

- (1) பக்கங்களின் எண்ணிக்கை 58
 (2) புதுக்கித் திருப்பிய நாள் 10/12/1992
 (3) ஆதாரக் குறிப்பவர் சுருக்கப்படும்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P.W.D துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	48 49	அச்சகம் பலவகை
நாள் :	9/1/1894	199

கலோ கண்டிடி கையாளலோ கூடாது.

29/1/1992
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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

From the Hon'ble Mr. W. AUSTIN, I.C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated 3rd December 1893, No. 3083.

I have the honour to submit herewith, for the information of Government, report upon the progress made in the reconstruction of the Madras Harbour during the quarter ending 30th September 1893, together with the various tracings and statements referred to by the Board's Engineer.

2. The period under review was exceptionally favorable for progress at the pier heads, the sea being for the most part clear and calm, enabling the divers to work to the best advantage in removing pieces of old block-work and setting the new blocks.

3. At the north pier, of 78 working days, 48 were occupied in dredging the base to the required depth, 6 days in levelling it, and 11 days in setting in position 119 superstructure blocks, which represent five complete courses, and advanced the north arm by 26 feet 10½ inches, temporary work, to compress the base and thus prepare the foundation for the caisson, the erection of which was commenced on the 8th August—total length of north arm 3,791 feet.

4. At the south pier, in 78 working days, 64 were occupied in dredging, clearing and levelling the base and 10 days in setting 72 blocks forming three complete courses, which advanced the arm by 16 feet 1½ inches and brought the total length of this arm up to 3,868 feet from the commencement of block-work at the shore end. There still remain three courses of permanent work, 16 feet, and six courses of temporary work, 32 feet, to be built at the south pier before that caisson can be set.

5. The sea having been exceptionally calm throughout the quarter, no appreciable movement has taken place in the protective revetment to the north of the harbour, while to the south the foreshore has advanced seaward 90 feet during the quarter, making in all 120 feet during the twelve months ending 30th September.

6. The sea bottom inside the harbour has been surveyed, and, although the high water mark has advanced seawards, the Engineer reports no perceptible shoaling of the deep water space available for anchorage within the walls.

7. During the quarter, 171 vessels representing a tonnage of 302,957 net register entered the harbour and 14 vessels of 908 net register tonnage anchored within port limits outside.

8. I also submit herewith, for information, the usual tabulated returns of exports and imports, so arranged that the half-year ending 30th September 1893 is comparable, at a glance, with the same period in 1892, the increase or decrease being shown in a final *plus* and *minus* column, as suggested by Mr. VansAgnew.

9. From these returns it is to be noticed that nearly all important items of import from foreign ports show a moderate increase, the most important being coal, which is 14,709 tons in excess of the corresponding period last year and for the six months only 7,122 tons less than the total from foreign ports of 1892-93, the figures being 49,508 tons last official year and 42,486 tons during the first half of this; the facilities existing for handling this important increase have fully met all requirements, and the trustees have called for an estimate for extending the hard north of the pier, so that the iron may be moved further south and more space be given for the storage of coal immediately to the south of the north arm of the harbour. The increase in the quantity of coal landed, and the necessity which has therefore arisen of stacking it further south, has unavoidably occasioned considerable inconvenience from the dust in the offices of Messrs. Dymes and Co. and the Deputy Commissioner of Police; but while regretting this the trustees are unable to avoid it under existing circumstances, though, when the harbour is completed, arrangements may perhaps be made to abate the inconvenience by landing coal to the south of the harbour, where the wide accretion of sand would prevent the dust from incommoding the offices upon the beach road opposite.

10. The increase in import of coal has not been confined to that from foreign ports, a satisfactory increase of 4,063 tons being also recorded in the imports from Calcutta.

11. The question of providing further facilities, and if possible reducing the charges and preventing wastage, will continue to receive the careful attention of the Board.

12. A fire occurred in one cargo of English coal. Smoke was discovered a little before 8 A.M. on the morning of the 27th July, and the trustees have to record, with thanks, the valuable assistance rendered by the officers of the Madras Railway Company. Within a quarter of an hour of the alarm being given, the Madras Railway Company's steam fire-engine was, in response to an urgent letter from the Board's Secretary, at work, pumping water from the municipal hydrant immediately to the north of the office of the Deputy Commissioner of Police, and the thanks of the Board are also due to this officer and the Police force under him for the admirable manner in which the Trust premises were at once cleared of the crowd which immediately assembled, enabling the Traffic Manager and his subordinates to cope without hindrance with the fire which was promptly extinguished and the coal restacked.

13. This is the first instance in which a fire has occurred in coal stacked upon the Board's premises. The expenses incurred in extinguishing the fire and in re-stacking the coal has, under the advice of the Board's solicitors, been paid by the Trust and a system of ventilation by means of horizontal and perpendicular ventilating shafts has since been adopted, which it is hoped will prevent any similar accident in future.

14. Other very satisfactory and important items of increase in imports are (a) 109,881 cases of kerosine-oil for the half-year, accompanied also by the import of 1,518 tons in bulk against 3,361 tons, the total of the previous year; (b) piece-goods + 6,676 and twist + 2,790 bales and cases.

15. Other important variations in imports from coast are as follows:—
Gram and peas + 18,939 bags, hides—2,998 bales, paddy—35,149 bags, rice—73,443 bags, skins + 1,096 bales, timber + 2291 tons.

16. In exports to foreign ports the following items show important increases:—
Cotton + 18,742 bales, ground-nuts + 91,340 bags, indigo + 1,494 chests, jaggery + 35,232 bags, poonac + 6,514 bags, rice (to Ceylon) + 6,101 bags, seeds + 10,924 bags.

17. On the other hand, there is a reduction in coffee—12,041 bags, twist (from local mills to Straits and China)—4,659 bales, tanned hides—7,486 bales, tanned goat and sheep skins—3,361 bales. All the above are important articles of export; coffee will probably be up to previous figures upon the full year; but the falling off in the export of tanned hides and skins, one of the most important local industries, would appear to be due to the unfavorable state of the home markets and is a loss to the trade of the port much to be regretted, as future shipments cannot make up for smaller production during the half-year under review.

18. Exports to coast ports have been fairly well maintained; the various variations are given in detail in the returns and call for no special comment.

19. Turning to the net results as gauged by cash collections, the position of the Trust is satisfactory. Compared with the corresponding half-year 1892-93, the period from 1st April to 30th September 1893 shows the following substantial increases:—

	RS.
Beach imports	12,054
Pier	1,083
Beach exports	7,169
Pier	1,210
Dues for entry of vehicles	1,914
Craneage	9,246
Storage	354

* This item has been excluded from "portage" and placed amongst ordinary dues, being more properly shown as such.

20. The only item of decrease is Rs. 685 under the head wharfage, which is satisfactory as showing that the facilities for removal of goods leaves it optional with merchants to clear their cargo before dues accumulate, and it is pleasing to note that nothing whatever has been paid on account of demurrage upon goods left uncleared, thus evidencing the completeness of the facilities given by the Board.

21. Portage receipts have increased Rs. 8,210, though miscellaneous are Rs. 1,276 less. The net charges against portage, however, also show an increase of Rs. 6,783, due to the extra work performed. Both increase and decrease are chiefly due to the larger importation of coal.

22. Fees paid for drinking-water delivered at the pier head have increased by Rs. 393, which is satisfactory as showing that the improved supply given by the Trust is appreciated and made use of.

23. Sundries have increased Rs. 2,281, due to sale of casuarina trees growing upon Harbour Trust land at Cassimode.

24. Interest upon Government promissory notes representing cash balances invested has increased by Rs. 7,334. This merely shows that interest has been realised and credited more promptly than before.

25. The expenditure of the Trust shows a large increase Rs. 31,438 in interest payable to Government under section 30 of the Harbour Trust Act, and it is to be noted that, excluding contribution from Port funds Rs. 20,000 and portage Rs. 54,203, the whole of the receipts for the first six months of the current year have been insufficient to meet this one item of liability, interest paid being Rs. 2,18,478, and the receipts, including interest upon investments, amounted only to Rs. 2,12,721; there is also the additional payment of Rs. 1,00,000, refund of capital, which was duly paid to the credit of Government in April last.

26. Other items of expenditure cannot be usefully compared for the half-year, and I need not refer to them until reporting upon the administration of the Trust for the full year ending in March next. I need now only remark that the financial position of the Trust as disclosed in the receipts and charges for the half-year is satisfactory and goes to show that, whereas the anticipated receipts will probably be in excess of the budget estimate, the expenditure will be kept within the limits assigned, and it is expected that the close of the financial year will again show an improved financial position.

ENCLOSURES.

STATEMENT of Receipts and Charges from 1st April to 30th September 1893.

	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Opening balance—									
Government securities (par value Rs. 8,00,000) ...				7,93,157	0	10			
1. Cash in the Bank of Madras ...	3,71,724	13	1						
2. General cash in office ...	469	14	8						
3. Advance for contingencies ...	500	0	0						
				3,72,694	11	9			
							11,63,851	12	7
Receipts.									
I. Contribution from Port funds ...							20,000	0	0
II. Beach import—Dues under section 45 (a) I (i) (ii) (iii) ...	85,043	12	1						
Pier do. do. do. ...	30,969	0	10						
Beach export do. do. ...	16,056	13	8						
Pier do. do. do. ...	24,880	3	1						
Wharfage under sec. 45 (a) II ...	3,750	0	0						
Cranage do. III ...	22,318	0	1						
Storage do. IV ...	1,495	1	8						
Demurrage do. V ...									
Dues for entry of vehicles under section 45 (c) VI ...	6,648	6	0						
Provisions—Dues on—under section 45 (a) I (i) ...	306	3	0						
Rent of properties ...	619	8	0						
Water—Charge for—delivered at pier head ...	2,248	12	0						
Penalties under section 84 ...									
Sundries ...	2,369	7	0						
				1,96,705	3	5			
III. Portage under sec. 45 (a) (iv)—									
Beach ...	35,931	4	3						
Pier ...	16,998	3	8						
Miscellaneous ...	1,274	6	9						
				54,203	14	8	2,50,909	2	1
IV. Interest realized on Government of India 4 per cent. promissory notes ...							16,015	4	10
							14,52,776	3	6
Charges.									
I. Interest (under section 30) ...				2,18,477	13	7			
II. Repayment of loan for construction of harbour under section 31 ...				1,00,000	0	0			
							3,18,477	13	7
III. Establishment, &c.—									
1. Chairman's salary ...	2,400	0	0						
2. Secretary's do. ...	5,066	2	1						
3. Correspondence department ...	1,835	13	8						
4. Accounts department ...	3,078	1	9						
5. Cash department ...	2,203	10	0						
6. Traffic department (shore staff). ...	12,709	1	9						
7. Preventive service ...	6,023	6	0						
8. Do. (boatmen) ...	587	13	7						
9. Contribution to Government for pensions ...	177	2	8						
10. Fees to Trustees ...	3,120	0	0						
11. Contribution to Provident fund. ...	88	3	7						
				37,242	7	1			

IV. Contingencies—

(a) Subject to regular audit—

	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Postage ...	36	5	4						
Receipt stamps ...	111	8	0						
Telegrams ...	7	4	0						
Furniture ...									
Fees for audit ...									
Law charges ...	1,197	14	0						
Stationery and printing ...	1,089	15	11						
Advertisement charges ...	393	0	0						
Uniform for Preventive service ...	1,318	8	0						
							4,154	7	3

(b) Admissible without detailed audit—

Overtime fees to establishment. ...	1,952	14	0						
Do. do. Preventive service and boatmen ...	1,466	2	6						
Miscellaneous ...	3,179	6	2						
							6,598	6	8

V. Refunds ...

1,355 13 4

VI. Petty construction and repairs—

New works ...									
Repairs ...	4,269	1	0						
Tools and plant ...	545	7	6						
							4,814	8	6

54,135 10 10

VII. Portage—

1. Coolies, pier ...	8,097	14	0						
2. Do. beach and custom-house ...	28,437	10	5						
3. Madras Railway Company ...	2	0	0						
4. South Indian Railway Company. ...	40	15	7						
5. Coasting cargo ...	603	2	2						
6. Boat hire ...									
7. Claims for losses and damage ...	123	6	11						
8. Engine charges ...	784	8	0						
9. Refunds ...	224	12	10						
10. Steam crane charges ...	974	12	8						
11. Contribution to Cooly Provident fund ...	486	7	10						
							39,775	10	5

Contingencies—

(a) Subject to regular audit—

Postage ...									
Receipt stamps ...	6	15	0						
Telegrams ...									
Furniture ...									
Tarpaulins ...	707	8	0						
Law charges ...									
Stationery and printing ...	388	10	1						
Advertisement charges ...									
Lighting pier and yards ...	832	1	3						
							1,935	2	4

(b) Admissible without detailed audit—

Miscellaneous ...	1,130	9	7						
							42,341	6	4
Advances to construction account ...							41,000	0	0

Total Expenditure ... 4,56,484 14 9

Balance on the 30th September 1893—

Government securities (par value Rs. 9,45,000) ...				9,45,104	2	10			
Cash in the Bank of Madras ...	50,528	5	2						
General cash in office ...	158	12	9						
Advance for contingencies ...	500	0	0						
				51,187	1	11			
							9,96,291	4	9
							14,52,776	3	6

COMPARATIVE STATEMENT OF RECEIPTS AND CHARGES OF THE MADRAS HARBOUR TRUST UNDER ACT II OF 1886 FOR HALF-YEARS ENDING 30TH SEPTEMBER 1891 AND 1892.

Items	Actuals from 1st April to 30th Sept. 1891.	Actuals from 1st April to 30th Sept. 1892.	Plus or Minus.
<i>Revenue Account.</i>	RS.	RS.	RS.
Opening balance	41,45,348	41,35,863	+ 20,294
<i>Receipts.</i>			
Contribution from Port Jute	55,000	20,000	- 35,000
Beach import—Dues under sec. 45 (a) I (3) (ii).	72,800	36,344	+ 1,354
Pier do. do. do.	23,880	30,969	+ 1,083
Beach export do. do.	8,888	16,057	+ 7,169
Pier do. do. do.	23,670	24,580	+ 1,210
Wharfage under section 45 (a) II	4,436	3,700	- 685
Craneage do. III	13,072	22,318	+ 9,246
Storage do. IV	1,141	1,495	+ 354
Demurrage do. V	...	...	...
Dues for entry of vehicles under sec. 45 (c) VI	4,734	6,648	+ 1,914
Provisions—Dues on—under sec. 45 (a) I (i)	320	306	- 14
Rent of properties	632	620	- 12
Water—Charge for—delivered at pier head	1,851	2,219	+ 368
Penalties under section 84	...	...	...
Sundries	89	2,370	+ 2,281
<i>Porterage under section 45 (a) I (c).</i>			
Beach	28,565	25,931	+ 7,386
Pier	16,154	16,908	+ 844
Miscellaneous	4,550	1,274	- 1,270
Interest realised on Govt. of India 4 per cent. promissory notes.	8,681	16,015	+ 7,334
Total	2,82,858	2,86,924	...
Total including the opening balance	14,28,506	14,52,776	...
<i>Charges.</i>			
Interest paid to Government under section 30	1,87,040	2,18,478	+ 31,438
Repayment of loan for construction of harbour under section 31	1,00,000	1,00,000	...
<i>Establishment.</i>			
Chairman's salary	2,400	2,400	...
Secretary's do.	4,550	5,066	+ 516
Correspondence department	1,734	1,836	+ 102
Accounts department	3,019	3,078	+ 59
Cash department	1,938	2,207	+ 269
Traffic department (shore staff)	13,007	12,709	- 298
Preventive service	6,247	6,023	- 224
Preventive service boatmen	595	588	- 7
Contribution to Government for pensions	426	177	- 249
Fees to Trustees	3,090	3,120	+ 30
Contribution to Provident fund	49	38	- 11
<i>Contingencies.</i>			
(a) Subject to regular audit—			
Postage	32	36	+ 4
Receipt stamps	101	112	+ 11
Telegrams	...	7	...
Furniture	450	...	- 450
Fees for audit	...	...	...
Law charges	35	1,198	+ 1,163

COMPARATIVE STATEMENT OF RECEIPTS AND CHARGES OF THE MADRAS HARBOUR TRUST, &c.—cont.

Items	Actuals from 1st April to 30th Sept. 1892.	Actuals from 1st April to 30th Sept. 1893.	Plus or Minus.
<i>Contingencies—cont.</i>	RS.	RS.	RS.
(a) Subject to regular audit—cont.			
Stationery and printing	1,717	1,090	- 627
Advertisement charges	2	293	+ 291
Uniform for peons, Preventive service, &c.	280	1,219	+ 1,039
(b) Admissible without detailed audit—			
Overtime fees to establishment	2,063	1,953	- 110
Do Preventive service and boatmen	1,324	1,446	+ 142
Miscellaneous	1,841	3,179	+ 1,338
Refunds	1,515	1,356	- 159
<i>Petty Construction and Repairs.</i>			
New works	10,397	...	- 10,397
Repairs	9,500	4,269	- 5,231
Tools and plant	...	545	+ 545
<i>Porterage.</i>			
Coolies, pier	6,627	8,098	+ 1,471
Do Beach and custom-house	21,682	28,438	+ 6,756
Madras Railway Company	483	2	- 481
South Indian Railway Company	137	41	- 96
Coasting cargo	405	603	+ 198
Boat hire	1,196	...	- 1,196
Claims for losses and damage	534	123	- 411
Engine charges	725	785	+ 60
Refunds	438	225	- 213
Steam crane charges	1,341	975	- 366
Contribution to Cooly Provident fund	451	486	+ 35
<i>Contingencies.</i>			
(a) Subject to regular audit—			
Postage	7	7	...
Receipt stamps	...	...	...
Telegrams	...	...	...
Furniture	152	707	+ 555
Tarpaulins	25	...	- 25
Law charges	412	389	- 23
Stationery and printing	...	...	...
Advertisement charges	733	832	+ 99
Lighting pier and yards	...	...	...
(b) Admissible without detailed audit—			
Miscellaneous	707	1,131	+ 424
Total	3,89,407	4,15,485	...

H. E. HOPE-ROSS,
Chief Accountant, Harbour Trust.

I.—Statement of goods imported from Foreign Ports.

	Packages	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.
Apparel and effects	Packages	366	439	378	1,098	256	- 108
Alum	Barrels	204	373	102	685	859	+ 646
Asphalt, tar and pitch	Casks	1,595	596	428	2,329	1,019	- 314
Acids	Cases	1,183	129	176	1,408	1,186	+ 82
Arms and guns	...	150	49	12	221	163	- 12
Arrack	Casks	458	247	128	833	644	- 83
Blankets	Bales	20	143	5	168	9	- 11
Beef and pork	Cases	...	...	...	...	...	...
Bricks	...	170	231	180	581	1,550	+ 1,330

I.—Statement of goods imported from Foreign Ports.

		Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.	
Apparel and effects	Packages	180	78	106	364	196	+	30
Alum	Barrels	81	106	..	187	7	+	76
Acids	Cases	14	17	92	123	262	+	186
Animals	No.	10	..	..	10	..	+	10
Arms and guns	Cases	5	5	2	12	4	+	1
Boilers	No.	..	..	..	..	..	+	..
Bricks and tiles	No.	10	47	..	57	517	+	507
Coffee	Bags	461	14	120	595	480	+	19
Candles	Cases	..	..	..	..	2	+	2
Colours	..	1,239	167	125	1,531	1,315	+	76
Crockery and glassware	..	183	108	175	466	402	+	19
Coal	Tons	4,292	1,985	7,515	13,792	8,365	+	4,067
Coke	..	..	..	..	..	..	+	..
Carpets	Bales	45	22	27	94	45	+	1
Camphor and benjamin	Tubs	607	453	296	1,356	544	+	323
Copra	Bags	..	..	..	..	..	+	..
Crackers	Cases	..	..	..	..	..	+	..
Copper	..	740	161	28	929	558	+	182
Do.	..	..	421	..	421	1,411	+	1,411
Catch and lac	Packages	1,006	1,540	557	3,103	2,993	+	999
Decapants	No.	..	..	415	415	2,023	+	2,023
Earthenware	Cases	1,424	1,494	21	2,941	399	+	1,084
Do.	Pipes	8,225	805	2,790	11,820	936	+	2,289
Firewood	Tons	..	..	..	..	..	+	..
Fleur	Bags & barrels	5,223	3,501	2,958	11,682	8,989	+	743
Gum and peas, &c.	Bales	1,405	2,097	6,159	9,661	6,306	+	3,961
Garlic	..	183,186	112,518	94,496	390,160	202,075	+	18,935
Hardward	..	360	335	..	695	4,927	+	3,637
Horns	..	268	315	674	1,257	744	+	506
Hides	..	560	244	186	990	909	+	80
Iron	..	8,862	2,159	1,744	12,765	2,664	+	2,998
Iron safes	..	..	96	100	196	67	+	30
Kerosene-oil	No.	21	2	15	38	14	+	7
Leaves	Cases	..	..	..	..	500	+	500
Liquor	Bundles	2,395	1,000	417	3,812	3,919	+	1,024
Machinery	Cases	..	..	..	..	1,186	+	1,186
..	Tons	21	37	21	79	16	+	6

II.—Statement of stores imported by the Madras Railway Company.

		Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.
Stores	Packages	15,548	7,292	49,001	72,834	49,341	+	21,802
	Tons	389	110	..	499	6	—	383
Fuel ..	..	..	..	..	544	628	+	487
Coke ..	..	141	..	403	300	..	..	..
Coal ..	..	..	..	300	300	..	—	569
Timber	..	589	73	1,399	2,082	..	..	..
Fire brick	100	..	95	232	320	..	..	..

Statement of stores imported by the South Indian Railway Company.

		Packages.	Half-year ending 30th Sept 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.	
Stores	{	Packages Tons	10,619	4,241	7,311	22,171	6,539	—	4,080
Fuel	..	..	..	..	..	..	22	+	22
Coke	..	..	..	..	..	..	..	..	..
Coal	..	..	..	..	..	..	..	..	..
Timber	..	..	..	..	..	..	..	..	..
Boiler	..	No.	5	..	7	12	10	+	5

IV.—Statement of goods imported from Coast Ports.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.	
Apparel and effects	Packages	180	78	105	363	196	+	30
Alum	Barrels	81	106	..	187	7	—	76
Acids	Cases	14	17	92	123	262	+	186
Animals	No.	10	..	..	10	..	—	10
Arms and guns	Cases	5	5	2	12	4	—	1
Boilers	No.	..	..	..	..	..	—	..
Bricks and tiles	100	10	47	..	57	517	+	507
Coffee	Bags	461	14	120	595	480	+	19
Candles	Cases	..	..	..	..	2	+	2
Colours	..	1,239	167	125	1,531	1,315	+	76
Crockery and glassware	..	183	108	175	466	402	+	19
Coal	Tons	4,292	1,985	7,515	13,792	8,365	+	4,067
Coke	..	..	..	..	..	..	—	..
Carpets	Bales	45	22	27	94	45	+	1
Camphor and benjamin	Tubs	607	453	296	1,356	544	—	323
Copra	Bags	..	..	..	..	..	—	..
Crackers	Cases	..	..	..	..	..	—	..
Copper	..	740	161	28	929	558	—	182
Do.	Tiles and ingots.	..	421	..	421	1,411	+	1,411
Catch and lac	Packages	1,006	1,540	557	3,103	2,993	+	999
Decapants	No.	..	..	415	415	2,023	+	2,023
Earthenware	Cases	1,424	1,494	21	2,941	399	—	1,084
Do.	Pipes	8,225	805	2,790	11,820	936	—	2,289
Firewood	Tons	..	..	..	..	..	—	..
Fleur	Bags & barrels	5,223	3,501	2,958	11,682	8,989	+	743
Gum and peas, &c.	Bales	1,405	2,097	6,159	9,661	6,306	+	3,961
Garlic	..	183,186	112,518	94,496	390,160	202,075	+	18,939
Hardware	Cases	360	335	674	1,369	4,927	+	3,637
Horns	Bundles	560	244	186	990	744	+	506
Hides	Piles	8,862	2,159	1,744	12,765	2,664	—	2,998
Iron	Tons	97	96	100	293	67	—	30
Iron safes	No.	21	2	15	38	14	—	7
Kerosene-oil	Cases	..	..	..	..	500	+	500
Leaves	Bundles	2,395	1,080	417	3,892	3,919	+	1,024
Liquor	Cases	..	..	..	..	1,186	+	1,186
Machinery	Tons	21	37	21	79	16	—	6

IV.—Statement of goods imported from Coast Ports—cont.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.
Milinery and haberdashery	Cases	69	50	98	265	65	—
Oil and turpentine	Drums	3,043	1,197	2,125	6,365	3,464	+
Paddy	Bags	49,210	5,610	23,780	78,600	11,081	—
Piece-goods	Cases and bales	1,177	1,692	1,687	4,556	2,117	+
Paper	Bales	1,809	1,322	1,376	4,507	3,858	+
Paint	Keys	224	155	304	683	128	—
Piano	No.	6	1	3	10	2	—
Rice	Bags	122,002	26,031	57,143	305,176	48,539	—
Rose-water	Cases	1,319	231	265	1,815	692	—
Seeds	Bags	14,743	4,798	6,206	25,747	8,949	—
Skins	Bales	2,073	1,000	1,903	5,052	3,174	+
Silk	Bales	450	177	72	699	211	—
Sandalwood	Bundles	26	9	83	121	32	—
Sugar	Bags	343	227	291	861	675	—
Specie	No.	64	27	199	290	26	—
Sundries	Packages	23,435	12,279	11,323	47,137	16,671	—
Soap	Cases	6	17	17	40	30	—
Sulphur	Casks	234	137	73	444	249	—
Spices	Packages	250	313	177	740	340	—
Soda-water bottles	Crates	—	—	—	—	—	—
Twine and rope	Bales and coils	341	202	232	775	909	—
Tin plates	Boxes	232	203	227	662	402	—
Twist	Bales	809	168	170	1,147	678	—
Turneric	Bags	2,601	1,107	1,269	4,977	2,821	—
Timber	Tons	4,636	2,044	3,275	10,695	6,921	—
Tea	Cases	3,136	261	14	3,411	37	—
Tamarind	Bundles	—	—	—	—	—	—
Yellow metal	Cases	300	197	45	542	72	—
Horses	No.	8	—	7	15	—	—
Two-wheeled carriages	No.	2	2	2	6	2	—
Beer	do.	—	—	3	3	5	+

V.—Statement of goods exported to Foreign Ports.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.
Beer and ale	Cases	2	—	—	2	12	+
	Casks	7	—	—	7	—	—
Cinchona bark	Bales	437	33	80	550	306	—
Chillies	Bags and bundles	—	—	—	—	145	—
Cigars	Cases	285	92	179	556	201	—
Coffee	Bags	16,558	41	19,014	34,613	3,517	—
Cotton	Bales	16,899	6,422	2,619	25,940	35,641	—
Do. twist	Bags	5,201	5	60	5,266	642	—
Coriander and onion seeds	Bags	621	899	204	1,724	2,901	—
Carpets	Bales	140	56	32	228	156	—
Coal	Tons	313	100	—	413	185	—
Deer horns	Packages	1,107	263	179	1,549	385	—
Explosive	Cases	1	—	—	1	—	—
Firewood	Tons	—	—	—	—	—	—
Four-wheeled carriages	No.	2	—	—	2	2	—
Ground-nuts	Bags	22,720	82	3,407	26,209	114,000	—
Gram, peas, &c.	Tons	—	136	26	161	1,604	—
Horns, cow and buffalo	Tons	19	3	7	29	13	—
Hides, tanned	Bales and bundles	19,796	3,898	5,118	28,812	6,310	—
Indigo	Cases and chests	5,543	10,503	9,086	25,132	7,037	—
Iron	Tons	11	—	—	11	13	—
Jaggery	Bags	13,736	5,443	38,493	57,672	48,988	—
Myrabolams	Bags	60	31	—	91	603	—
Miscellaneous	Packages	17,173	4,841	6,727	28,741	10,732	—
Onions	Bags and baskets	6,393	24	209	6,626	8,133	—
Oil	Cases	22	25	9	56	193	—
Piece-goods	Bales and cases	2,356	1,540	961	4,857	2,786	—
Potatoes	Bags and baskets	167	116	10	293	824	—
Peanut	Bags	10,127	3,764	2,236	16,127	16,631	—
Piano	No.	7	3	—	10	4	—
Paddy	Bags	—	6	—	6	22	—
Rice	—	1	2,689	389	3,229	6,102	—

V.—Statement of goods exported to Foreign Ports—cont.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.
Redwood	Tons	725	273	665	1,663	423	—
Seeds, gingelly and castor	Bags	717	7,632	4,304	12,653	9,361	—
Skins, sheep and goat	Bales	17,470	7,297	9,386	34,153	18,599	—
Sandalwood	Bundles	43	1	286	330	49	—
	Cases	15	1	22	41	19	—
	Cases	40	25	—	65	33	—
Spirits and wine	Pantheons	—	52	77	129	445	—
Sugar	Bags	21	9	13	43	13	—
Specie	Boxes	—	51	1,834	1,885	710	—
Tamarind	Bundles	3,436	574	530	4,540	765	—
Turneric	Bags	2,209	470	—	2,679	1,669	—
Tea	Cases	—	—	—	—	—	—
Two-wheeled carriages	No.	—	207	684	891	263	—
Wool	Bales	579	100	—	679	117	—
Yellow metal	Tons	—	—	—	—	—	—

VI.—Statement of goods exported to Coast Ports.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.
Beer and ale	Cases	167	68	89	324	58	—
	Casks	25	45	24	94	27	—
	Hogsheds	6	—	26	32	123	—
Boher	No.	—	—	—	—	—	—
Cinchona bark	Bales	84	—	—	84	4,316	—
Chillies	Bags and bundles	2,390	288	1,359	4,037	312	—
Cigars	Cases	588	196	111	1,449	96	—
Coffee	Bags	1,140	573	1,528	3,241	5,444	—
Cotton	Bales	2,144	3,123	1,281	6,548	1,640	—
Do. twist	Bags	1,784	582	3,377	5,743	2,189	—
Coriander and onion seeds	Bags	2,343	8,011	297	10,651	54	—
Canebrake	Cases	—	14	13	27	23	—
Carpets	Bales	25	75	300	400	82	—
Coal	Tons	1	100	50	151	43	—
Deer horns	Packages	247	26	958	1,231	20	—
Explosive	Cases	350	379	396	1,125	414	—
Eggs	Pots	—	—	—	—	—	—
Firewood	Tons	14	5	12	31	14	—
Four-wheeled carriages	No.	—	—	—	—	—	—
Ground-nuts	Bags	8,528	2,332	6,369	17,229	8,326	—
Gram, peas, &c.	Tons	653	32	99	784	201	—
Horns, cow and buffalo	Tons	96	112	99	307	56	—
Hides	Bales and bundles	120	142	264	526	381	—
Indigo	Cases and chests	16	608	200	624	708	—
Iron	Tons	2,402	26	183	2,611	322	—
Jaggery	Bags	84	35	1,313	1,432	120	—
Kerosine-oil	Cases	428	11	220	559	680	—
Myrabolams	Bags	7	12	272	291	1,082	—
Miscellaneous	Packages	23,628	12,071	38,885	74,584	30,334	—
Onions	Bags and baskets	8,348	26,450	20,378	55,176	31,261	—
Oil	Cases	2,78	233	71	322	822	—
Piece-goods	Bales and cases	3,502	1,779	2,970	8,251	3,007	—
Potatoes	Bags and baskets	8,499	14,353	796	23,648	11,366	—
Peanut	Bags	9,378	2,351	8,052	22,181	8,128	—
Piano	No.	6	—	—	6	6	—
Paddy	Bags	250	1,300	7,256	8,806	5,109	—
Rice	—	5,000	12,678	14,215	31,893	6,045	—
Redwood	Tons	663	323	4,501	5,487	16,952	—
Seeds, gingelly and castor	Bags	—	—	—	—	—	—
Skins, sheep and goat	Bales	256	263	557	1,076	629	—
Sandalwood	Bundles	33	162	81	276	523	—
	Cases	2,027	1,023	793	3,843	1,112	—
Spirits	Cases	298	133	22	453	506	—
	Pantheons	14	95	40	149	145	—
Sugar	Bags	902	263	249	1,414	316	—
Specie	Boxes	301	189	19	509	—	—
Tamarind	Bundles	5,524	725	1,391	7,640	2,266	—
Turneric	Bags	7,939	3,751	6,152	17,842	20,303	—
Tea	Cases	63	16	—	79	24	—
Two-wheeled carriages	No.	—	—	—	—	—	—
Wool	Bales	336	111	148	603	387	—
Yellow metal	Tons	16	51	—	67	256	—

VII.—Statement of stores, &c., imported by Government.

Department.	Description.	Class.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Total for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.	
Accountant-General	Specie silver ..	Boxes.	200	370	112	682	174	+	74
	.. copper ..	"	"	"	710	710	850	+	500
	Silver and copper ..	"	"	"	"	"	"	"	"
	Notes ..	"	"	17	2	19	"	"	"
	Packages ..	No.	1	"	"	1	"	"	1
State Railway	" & pieces ..	"	"	"	"	"	"	"	"
	Balls ..	"	"	"	"	"	"	"	"
	Sleepers ..	"	"	"	"	"	"	"	"
	Bridge works ..	Tons	"	"	"	"	"	"	"
Public Works Department.	Boilers ..	No.	"	"	"	"	"	"	"
	Coal ..	Tons	20	"	"	20	"	"	20
	Iron ..	"	"	"	"	"	"	"	"
	Stores ..	Pags.	5,153	2,092	1,248	8,493	1,325	—	1,297
Ordnance	Coal ..	Tons	"	"	"	"	"	"	"
	Ammunition ..	Boxes.	2,148	"	"	"	"	"	"
	Stores ..	Pags.	5,219	10,296	5,812	21,327	14,564	+	2,148
Madras Harbour Works.	Cement ..	Casks	"	"	"	"	"	"	"
	Stores ..	Pags.	"	"	"	"	"	"	"
	Coal ..	Tons	"	"	"	"	"	"	"
Clothing	Packages ..	No.	1,224	760	291	2,275	753	—	471
Police ..	"	"	149	13	5	167	124	—	25
Salt Revenue ..	"	"	276	3	11	290	46	—	230
Post office ..	"	"	447	129	283	859	350	—	97
Medical ..	"	"	465	32	510	1,007	987	+	622
Telegraphs ..	"	"	3,791	6,769	13,653	24,213	5,191	—	1,450
Stationery ..	"	"	126	753	238	1,117	381	—	255
Stamps ..	"	"	842	179	101	1,122	1,449	—	607
Commissariat ..	"	"	3,217	3,058	1,165	7,440	1,344	—	1,373
Gazette Press ..	"	"	133	11	5	149	90	—	43
Marine ..	"	"	224	509	147	880	58	—	131
Superintendent, Railway	"	"	"	"	"	"	"	"	"
Mail Service ..	"	"	"	"	"	"	"	"	"
Revenue Survey ..	"	"	206	1	1	208	"	"	196
Agriculture ..	"	"	310	6	4	320	124	—	186
Government Central Museum	"	"	5	3	3	11	5	—	"
Under Secretary to Govt.	"	"	48	20	17	85	40	—	8
Superintendent of Prisons	"	"	5	8	4	17	6	—	1
Revenue Board ..	"	"	15	12	6	33	2	—	13
Forests ..	"	"	3	1	5	9	2	—	1
Bank of Madras	Specie silver ..	Boxes.	"	"	"	"	"	"	"
	.. copper ..	"	"	"	"	"	"	"	"
Presidency College	Packages ..	No.	7	2	6	15	2	+	6
School of Arts ..	"	"	"	"	"	"	"	"	"
Sanitary Commissioner	"	"	"	"	1	1	1	+	1
Inspector of Cattle Diseases	"	"	"	"	"	"	"	"	"
Chemical Examiner ..	"	"	100	"	"	100	"	"	"
Medical College ..	"	"	6	13	7	26	7	—	1
Deputy Collectors ..	"	"	2	13	16	31	14	+	12
Camp Equipage ..	"	"	11	2	2	15	7	—	4
Astronomer ..	"	"	"	"	"	"	"	"	"
Presidency Paymaster ..	"	"	9	4	"	13	14	+	5
Registration ..	"	"	4	"	"	4	"	—	8
Director of Public Instruction	"	"	137	3	"	140	"	—	4
Superintendent, Remount Depot, Hosur	"	"	"	"	"	"	"	"	133
Resident, Mysore, in Bangalore	"	"	800	800	600	2,200	211	+	211
Secretary for Bazar, Hyderabad	"	"	1	1	2	4	6	+	6
His Excellency Lord Wellock, Government House, Madras	"	"	6	1	7	14	17	+	17
Judge, Civil City Court, Madras	"	"	"	"	2	2	"	"	"
Quartermaster-General ..	"	"	"	1	1	2	3	+	3
Registrar of High Court ..	"	"	1	"	1	2	2	+	2

VIII.—Statement of stores, &c., exported by Government.

VIII.—Statement of stores, &c., &c.									
Department.	Description.	Class.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March. 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or decrease as compared with corresponding period of last year.	
Accountant-General	Specie silver	Boxes.	36	3	6	45	95	+	59
	copper	"	198	2	"	200	102	—	98
	notes	"	7	3	3	13	3	—	4
	Packages	No.	1	"	"	1	1	—	"
Bank of Madras	silver	Boxes.	62	"	"	62	84	+	22
Do. do.	copper	"	"	"	"	"	"	"	"
Ordnance	Packages & pieces.	No.	2,206	2,085	1,540	5,831	3,162	+	668
Public Works Department.	"	"	164	197	217	578	259	+	95
Clothing	"	"	703	183	193	1,086	585	+	173
Police	"	"	590	272	112	974	647	+	57
Salt Revenue	"	"	377	149	199	725	472	+	95
Medical	"	"	771	123	696	1,610	1,165	+	314
Telegraph	"	"	155	3,730	440	4,380	1,477	+	1,392
Stationery	"	"	235	121	374	730	261	—	24
Stamps	"	"	96	134	66	396	95	—	3
Commissariat	"	"	1,528	2,672	2,005	6,205	2,714	+	1,186
Gazette Press	"	"	242	156	105	503	216	—	26
Marine	"	"	214	78	71	363	27	—	187
Revenue Board	"	"	23	4	10	37	30	+	16
Do. Settlement.	"	"	62	17	6	85	37	—	25
Do. Survey	"	"	289	92	71	452	174	—	115
Superintendent of Prisons.	"	"	125	19	52	196	36	—	89
Registration	"	"	"	"	"	"	1	+	1
Conservator of Forests	"	"	7	11	15	33	1	—	6
Quartermaster-General.	"	"	4	"	"	4	"	—	4
Government Central Museum	"	"	19	2	1	22	10	—	9
Deputy Collectors	"	"	9	"	"	9	"	—	9
Camp Equipage	"	"	13	"	5	18	6	—	7
Government Astronomer.	"	"	2	"	5	7	2	—	1
Agriculture	"	"	"	"	"	"	"	—	"
General Hospital	"	"	"	"	"	"	"	—	"
State Railways	"	"	"	"	"	"	"	—	"
Inspector of Cattle Diseases	"	"	1	"	"	1	"	—	1
Chemical Examiner	"	"	1	"	"	1	"	—	"
Director of Public Instruction	"	"	4	"	"	4	13	+	9
Registrar of University	"	"	"	10	"	10	6	+	6
Collectors	"	"	"	"	"	"	2	+	2
Curator of Government	"	"	"	"	"	"	"	—	"
Garden, Ootacamund	"	"	"	"	"	"	"	—	"
Engineer, Harbour Trust	"	"	9	1	8	18	5	—	4
Board	"	"	"	"	"	"	"	—	"
Crown Officer, High Court.	"	"	"	"	"	"	"	—	"
School of Arts	"	"	"	"	"	"	"	—	"
Secretary to Government.	"	"	"	"	"	"	"	—	"
Public Department	"	"	"	"	"	"	"	—	"
Registrar-General of Births, Deaths and Marriages	"	"	"	"	"	"	"	—	"
Inam Commissioner	"	"	"	"	"	"	"	—	"
Consulting Engineer to Government Railways.	"	"	1	"	"	1	1	—	1
Civil Engineering College.	"	"	"	"	"	"	"	—	"
Superintendent, Census Operations	"	"	"	"	"	4	4	—	2
Post office	"	"	"	"	"	"	1	—	2
Sanitary Commissioner	"	"	"	"	"	"	"	—	"

No. P.

(Signed) G. R. P. LLOYD.
Acting Traffic Manager, Harbour Trust Board.

To the Secretary, Harbour Trust Board, Madras.

REPORT of Progress on the Madras Harbour Works for the quarter ending 30th September 1893.
Accompanying this report are the following plans and statements:—

No. 33 (a).—A plan of the harbour to a scale of 300 feet to an inch, showing in red the position and quantity of work done during the quarter. The contours in half fathoms shown on this plan are those of the last complete marine survey of 1889. The positions of the high water marks of the 30th September 1893, and that of the previous twelve months, both to the north of the revetment and the south of the harbour, are shown for comparison.

No. 33 (b).—A revised plan showing in detail the advances made during the quarter at the pier-heads as now being constructed, and the positions of the caissons for completing both piers of the harbour, with an eastern entrance of 320 feet.

No. 34 (c).—A statement comparing the expenditure on different sub-heads of work up to the end of the quarter, with the provisions of the sanctioned estimate.

No. 34 (d).—A statement showing work done under different sub-heads and particulars of cement received and issued.

2. The various heads of work, &c., throughout the harbour works are reported on as follows.

3. *General*.—The progress on the works during the quarter under report, which includes the months of July, August and September, has been one most favorable to the difficult diving operations necessary at the north pier, as the water was at times exceptionally clear, when most of the old overthrown blocks could be and were slung with chains by divers, which were then left to be raised in less favorable weather, when the water is generally so dark that a diver cannot see one foot ahead. In the absence of these difficulties of rough sea and thick water, most satisfactory progress and rapid removal of the heaped up masses of old blocks and excess base can be reported as follows.

4. *North pier-head*.—Of the 32 days in the quarter under review, 78 days were available for marine work, after deducting the Sundays and holidays, &c., when there was no work.

Of these working days at the north pier, 48 were occupied in steadily dredging up the excess rubble base to found the pier-head at 40 feet below water level; 6 days went to preparing and levelling the base, immediately beneath the blockwork; and 11 days were taken up in setting in position the 133 superstructure blocks, which were set by divers during the quarter; or 5 completed courses of the temporary blockwork, shown on the plan in red, which blockwork is not only to compress the base beneath the caisson, but to enable the titan to reach the ruined portions of the old pier-heads, from which blocks of all shapes have to be removed to allow the base to be dredged down to the required depth to rest the caisson upon.

5. In addition to the enormous amount of base dredged up and the good progress of 5 completed courses, or an advance of 26' 10½" of completed work being recorded, the divers had to carefully sling 84 of these huge blocks under water, which were in most dangerous positions, and this is shown by the fact that, on three occasions, the blocks slipped from undermining; and on the last occasion, unfortunately, the large Priestman's lined grab was crushed, but not beyond repair, which will be ready for work next season, but to avoid a stoppage of work in a similar accident, a second grab has been secured locally.

6. The progress, therefore, recorded is 5 courses, or 26' 10½" of temporary work built, which brings up the total length of the north arm to 3,790' 10½" from shore, or 5 out of the necessary 6 temporary courses are set in the quarter.

7. I am happy to add that, since September, the 6th and last course of blockwork at the north pier has been set, and thereby the foundation of the north pier caisson prepared, levelled, and compressed, to prevent settlement.

8. The erection of the iron caisson for the north pier was commenced on the 8th August, and as the climate of India and the passage out has changed the color and lost all identity of the paint marks of where the portions belong, careful sorting and rough fitting together had to be done in the block yard first, for remarking, previous to erection on the sea shore.

9. *Wave-breaker*.—The wave-breaker screen was, as reported last quarter, brought up to the full section as far as the permanent work; but no protection of this nature could be given to the six temporary courses as the wave-breaker blocks, if deposited, would have rolled forward and have blocked up the hollow, which it is necessary to have clear in January next, previous to setting the caisson, so that, at this point, the old pier-head has had to be weakened by re-moving one row of partly overthrown blocks, to prevent undermining and to unite the old and new work as closely as possible; and as some of these old upper blocks have had to be left in a somewhat doubtful position, I quite expect to report a change in their position, should this temporary work have to stand the pressure of a severe storm.

10. *South pier-head*.—The total 78 working days available for work during the quarter were portioned out to 64 days in dredging, slinging and raising by divers the numerous pieces of broken blocks, 4 days to preparing and levelling the beds, and 10 days to setting the 72 blocks in position, which formed the progress of 3 completed courses, or an advance of 16' 1½" against an advance of only 6½' in the same quarter last year.

11. The total length of the completed work at the south pier is therefore 3,863' 1½" from the first block set on shore, and there remains 3 courses, or 16½ feet of permanent work, and 6 courses or 32½ feet of temporary work to be built before the caisson can be set to complete the south pier-head.

12. *Protective works north of the Harbour*.—The general state of the sea during the quarter having been calm, no further appreciable movement in the revetment has taken place with the exception of at a point opposite Carlton House, where the steep bank has found a more natural slope, which may at any time bring a high sea uncomfortably close to the compound wall; in which case, more stone must be immediately added and charged to "maintenance of revetment," as the provisions for constructing this work have now been exhausted and the work must be strengthened, until no further settlement takes place.

13. The high water mark along the line of revetment remains the same, but at the extreme end the anticipated bay is rapidly forming, as shown upon the accompanying tracing, but no buildings can be endangered by this anticipated erosion.

14. *Forcible south of Harbour*.—Upon the plan of the harbour attached to this report, are shown the high water marks of 30th September 1892 and 1893, and 30th June 1893, and the advance of foreshore measures near the pier 90 feet during the quarter, or 120 feet in the past 12 months.

15. *Sea bottom within the Harbour*.—All through the quarter, the soundings for the marine survey of the harbour and roadstead were taken, whenever the state of the sea was calm enough; and the survey is now complete with the exception of a few soundings near the entrance. This chart will be completed and reported upon as soon as possible.

The high water mark inside the harbour has advanced on an average 60 feet north of the iron pier, while it has receded 70 feet at the south of the harbour, which shows no permanent advance, but the usual transfer of sand from one side of the harbour to the other according to the monsoon.

16. *Summary of Progress*.—The following is the summary of the progress made on the harbour works during the quarter under review:—

No. of items.	Particulars and quantity of work, &c.	Sub-heads of work.	North Pier.						South Pier.						Railway Lines.			Total expenditure during the quarter, 30th September 1893.	
			Rubble base.	Pier-head.	Wave-breaker.	Concrete capping.	Base protection.	Rubble base.	Pier-head.	Wave-breaker.	Concrete capping.	Base protection.	At works.	At quarters.	Sand line.	Beach improvements.	Palladium quarters out-turn.		Concrete blockmaking.
1	Rubble stone deposited from boats ..	Tons.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Do. do. from wagons ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Total quantity rubble stone received on works ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	Do. blasted chips ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	Concrete blocks—set by divers ..	No.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	Do. deposited in wave-breaker temporarily ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	Do. made for superstructure ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	Do. pier-head ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	Weight of iron ramp fixed in position ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	Total amount of concrete cubic yds ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	Advance or progress of completed superstructure ..	By ft.	251 1/2	161 1/2	81	12	7 1/2	24	..	..	..	..	..	..	..	..	..	..	..
12	Rubble base protected with concrete ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	Diets gauge, 40 lb. per yard, laid new ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	Do. do. renewed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	Do. do. taken up ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	Broad gauge, 80 lb. per yard, laid ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	Do. do. renewed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	Do. do. taken up ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	Thin gauge, 75 lb. per yard, laid new ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	Do. do. renewed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	Do. do. taken up ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	Approximate expenditure under sub-heads of work ..	Rs.	14,556	10,784	..	..	49	..	..	..	..	..	..	..	..	..	..	..	25,193

24 cabs of cement reserved on works during ending 30th Sept. 1893 containing
150 do. issued for do.
1,564 do. balance is store at end of

MADRAS,
11th November 1893.

(Signed) A. LEE-POGSON,
Engineer, Harbour Trust Board.

48/a

17. *Miscellaneous.*—In 1892 it was reported that the inner line of screw moorings had been lost and were abandoned and reported buried in silt. Three of these moorings were found, and were correctly buoyed off at once.

18. The original chains found were lying upon the sand, and not buried, which is a satisfactory proof that silting has not taken place at these points since 1881.

19. The property of the trust known as Canning House at Poonam was taken in hand for thorough repairs necessary previous to the setting in of the monsoon.

20. The usual repairs and upkeep of all machinery, cranes, railway lines, &c., for the Traffic Department was continued, and no accidents of any nature occurred during the quarter.

MEMORANDUM to accompany statement of progress for the quarter ending 30th Sept. 1893.

1. Estimated sum required to complete the works at the commencement of the quarter, except establishment, tools and plant and contingent charges	5,87,669
2. Cost of work done during the quarter	25,193
	5,12,476
3. Estimated cost of additional work found necessary during the quarter	—
4. Estimated cost of completing the works from and after the end of quarter	5,12,476

MADRAS,
11th November 1893.

(Signed) A. LEE-POGSON,
Engineer, Harbour Trust Board.

Comparison of expenditure to date with sanctioned estimate for the quarter ending 30th September 1893—cont.

Sub-head of work.	As per estimate sanctioned in Secretary of State's despatch No. 1, dated 7th January 1892.				As executed.				Arrears not paid.	Value of work done up to date, column II and III.
	Quantity.	Rate.	Per.	Cost.	Total.	Quantity.	Rate.	Total up to end of last quarter.		
1	2	3	4	5	6	7	8	9	10	11
Extending the Public Department protecting the Fisheries north of Harbour—cont.										
41. Advances to work-people	..	Rs. A. P.	..	..	..	..	..	..	..	..
Total of estimate and value of work done	..	..	..	..	..	..	..	..	..	..
Deduct probable resources due to sales of tools and plant	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..
Total of revised estimate sanctioned in Secretary of State's despatch, No. 1, dated 7th January 1892.	..	..	..	..	..	..	..	..	..	..
Estimated cost of additional works found necessary up to end of last quarter	..	..	..	..	..	..	..	..	..	..
Estimated cost of additional works found necessary during quarter ending	..	..	..	..	..	..	..	..	..	..
Total estimated cost for completion of work	..	..	..	..	..	..	..	..	..	..
Deduct total expenditure as per column II	..	..	..	..	..	..	..	..	..	..
Total estimated cost of completing work after quarter ending 30th Sept 1893	..	..	..	..	..	..	..	..	..	..

Expenditure up to 31st March 1893 from commencement of works Do. during current official year from 1st April 1893 to 30th September 1893

Rs. A. P.
1,19,35,729 3 0
186,177 3 6

Grant for 1893-94, Rs. 2,70,000

1,26,39,000 8 0

MADRAS,
11th November 1893.(Signed) A. LEE-PHOSON,
Engineer, Harbour Trust Board.

No. 2260, Marine.

Transferred to the Public Works Department.

16th December 1893.

(Signed) J. F. PRICE,
Chief Secretary.

ORDER—dated 9th January 1894, No. 48 W., Public Works.

Ordered to be forwarded for the information of the Secretary of State and the Government of India.

[Here enter No. 49 W., dated 9th January 1894.]

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.To the Chairman, Harbour Trust Board.
" Marine Department.

ENDORSEMENT—dated 9th January 1894, No. 49 W., Public Works.

Copy of the above, with two plans showing the progress of the work, forwarded to the Government of India.

(By Order.)

Colonel, R.E.,
Secretary to Govt., P.W.D.Encl. C. A. Muniswamy.
Spent Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1894} Madras.
PUBLIC WORKS.

Dated January, 9th.

Recd.

Encl.

G.O., 9th Jan. 1894, Nos. 49,
49 W.

JANUARY.

Madras Harbour Works

Forwarding copy of the progress report of the — for the quarter ending 30th September 1893 with two plans showing the progress of the work.

48 1/2

HARBOUR TRUST OFFICE,
MADRAS, 3rd December 1893.

No. 3083

From

THE HON'BLE MR. WARE AUSTIN, I.C.S.,
CHAIRMAN, HARBOUR TRUST BOARD,
Madras.

To

THE HON'BLE MR. J. F. PRICE, C.S.I., I.C.S.,
CHIEF SECRETARY TO GOVERNMENT,
Marine Department.

SIR,

I have the honor to submit herewith for the information of Government report upon the progress made in the reconstruction of the Madras Harbour, during the Quarter ending 30th September 1893, together with the various tracings and statements referred to by the Board's Engineer.

2. The period under review was exceptionally favourable for progress at the pier heads, the sea being for the most part clear and calm, enabling the Divers to work to the best advantage in removing pieces of old block-work and setting the new blocks.

3. At the north pier: of 78 working days, 48 were occupied in dredging the base to the required depth, six days in levelling it, and eleven days in setting in position 119 superstructure blocks, which represent five complete courses, and advanced the north arm by 26 ft. 10½ inches temporary work, to compress the base and thus prepare the foundation for the caisson, the erection of which was commenced on the 8th August. Total length of north arm 3791 feet.

4. At the south pier: in 78 working days, 64 were occupied in dredging, clearing and levelling the base, and 10 days in setting 72 blocks forming three complete courses, which advanced the arm by 16 ft. 1½ inch, and brought the total length of this arm up to 3868 feet from the commencement of block-work at the shore end. There still remain three courses of permanent work, 16 feet, and six courses of temporary work, 32 feet, to be built at the south pier before that caisson can be set.

5. The sea having been exceptionally calm throughout the Quarter, no appreciable movement has taken place in the protective revetement to the north to the Harbour, while to the south the foreshore has advanced seaward 90 feet during the quarter, making in all 120 feet during the twelve months ending 30th September.

6. The sea bottom inside the Harbour has been surveyed, and although the high water mark has advanced seawards, the Engineer reports no perceptible shoaling of the deep water space available for anchorage within the walls.

7. During the quarter 171 vessels representing a tonnage of 3,03,957 net register entered the Harbour, and 14 vessels of 908 net register tonnage anchored within port limits outside.

7. I also submit herewith for information the usual tabulated returns of exports and imports, so arranged that the half year ending 30th September 1893 is comparable, at a glance, with the same period in 1892, the increase or decrease being shown in a final plus and minus column, as suggested by Mr. Vans Agnew.

8. From these returns it is to be noticed that nearly all important items of import from foreign ports show a moderate increase, the most important being coal which is 14,709 tons in excess of the corresponding period last year, and for the six months only 7,122 tons less than the total from foreign ports of 1892-93, the figures being 49,508 tons last official year, and 42,486 tons during the first half of this; the facilities existing for handling this important increase have fully met all requirements, and the Trustees have called for an estimate for extending the hard north of the pier so that the iron may be moved further south and more space be given for the storage of coal immediately to the South of the North arm of the Harbour. The increase in the quantity of coal landed, and the necessity which has therefore arisen of stacking it further South, has unavoidably occasioned considerable inconvenience from the dust in the offices of Messrs. Dymes & Co. and the Dy. Commissioner of Police; but while regretting this the Trustees are unable to avoid it under existing circumstances: though when the Harbour is completed arrangements may perhaps be made to abate the inconvenience by landing coal to the South of the Harbour, where the wide accretion of sand would prevent the dust from incommoding the offices upon the Beach road opposite.

9. The increase in import of coal, has not been confined to that from foreign ports, a satisfactory increase of 4,063 tons being also recorded in the imports from Calcutta.

10. The question of providing further facilities, and if possible reducing the charges and preventing wastage, will continue to receive the careful attention of the Board.

11. A fire occurred in one cargo of English coal. Smoke was discovered a little before 8 A.M. on the morning of the 27th July, and the Trustees have to record, with thanks, the valuable assistance rendered by the officers of the Madras Railway Company. Within a quarter of an hour of the alarm being given, the Madras Railway Company's Steam Fire Engine was, in response to an urgent letter from the Board Secretary, at work pumping water from the Municipal hydrant immediately to the north of the office of the Dy. Commissioner of Police, and the thanks of the Board are also due to this officer and the Police Force under him, for the admirable manner in which the Trust premises were at once cleared of the crowd which immediately assembled, enabling the Traffic Manager and his subordinates to cope without hindrance with the fire, which was promptly extinguished, and the coal restacked.

12. This is the first instance in which a fire has occurred in coal stacked upon the Board's premises. The expenses incurred in extinguishing the fire and in restacking the coal has, under the advice of the Board's Solicitors, been paid by the Trust, and a system of ventilation by means of horizontal and perpendicular ventilating shafts has since been adopted, which it is hoped will prevent any similar accident in future.

13. Other very satisfactory and important items of increase in imports are (a) 109,881 cases of kerosine oil for the half year, accompanied also by the import of 1,518 tons in bulk against 8,361 tons the total of the previous year (b) Piece Goods + 6,676, and Twist + 2,790 bales and cases.

14. Other important variations in imports, from coast, are, as follows:—Gram and Peas + 18,939 bags, Hides—2,998 bales, Paddy—35,149 bags, Rice—72,443 bags, Skins + 1,096 bales, Timber + 2291 tons.

15. In exports to foreign ports the following items show important increases Cotton + 18,742 bales, Ground-nuts + 91,340 bags, Indigo + 1,494 chests, Jaggery + 35,232 bags, Poonac + 6,514 bags, Rice (to Ceylon) + 6,401 bags, Seeds + 10,924 bags.

16. On the other hand there is a reduction in Coffee—12,911 bags, Twist (from local Mills to Straits and China)—4,659 bales, Tanned Hides—7,486 bales, Tanned Goat and Sheep Skins—3,361 bales. All the above are important articles of export; Coffee will probably be up to previous figures upon the full year; but the falling off in the export of Tanned Hides and Skins, one of the most important local industries, would appear to be due to the unfavourable state of the home markets, and is a loss to the trade of the port much to be regretted, as future shipments cannot make up for smaller production during the half year under review.

17. Exports to coast ports have been fairly well maintained; the various variations are given in detail in the returns, and call for no special comment.

18. Turning to the net results as gauged by cash collections, the position of the Trust is satisfactory. Compared with the corresponding half year 1892-93 the period from 1st April to 30th September 1893 shows the following substantial increases:—

	Rs.
Beach imports	12,054
Pier	1,083
Beach exports	7,169
Pier	1,210
Dues for entry of vehicles	1,914
Craneage	9,246
Storage	354

19. The only item of decrease is Rs. 685 under the head wharfage, which is satisfactory, as showing that the facilities for removal of goods leaves it optional with merchants to clear their cargo before dues accumulate, and it is pleasing to note that nothing whatever has been paid on account of demurrage upon goods left uncleared, thus evidencing the completeness of the facilities given by the Board.

20. Porterage receipts have increased Rs. 8,210: though miscellaneous are 1,276 less. The net charges against porterage however also show an increase of Rs. 6,788 due to the extra work performed. Both increase and decrease is chiefly due to the larger importation of coal.

* This item has been excluded from 'porterage' and placed amongst ordinary dues, being more properly shown as such.

21. Fees paid for drinking water delivered at the pier head have increased by Rs. 398, which is satisfactory, as showing that the improved supply given by the Trust is appreciated and made use of.

22. Sundries have increased Rs. 2,281 due to sale of Cassia trees growing upon H. T. land at Cassinoda.

23. Interest upon Government prom. notes representing cash balances invested, has increased by Rs. 7,384. This merely shows that interest has been realised and credited more promptly than before.

24. The expenditure of the Trust shows a large increase Rs. 31,438 in interest payable to Government under Section 30 of the Harbour Trust Act, and it is to be noted that excluding contribution from Port funds Rs. 20,000 and Portage Rs. 54,203, the whole of the receipts for the first six months of the current year have been insufficient to meet this one item of liability: interest paid being Rs. 2,18,478: and the receipts, including interest upon investments, amounted only to Rs. 2,12,721: there is also the additional payment of Rs. 1,00,000 refund of capital, which was duly paid to the credit of Government in April last.

25. Other items of expenditure cannot be usefully compared for the half year, and I need not refer to them, until reporting upon the administration of the Trust for the full year ending in March next. I need now only remark that the financial position of the Trust as disclosed in the receipts and charges for the half year is satisfactory, and goes to show that whereas the anticipated receipts will probably be in excess of the budget estimate, the expenditure will be kept within the limits assigned, and it is expected that the close of the financial year will again show an improved financial position.

I have the honor to be,

Sir,

Your obedient Servant,

Chairman, Harbour Trust Board.

Statement of Receipts and Charges from 1st April to 30th September 1893.

Opening balance—	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Government Securities (Par value 8,00,000) ...	...	...	...	7,93,157	0	10			
1. Cash in the Bank of Madras ...	8,71,724	13	1						
2. General Cash in Office ...	469	14	8						
3. Advance for Contingencies ...	500	0	0	3,72,694	11	9			
							11,65,851	12	7
Receipts.									
I. Contribution from Port Funds ...							20,000	0	0
II. Beach Import dues, under Section 45									
(a) I (i) (ii) (iii) ...	85,043	12	1						
Pier do. do. do. ...	30,969	0	10						
Beach Export do. do. ...	16,056	13	8						
Pier do. do. do. ...	24,850	3	1						
Wharfage, under Sec. 45 (a) II ...	3,750	0	0						
Craneage do. III ...	22,318	0	1						
Storage do. IV ...	1,495	1	8						
Demurrage do. V ...									
Dues for entry of Vehicles under Sec. 45 (c) VI ...	6,648	6	0						
Provisions : dues on—under Sec. 45 (a)									
I (i) ...	306	3	0						
Rent of Properties ...	619	8	9						
Water charge for—delivered at Pier Head ...	2,248	12	0						
Penalties under (Section 84) ...									
Sundries ...	2,369	7	0						
				1,96,705	3	5			
III. Portage under Sec. 45 (a) I (iv)—									
Beach ...	35,931	1	3						
Pier ...	16,998	3	8						
Miscellaneous ...	1,274	6	9						
				54,203	14	8	1,50,903	2	1
IV. Interest realized on Government of India 4 per cent. Promissory Notes ...							16,915	4	10
Total Rupees ...							14,52,776	3	6
Charges.									
I. Interest (under Section 30) ...				2,18,477	13	7			
II. Repayment of Loan for Construction of Harbour under Section 31 ...				1,00,000	0	0			
III. Establishment, &c.—							3,18,477	13	7
1. Chairman's salary ...	2,400	0	0						
2. Secretary do. ...	5,066	2	1						
3. Correspondence Department ...	1,835	13	8						
4. Accounts Department ...	3,078	1	9						
5. Cash Department ...	2,206	10	0						
6. Traffic Department (Shore Staff) ...	12,709	1	9						
7. Preventive Service ...	6,023	6	0						
8. Do. Boatmen ...	587	13	7						
9. Contribution to Government for Pensions ...	177	2	8						
10. Fees to Trustees ...	3,120	0	0						
11. Contribution to Provident Fund ...	38	3	7						
				37,242	7	1			

IV. Contingencies—

(a) Subject to Regular Audit—

Postage	36 5 4
Receipt Stamps	111 8 0
Telegrams	7 4 0
Furniture	...
Fees for Audit	...
Law Charges	1,197 14 0
Stationery and Printing	1,088 15 11
Advertisement Charges	393 0 0
Uniform for Preventive Service	1,318 8 0

4,154 7 5

(b) Admissible without Detailed Audit—

Overtime Fees to Establishment	1,952 14 0
Do. Preventive Service and Boatmen	1,406 2 6
Miscellaneous	3,179 6 2

6,538 6 8

V. Refunds

1,355 12 4

VI. Petty Construction and Repairs—

New Works	...
Repairs	4,269 1 0
Tools and Plant	545 7 6

4,814 8 6

VII. Portage—

54,365 10 10

1. Cobles, Pier	8,097 14 0
2. Do. Beach and Custom House	22,437 10 5
3. Madras Railway Company	2 0 0
4. South Indian Railway Company	40 15 7
5. Coasting Cargo	603 2 2
6. Boat Hire	...
7. Claims for Losses and Damage	128 6 11
8. Engine Charges	784 8 0
9. Refunds	224 12 10
10. Steam Crane Charges	974 12 8
11. Contribution to Coity Provident Fund	436 7 10

32,775 10 6

Contingencies—

(a) Subject to Regular Audit—

Postage	...
Receipt Stamps	6 15 0
Telegrams	...
Furniture	...
Tarpaulins	707 8 0
Law Charges	...
Stationery and Printing	388 10 1
Advertisement Charges	...
Lighting Pier and Yards	832 1 3

1,935 2 4

(b) Admissible without Detailed Audit—

Miscellaneous	1,130 9 7
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42,841 6 4

Advances to Construction Account

41,000 0 0

Total Expenditure

4,56,484 14 9

Balance on the 30th September 1893—

Government Securities (Par value 9,45,000)	9,45,104 2 10
Cash in the Bank of Madras	50,528 5 2
General Cash in Office	158 12 9
Advance for Contingencies	500 0 0

51,187 1 11

9,96,291 4 9

Total Rupees

14,52,776 3 6

ACCOUNTS DEPARTMENT,
HARBOUR TRUST,
MADRAS, 13th July 1898.

H. E. HOPE-ROSS,
Chief Accountant, Harbour Trust.

Comparative Statement of Receipts and Charges of the Madras Harbour Trust under Act II of 1883 for half years ending 30th September 1892 and 1893.

Items.	Actuals from 1st April to 30th Sep. 1892.	Actuals from 1st April to 30th Sep. 1893.	Plus or Minus.
Revenue Account.			
Opening Balance	Rs. 11,47,648	Rs. 11,63,952	+ 20,204
Receipts.			
Contributions from Port Funds	65,000	20,000	- 45,000
Beach Import dues, under Sec. 45 (a) I (b) (ii) (iii)	71,960	85,044	+ 12,084
Pier do. do. do.	20,989	30,909	+ 10,920
Beach Export do. do. do.	8,888	16,067	+ 7,179
Pier do. do. do.	24,679	24,890	+ 211
Wharfage, under Sec. 45 (a) II	4,485	9,750	+ 5,265
Craneage do. III	14,072	22,318	+ 8,246
Storage do. IV	1,141	1,495	+ 354
Demurrage do. V	...	...	...
Dues for entry of Vehicles under Sec. 45 (a) VI	4,734	8,648	+ 3,914
Provision dues on under Sec. 45 (a) I (G)	330	306	- 24
Rent of Properties	882	899	+ 17
Water charges for delivered at Pier head	1,891	2,349	+ 458
Penalties under Sec. 34	...	...	...
Sundries	89	2,370	+ 2,281
Portage under Sec. 45 (a) I (a).			
Beach	28,565	35,331	+ 6,766
Pier	16,154	16,998	+ 844
Miscellaneous	2,550	1,274	- 1,276
Interest realised on Govt. of India 17 Pro. Notes	2,681	16,015	+ 13,334
Total	2,02,858	2,80,924	+ 78,066
Total including the opening Balance	14,50,506	14,52,776	+ 2,270
Charges.			
Interest paid to Govt. under Sec. 30	1,87,040	2,18,478	+ 31,438
Repayment of Loans for Construction of Harbour under Section 31	1,00,000	1,00,000	...
Establishment.			
Chairman's Salary	2,400	2,400	...
Secretary's Salary	4,550	5,066	+ 516
Correspondence Department	1,794	1,846	+ 52
Accounts Department	5,019	5,978	+ 959
Cash Department	7,688	2,267	- 5,421
Trade Department (Shore Staff)	18,007	12,709	- 5,298
Preventive Service	6,347	6,023	- 324
Preventive Service Boatmen	365	388	+ 23
Contribution to Govt. for Pensions	426	177	- 249
Fees to Trustees	8,090	3,120	- 4,970
Contribution to Provident Fund	49	38	- 11
Contingencies.			
(a) Subject to Regular Audit—			
Postage	32	35	+ 3
Receipt Stamps	101	113	+ 12
Telegrams	...	7	+ 7
Furniture	450	...	- 450
Fees for Audit	...	1,198	+ 1,198
Law Charges	...	1,090	+ 1,090
Stationery and Printing	...	393	+ 393
Advertisement Charges	...	1,819	+ 1,819
Uniform for Peons, Preventive Service, &c.	280	...	- 280
(b) Admissible without Detailed Audit—			
Overtime Fees to Establishment	2,063	1,953	- 110
Do. Preventive Service and Boatmen	1,624	1,466	- 158
Miscellaneous	1,841	3,379	+ 1,538
Refunds	1,515	1,856	+ 341
Petty Construction and Repairs.			
New Works	10,397	...	- 10,397
Repairs	9,500	4,269	- 5,231
Tools and Plant	...	545	+ 545

Comparative Statement of Receipts and Charges of the Madras Harbour Trust under Act II of 1886 for half years ending 30th September 1892 and 1893. (continued)

ITEMS.	Actuals from 1st April to 30th Sep. 1892.	Actuals from 1st April to 30th Sep. 1893.	Plus or Minus.
Receipts.	Rs.	Rs.	Rs.
Coastal Port	8,627	8,894	+ 267
Do. Beach and Customs House	21,182	22,432	+ 1,250
Madras Railway Company	89	1	- 88
South Indian Railway Company	137	41	- 96
Coastal Office	905	608	- 297
Wharf Hire	1,186	124	- 1,062
Charges for Losses and Damages	534	124	- 410
Refund	735	785	+ 50
Refund	885	92	- 793
Stevedoring Charges	1,341	973	- 368
Contribution to Cooly Provident Fund	451	485	+ 34
Contingencies.			
(a) Subject to Regular Audit—			
Postages	7	7	—
Receipt Stamps	—	—	—
Telegrams	—	—	—
Furniture	—	—	—
Turnstiles	152	767	+ 615
Law Charges	25	—	- 25
Stationery and Printing	412	369	- 43
Advertisement Charges	—	—	—
Lighting Pier and Yards	783	802	+ 19
(b) Admissible without Detailed Audit.			
Miscellaneous	707	1,181	+ 474
Total	3,29,407	4,18,253	

H. K. HOPE-ROSS,
Chief Accountant, Harbour Trust.

I. STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS.

	Packages.	Half year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half year ending 30th September 1893.	Increase or Decrease as compared with corresponding period of last year.
Apparel and Effects	Packages	366	429	273	1,068	258	- 810
Alum	Barrels	206	378	102	686	352	+ 334
Asphalte, Tar, & Pitch	Casks	1,305	1,96	428	2,329	1,619	+ 710
Acids	Cases	1,103	129	176	1,408	1,185	+ 223
Arms and Guns	"	150	49	12	221	162	+ 59
Arrack	Casks	458	247	128	833	546	+ 287
Blankets	Bales	20	143	5	168	9	- 159
Beef and Pork	Cases	—	—	—	—	—	—
Bricks	100	170	231	150	551	1,550	+ 999
Beer	Cases	4,514	1,841	2,315	8,710	2,544	- 6,166
Boiler	Barrels	777	433	497	1,707	437	- 1,270
	Hogsheads	1,096	2,159	1,935	5,190	2,309	- 2,881
	No.	13	10	9	32	27	+ 5
Corks	Bundles	27	18	37	72	16	- 56
Canvas	"	97	31	62	190	455	+ 265
Candles	"	17,376	7,866	6,275	31,517	13,681	- 17,836
Colours	"	1,612	1,177	497	3,286	1,658	+ 1,628
Confectionery Provisions and Oilman's stores	"	9,300	3,321	4,408	22,129	9,653	+ 12,476
Crockery & Glassware	Crates	—	—	—	—	—	—
	& Casks	1,848	802	1,172	3,817	2,328	+ 1,489
Chalk	Barrels	65	25	50	140	10	- 130
Cement	Casks	5,745	968	656	7,369	4,069	- 3,300
Cast Iron Pipes and Tubes	Tons	805	376	355	1,436	712	- 724
Carbide	Tons	2,223	1,067	1,559	4,849	2,987	+ 1,862
Coal, Coke and Fuel	Tons	27,777	11,265	10,466	49,508	42,486	+ 7,022
Coal	"	611	130	637	1,378	540	- 838
Coke	"	—	—	2,953	2,953	—	- 2,953
Fuel	"	724	115	1	840	—	- 840
Crackers	Cases	199	145	177	521	2,708	+ 2,187
Copper Plates and Tiles	No.	992	843	676	2,512	299	- 2,213
Corrugated Iron	Packages	3,530	405	4,100	8,035	3,344	- 4,691
Dynamite	Cases	596	920	370	1,886	917	+ 969
Earthenware	Casks	56	148	68	272	60	- 212
Fire Clay	Bags and Barrels	571	171	79	821	583	+ 238
Flannel	Bales	12	9	9	30	25	+ 5
Gunpowder	Packages	3,708	387	1,892	5,987	3,195	+ 2,792
Harmonium	Cases	3	14	10	27	19	+ 8
Hardware	Cases	3,237	1,068	2,478	6,783	4,322	+ 2,461
Hops	Packages	36	8	20	64	31	- 33
Iron	Tons	11,869	1,861	4,199	17,929	11,544	+ 6,385
Iron Safes	No.	126	10	14	150	52	- 98
Kerosine Oil	Cases	54,235	82,664	1,14,421	2,51,320	1,64,116	+ 87,204
	Tons	—	—	3,361	3,361	1,518	+ 1,843
Lime Water	"	—	—	—	—	—	—
Malt	Bags	388	7	12	407	13	- 394
Millinery and Haberdashery	Cases	784	452	830	1,566	570	+ 996
Matches	"	4,916	1,579	2,630	9,125	4,304	+ 4,821
Machinery	Tons	1,593	678	970	3,241	1,506	+ 1,735
Nails	Kegs	5,136	2,237	3,175	10,547	7,648	+ 2,899
Oil and Turpentine	Drums	4,268	1,630	952	15,500	1,652	+ 13,848
Piece Goods	Piece Goods	23,326	13,477	14,748	51,551	30,002	+ 21,549
	Twist	9,282	5,703	3,676	18,664	12,072	+ 6,592
Paper	Bales	2,873	1,128	1,512	5,518	3,769	+ 1,749

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10 70 STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS—continued.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Total for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or de- crease as com- pared with corre- sponding period of last year.	
Piano	No.	56	25	8	90	57	+	1
Printing Types	Cases	547	112	68	727	466	—	381
Pig Lead	No.	608	309	161	1,098	1,089	+	1,381
Paint	Kegs	7,485	1,140	1,632	10,257	8,384	—	1,401
Rattan	Bundles	2,779	573	2,817	5,669	6,27	—	2,152
Soaps	Cases	312	210	448	970	1,332	+	1,020
Salt	"	134	115	80	329	48	—	86
Steel	Cases & Casks	469	1,278	1,596	3,343	568	+	99
Steel Bundles and Bars	No.	4,257	2,508	3,636	10,401	6,228	+	1,971
Steel Hoop	Bundles	1,189	408	58	1,597	4,874	+	3,683
Shovels	"	406	35	58	499	2	—	404
Soda-water Bottles	Crates	951	473	314	1,768	846	—	103
Sulphur	Casks	401	81	225	707	225	—	175
Shot	Kegs	1	20	35	56	87	+	86
Sundries	Packages	12,090	71,490	10,026	33,606	28,696	+	16,516
Specie	No.	155	208	224	588	364	—	92
Sugar	Bags	268	774	154	1,196	616	+	2,343
Slates and Pencils	Cases	409	160	279	848	733	+	324
Spelter	Cakes	2,144	3,266	3,376	8,786	6,376	+	4,232
Saw	Cases	34	6	8	48	48	+	14
Twine and Rope	Bales & Coils	91	339	25	455	400	+	309
Tin Plates	Boxes	1,145	866	2,338	4,649	3,640	+	2,195
Wine and Spirits	Cases	22,689	10,057	11,993	44,739	18,285	—	4,454
	Casks	138	32	188	358	232	—	206
	Punchoons	163	332	338	733	417	+	254
Window Glasses	Cases	1,379	1,579	4,937	12,000	9,156	+	3,672
White and Red Lead	Kegs	857	319	275	1,451	283	—	74
Yellow Metal	Cases	893	1,139	1,324	3,361	1,819	+	921
Zinc Sheets	Packages	847	361	482	1,690	558	—	289
Horses	No.	300	386	323	1,009	213	—	87
Ponies	"	56	32	24	112	127	+	61
Cows	"	3	6	4	13	3	—	2
Dogs	"	7	8	11	26	14	—	11
Elephants	"	1	1	7	9	7	—	2
Two-wheeled Car- riage	"	4	4	...	8	2	—	3

II. STATEMENT OF STORES IMPORTED BY THE MADRAS RAILWAY COMPANY.

	Packages.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or de- crease com- pared with cor- responding period of last year.
Stores	{ Packages	15,540	7,293	49,601	72,434	40,342	+ 24,802
	{ Tons	389	110	499	499	6	— 383
Fuel	"	...	...	...	...	...	...
Coke	"	141	...	403	544	628	+ 487
Coal	"	...	...	300	300	...	...
Timber	"	569	73	1,399	2,033	...	— 569
Fire Brick	100	...	98	232	330	...	...

STATEMENT OF STORES IMPORTED BY THE SOUTH INDIAN RAILWAY COMPANY.

Packages.		Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or de- crease as compar- ed with corre- sponding period of last year.
Stores	Packages	10,619	4,241	7,311	22,171	6,539	- 4,080
	Tons	...	...	...	...	22	+ 22
Fuel	Tons	...	...	...	...	...	...
Coke	"	...	...	...	...	...	...
Coal	"	...	...	...	...	...	...
Timber	"	...	...	...	...	...	...
Boiler	No.	5	...	7	12	10	+ 5

IV. STATEMENT OF GOODS IMPORTED FROM COAST PORTS.

		Half-year ending 30th Sept. 1892	Quarter ending 31st Dec. 1892	Quarter ending 31st March 1893	Totals for 1892-93	Half-year ending 30th Sept. 1893	Increase or decrease as compared with corres- ponding period of last year	
12	Packages	160	78	105	343	196	+	36
Apparel and Effects	Barrels	81	106	...	187	7	+	74
Alum	Cases	16	12	92	125	202	+	186
Acids	No.	10	...	...	10	...	+	10
Animals	Cases	5	5	2	12	4	+	1
Arms and Guns	No.	...	...	...	...	...	+	0
Boilers	100	10	42	...	57	517	+	507
Bricks and Tiles	...	...	...	...	...	...	+	...
Coffee	Bags	461	14	120	595	430	+	2
Candles	Cases	1,239	167	125	1,531	1,315	+	76
Colours	...	...	...	...	...	...	+	...
Crockery and Glass-ware	...	133	103	175	411	202	+	19
Coal	Tons	4,292	1,985	7,515	13,792	8,335	+	4,063
Coke	...	...	...	...	...	...	+	...
Corsets	Bales	45	22	27	94	46	+	1
Camphor and Benja-min	Tubs	667	433	206	1,306	344	+	323
Copra	Bags	...	...	...	...	...	+	...
Crackers	Cases	740	103	28	871	558	+	182
Copper	Tiles & Ingots	...	421	...	421	1,411	+	1,411
Do.	Packages	1,094	1,544	557	3,191	2,093	+	999
Catch & Law	No.	...	...	415	415	1,023	+	2,023
Cocoanuts	Crates	1,424	1,496	21	2,941	390	+	1,434
Earthenware	Pipes	3,235	304	2,790	6,315	936	+	2,239
Do.	Tons	...	...	...	...	...	+	...
Firewood	Bags & Barrels	5,223	3,501	2,958	11,682	5,969	+	746
Flour	Bales	1,405	2,097	6,159	9,661	5,306	+	3,901
Gummiel	Bags	1,83,106	1,12,513	84,496	3,80,115	2,02,075	+	18,939
Gram and Peas, &c.	Bags	990	225	...	1,215	4,027	+	3,037
Garlic	Cases	208	315	674	1,197	744	+	56
Hardware	Bundles	550	244	186	980	209	+	341
Horns	Bales	5,662	2,133	1,714	9,509	2,664	+	2,993
Hides	Tons	97	96	100	293	67	+	30
Iron	No.	21	2	15	38	14	+	7
Iron Safes	Cases	...	...	...	...	500	+	500
Kerosine Oil	Bundles	2,295	1,030	417	3,742	3,919	+	1,624
Leaves	Cases	...	...	...	...	1,185	+	1,185
Liquor	Tons	21	87	21	79	16	+	5
Machinery	Cases	99	50	96	245	65	+	34
Millinery and Haber-dashery	Drums	5,043	1,197	2,129	8,369	5,464	+	421
Oil and Turpentine	Bags	49,210	3,610	23,160	75,980	14,061	+	35,149
Paddy	Cases and Bales	1,477	1,592	1,687	4,756	3,117	+	640
Piece-goods	Bales	1,800	1,522	1,576	4,898	3,853	+	2,038
Paper	Kegs	224	155	304	683	123	+	96
Paint	No.	8	1	13	22	2	+	6
Piano	Bags	1,22,602	26,091	57,143	2,05,836	48,559	+	73,443
Rice	Cases	1,310	...	265	1,815	652	+	667
Rose Water	Bags	14,743	4,798	6,206	25,747	8,959	+	5,784
Seeds	Bales	2,078	1,006	1,968	5,052	6,174	+	1,096
Skins	"	450	177	72	699	211	+	239
Silk	Bundles	26	9	83	118	32	+	6
Sandalwood	Bags	343	227	291	861	675	+	327
Sugar	No.	54	27	109	190	26	+	28
Specie	Packages	23,435	12,379	11,323	47,137	16,671	+	6,764
Sundries	Cases	6	17	40	63	30	+	24
Soap	Cases	334	137	73	544	249	+	85
Sulphur	Packages	250	313	177	740	340	+	90
Spice	Crates	...	...	...	...	4	+	4
Soda water Bottles	Bales and Coils	341	202	232	775	909	+	563
Twine and Rope	Boxes	382	303	227	912	462	+	80
Tin Plates	Bales	809	168	170	1,147	673	+	136
Twist	Bags	2,601	1,107	1,269	4,977	2,821	+	220
Turmeric	Tons	4,630	2,044	3,375	10,505	6,921	+	2,291
Timber	Cases	3,136	261	14	3,411	37	+	3,099
Tea	Bundles	...	...	...	...	72	+	72
Tamarind	Cases	300	197	45	542	1,074	+	774
Yellow Metal	No.	8	...	...	7	15	+	8
Horses	No.	2	2	2	4	2	+	2
Two-wheeled Carriages	No.	...	...	3	3	5	+	5
Four-wheeled Carriages	No.	...	...	...	...	...	+	...

V. STATEMENT OF GOODS EXPORTED TO FOREIGN PORTS.

	Packages.	Half-year ending 31st Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 31st Sept. 1893.	Increase or de- crease as com- pared with cor- responding period of last year.
Beer and Ale	Cases	2	...	...	2	12	+ 10
	Casks	7	...	...	7	...	- 7
	Hogsheads	...	...	...	...	...	...
Cinchona Bark	Bales	457	32	60	529	300	- 137
Chillies	Bags & Bundles	...	9	...	9	145	+ 145
Cigars	Cases	285	92	179	556	201	- 355
Coffee	Bags	13,558	41	19,014	34,613	3,517	- 12,041
Cotton	Bales	16,899	6,422	2,819	26,140	35,643	+ 18,742
Cotton Twist	"	3,201	5	60	3,266	542	- 4,659
Coriander and Onum Seeds	Bags	621	899	294	1,814	2,901	+ 2,280
Carpets	Bales	140	56	92	288	156	+ 16
Coal	Tons	213	100	...	313	135	- 22
Deer Horns	Packages	1,107	203	179	1,540	335	- 722
Explosive	Cases	1	...	...	1	...	- 1
Firewood	Tons	...	...	...	...	...	...
Four-wheeled Car- riages	No.	2	...	...	2	2	...
Ground Nuts	Bags	22,720	82	3,407	26,209	1,14,060	+ 91,310
Gram, Peas, &c.	"	...	196	25	161	1,604	+ 1,604
Horns, Cow and Buffalo	Tons	10	3	7	20	13	- 6
Hides, Tanned	Bales & Bundles	12,796	3,898	5,118	21,812	5,310	- 7,486
Indigo	Cases & Chests	5,543	10,802	9,588	25,933	7,037	+ 1,494
Iron	Tons	...	11	...	11	13	+ 13
Jaggery	Bags	13,736	6,443	36,493	56,672	48,968	+ 35,232
Myrabolams	Bags	60	31	...	91	563	+ 503
Miscellaneous	Packages	17,179	4,641	6,727	28,547	10,782	- 6,447
Onions	Bags & Baskets	5,398	24	260	5,677	8,133	+ 2,710
Oil	Casks	22	25	9	56	193	+ 171
Piece-goods	Bales and Cases	2,356	1,540	961	4,857	2,789	+ 463
Potatoes	Bags & Baskets	157	115	10	282	824	+ 667
Poonac	Bags	10,127	3,764	2,236	16,127	16,641	+ 6,514
Piano	No.	7	3	...	10	4	- 3
Paddy	Bags	...	5	...	5	22	+ 22
Rice	"	1	2,639	589	3,229	4,102	+ 3,101
Redwood	Tons	726	273	655	1,654	423	- 303
Seeds, Gingelly and Castor	Bags	717	7,633	4,304	12,654	9,361	+ 8,643
Skins, Sheep and Goat, Tanned	Bales	17,470	7,207	9,886	34,063	13,809	- 3,361
Sandalwood	Bundles	48	1	286	330	459	+ 416
	Cases	18	1	22	41	19	+ 1
Spirits and Wine	Casks	40	25	...	65	39	- 1
	Puncheons	...	...	...	...	...	...
Sugar	Bags	22	62	77	161	445	+ 423
Specie	Boxes	21	9	13	43	13	- 8
Tamarind	Bundles	3,436	61	1,834	5,331	710	- 2,726
Tarmeric	Bags	237	374	830	1,441	765	+ 528
Tea	Cases	1209	370	190	1,769	1,000	- 182
Two-wheeled Car- riages	No.	...	...	...	...	...	...
Wool	Bales	879	207	384	1,470	769	- 110
Yellow Metal	Tons	...	100	...	100	117	+ 117

VI. STATEMENT OF GOODS EXPORTED TO COAST PORTS.

	Packages.	Half-year ending 31st Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 31st Sept. 1893.	Increase or de- crease as com- pared with cor- responding period of last year.
Beer and Ale	Cases	167	58	39	264	156	- 11
	Casks	25	46	24	94	27	- 2
	Hogsheads	9	9	26	41	128	+ 122
Boiler	No.	...	...	...	...	1	+ 1
Cinchona Bark	Bales	84	...	...	84	...	- 84
Chillies	Bags & Bundles	2,390	280	237	2,907	4,818	+ 2,128
Cigars	Cases	588	288	260	1,136	511	- 277
Coffee	Bags	1,140	198	111	1,449	305	- 833
Cotton	Bales	2,144	373	1,328	4,245	5,844	+ 3,700
Cotton Twist	"	1,734	3,123	1,281	6,138	1,540	- 194
Coriander and Onum Seeds	Bags	2,543	582	3,877	7,002	3,180	- 537
Cement	Casks	...	3,311	297	8,908	54	+ 54
Carpets	Bales	25	14	12	51	23	- 2
Coal	Tons	25	75	350	450	82	+ 57
Deer Horns	Packages	1	100	50	151	49	+ 48
Explosive	Cases	317	26	958	1,331	20	- 327
Eggs	Pots	350	379	896	1,625	414	+ 64
Firewood	Tons	...	...	...	...	...	...
Four-wheeled Carriage	No.	14	5	12	31	14	...
Groundnuts	Bags	5,528	2,352	6,960	17,839	8,226	- 302
Gram, Peas, &c.	"	658	33	540	1,226	204	- 449
Horns, Cow and Bu- ffalo	Tons	96	112	60	367	85	- 11
Hides	Bales & Bundles	220	142	164	526	331	+ 111
Indigo	Cases & Chests	16	600	200	816	768	+ 692
Iron	Tons	2,402	26	153	2,611	322	- 2,080
Jaggery	Bags	34	35	1,323	1,448	120	+ 30
Kerosine Oil	Cases	423	11	220	659	580	+ 152
Myrabolams	Bags	7	12	272	291	1,087	+ 1,080
Miscellaneous	Packages	23,628	12,071	33,835	69,534	39,334	+ 15,706
Onions	Bags & Baskets	6,548	26,480	20,378	53,406	21,281	+ 14,333
Oil	Casks	328	238	71	637	222	- 106
Piece-goods	Bales & Cases	3,902	1,779	2,970	8,651	3,037	- 835
Potatoes	Bags & Baskets	8,499	14,823	766	24,388	11,556	+ 3,057
Poonac	Bags	9,378	3,951	8,852	22,181	8,128	- 1,250
Piano	No.	6	8	2	16	6	- 3
Paddy	Bags	250	1,300	7,256	8,806	5,100	+ 4,850
Rice	"	5,000	12,678	14,215	31,893	6,645	+ 1,645
Redwood	Tons	687	6	...	693	2	- 685
Seeds, Gingelly and Castor	Bags	653	633	4,501	2,787	15,952	+ 15,290
Skins, Sheep & Goat, Tanned	Bales	256	253	537	1,046	529	- 273
Sandalwood	Bundles	63	162	31	256	523	+ 460
	Cases	2,027	1,023	733	3,783	1,412	- 615
Spirits	Casks	296	196	224	716	596	- 304
	Puncheons	14	95	91	189	150	- 145
Sugar	Bags	902	268	249	1,419	316	- 583
Specie	Boxes	301	169	40	510	25	- 276
Tamarind	Bundles	5,594	725	1,934	8,253	3,006	- 2,588
Tarmeric	Bags	7,980	3,751	6,152	17,883	20,503	+ 12,523
Tea	Cases	62	15	15	62	24	- 38
Two-wheeled Carriage	No.	6	4	6	16	6	...
Wool	Bales	937	113	148	603	267	- 70
Yellow Metal	Tons	16	51	...	67	256	+ 256

VII. STATEMENT OF STORES, &c., IMPORTED BY GOVERNMENT.

Department.	Description.	Class.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or de- crease as com- pared with corre- sponding period of last year.	
Accountant- General.	Specie Silver.	Boxes	100	870	112	582	174	+	74
	Copper.		...	...	710	710	560	+	560
	Silver & Copper		...	...	...	...	...	...	...
	Notes		...	17	2	19	...	...	...
State Railway...	Packages	No.	1	...	...	1	...	-	1
	Packages & Pieces		...	...	...	...	...	...	...
	Rails		...	...	...	...	...	...	...
	Sleepers		...	...	...	...	...	...	...
Public Works Department	Bridge Works	Tons	...	...	...	...	...	...	...
	Boilers	No.	...	...	...	...	...	...	...
	Coal	Tons	20	...	...	20	...	-	20
	Iron		...	9	...	9	...	...	...
Ordnance	Stores	Pkgs.	3,153	2,096	1,248	6,497	1,856	-	1,297
	Coal	Tons	...	...	...	...	...	...	...
	Ammunition	Boxes	2,148	...	...	...	...	-	2,148
	Stores	Pkgs.	5,219	10,296	6,812	28,566	16,504	+	11,285
Madras Harbour Works	Cement	Casks	...	...	...	...	...	...	...
	Stores	Pkgs.	...	...	...	...	...	...	...
	Coal	Tons.	...	...	...	...	...	...	...
	Packages	No.	1,224	709	391	2,324	753	-	471
Clothing			149	13	5	167	124	-	25
Police			276	8	11	291	46	-	235
Salt Revenue			447	129	282	858	850	-	97
Post Office			465	82	510	1,097	987	+	322
Medical			3,791	6,769	13,656	24,126	5,161	+	1,660
Telegraphs			126	783	288	1,197	831	+	250
Stationery			842	179	101	1,122	1,449	+	607
Stamps			3,217	3,038	1,165	7,420	1,844	-	1,378
Commissariat			138	11	5	149	90	-	48
Gazette Press			224	509	147	880	93	-	131
Marine			...	...	...	...	...	...	...
Supt. Railway			...	...	...	...	...	...	...
Mail Service			...	...	...	...	...	...	...
Revenue Survey			206	1	1	208	...	...	198
Agriculture			310	6	4	320	124	-	196
Government Cen- tral Museum			5	3	2	10	5	...	...
Under-Secy. to Government			48	20	17	504	40	-	8
Supt. of Prisons			5	8	4	17	0	+	1
Revenue Board			15	12	6	33	2	-	13
Forests			3	1	6	10	2	-	1
Bank of Madras	Specie Silver.	Boxes	...	...	...	...	...	...	...
Presidency College	Copper		...	...	...	...	...	...	...
School of Arts	Packages	No.	7	2	6	15	2	+	5
Sanitary Commis- sioner			...	...	1	1	1	+	1
Inspector of Cattle Diseases			...	...	...	...	...	...	...
Chemical Examiner			...	100	...	100	...	...	...
Medical College			8	16	7	31	7	-	11
Dy. Collectors			2	13	16	31	14	+	12
Camp Equipage			11	2	2	15	7	-	4
Astronomer			...	...	...	...	...	...	...
Presidency Pay Master			9	...	...	13	14	+	5
Registration			8	...	...	8	...	-	8
Director of Public Instruction			4	...	...	4	...	-	4
Superintendent, Remount Depot, Mussur.			137	2	...	139	4	-	134
Resident, Mysore, in Bangalore.			...	300	300	600	211	+	211
Secretary for Berar Hyderabad.			...	1	1	2	6	+	6
H. E. Lord Wellock Government House, Madras.			...	6	1	7	17	+	17
Judge, Civil City Court, Madras.			...	...	2	2	...	...	...
Quarter Master General.			...	...	1	1	...	...	...
Registrar of High Court.			...	3	...	3	3	+	3
			...	1	...	1	2	+	2

VIII. STATEMENT OF STORES, &c., EXPORTED BY GOVERNMENT.

Department.	Description.	Class.	Half-year ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.	Half-year ending 30th Sept. 1893.	Increase or de- crease as com- pared with corre- sponding period of last year.	
Accountant General	Specie Silver.	Boxes.	36	3	6	45	95	+	59
	Copper.	"	198	2	...	200	103	-	95
	Notes.	"	7	3	3	13	3	-	4
	Packages	No.	1	...	...	1	1	-	...
Bank of Madras	Silver.	Boxes	...	...	...	62	84	+	22
Ordnance	Copper.	"	62	...	...	62	...	...	...
Public Works De- partment	Packages & Pieces.	No.	2,206	2,085	1,540	5,831	3,162	+	956
Clothing	"	"	164	107	217	488	259	+	95
Police	"	"	708	183	195	1,086	535	-	173
Salt Revenue	"	"	590	272	112	974	647	+	57
Medical	"	"	377	149	199	725	472	+	95
Telegraph	"	"	771	123	696	1,610	1,105	+	214
Stationery	"	"	155	3,735	440	4,330	1,077	+	1,822
Stamps	"	"	285	121	874	780	261	-	24
Commissariat	"	"	98	134	66	298	95	-	3
Gazette Press	"	"	1,528	2,672	2,005	6,205	2,714	+	1,186
Marine	"	"	242	156	105	503	216	-	26
Revenue Board	"	"	214	78	74	366	27	-	187
Revenue Settlement	"	"	23	4	10	37	39	+	16
Revenue Survey	"	"	62	17	5	84	37	-	25
Superintendent of Prisons	"	"	289	92	71	452	174	-	115
Registration	"	"	125	19	52	196	36	-	29
Conservator of Forests	"	"	...	...	43	43	1	+	1
Quarter-Master General	"	"	7	11	15	33	1	-	6
Government Cen- tral Museum	"	"	4	...	...	4	...	-	4
Deputy Collectors	"	"	10	2	1	22	10	-	9
Camp Equipage	"	"	2	...	...	2	...	-	2
Government Astro- nomer	"	"	...	...	5	13	6	-	7
Agriculture	"	"	3	...	5	8	2	-	1
General Hospital	"	"	...	...	...	...	...	...	...
State Railways	"	"	...	...	...	...	...	...	...
Inspector of Cattle Diseases	"	"	1	...	...	1	...	-	1
Chemical Examiner	"	"	1	...	...	1	...	-	1
Director of Public Instruction	"	"	4	...	...	6	13	+	9
Registrar of Uni- versity	"	"	...	10	...	10	...	...	6
Collectors	"	"	...	...	...	...	6	+	6
Curator of Govern- ment Garden, Ooty	"	"	...	...	...	...	2	+	2
Engineer, H. T. Board	"	"	...	...	...	...	...	...	...
Crown Officer, High Court	"	"	9	1	8	18	5	-	4
School of Arts	"	"	...	...	...	...	...	...	...
Secretary to Gov- ernment, Pub- lic Department	"	"	...	...	...	...	...	...	...
Registrar-General of Births, Deaths and Marriages	"	"	...	...	...	...	...	...	...
Inam Commissioner	"	"	...	...	...	...	...	...	...
Consulting Engi- neer to Govern- ment Railways	"	"	1	...	...	...	...	-	1
Civil Engineering College	"	"	...	...	1	1	...	...	...
Superintendent, Census Opera- tions.	"	"	...	...	4	4	1	+	1
Post Office	"	"	...	1	...	1	2	+	2
Sanitary Commis- sioner	"	"	...	...	...	1	2	+	2

To
THE SECRETARY,
Harbour Trust Board Madras.

No. P.
G. R. P. LLOYD,
Acting Traffic Manager,
Harbour Trust Board.

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MADRAS HARBOUR WORKS.

Report of Progress on the Madras Harbour Works for the Quarter ending 30th September 1893.

Accompanying this report are the following plans and statements :—

No. 33 (a). A plan of the Harbour to a scale of 200 feet to an inch, showing in red the position and quantity of work done during the quarter. The contours in half fathoms shown on this plan are those of the last complete Marine Survey of 1889. The positions of the high water marks of the 30th September 1893, and that of the previous twelve months, both to the north of the revetement, and the south of the Harbour, are shown for comparison.

No. 33 (b). A revised plan showing in detail the advance made during the quarter at the pier-heads, as now being constructed, and the positions of the caissons for completing both piers of the Harbour, with an eastern entrance of 520 feet.

No. 34 (c). A statement comparing the expenditure on different sub-heads of work up to the end of the quarter; with the provisions of the sanctioned estimate.

No. 34 (d). A statement showing work done under different sub-heads and particulars of cement received and issued.

2. The various heads of work, &c., throughout the Harbour Works are reported on as follows :—

3. **General.**—The progress on the works during the Quarter under report, which includes the months of July, August, and September, has been one most favourable to the difficult diving operations necessary at the north pier, as the water was at times exceptionally clear, when most of the old overthrown blocks, could be and were, slung with chains by Divers, which were then left; to be raised in less favorable weather, when the water is generally so dark that a diver cannot see one foot a head. In the absence of these difficulties of rough sea, and thick water, most satisfactory progress, and rapid removal of the heaped up masses of old blocks, and excess base, can be reported; as follows :—

4. **North Pier-Head.**—Of the 92 days, in the Quarter under review, 78 days were available for Marine Work, after deducting the Sundays, and holidays, &c., when there was no work.

Of these working days at the north pier, 43 were occupied in steadily dredging up the excess rubble base to found the pier head at 40 feet below water level; 6 days went to preparing and levelling the base, immediately beneath the blockwork; and 11 days were taken up in setting in position the 119 superstruc-

ture blocks, which were set by divers during the Quarter; or 5 completed courses of the temporary blockwork, shown on the plan in red, which blockwork is not only to compress the base beneath the caisson, but to enable the Titan to reach the ruined portions of the old pier heads; from which blocks of all shapes have to be removed to allow the base to be dredged down to the required depth, to set the caisson upon.

5. In addition to the enormous amount of base dredged up, and the good progress of 5 completed courses or an advance of 26' 10½" of completed work being recorded, the Divers had to carefully sling 64 of these large blocks, under water; which were in most dangerous positions, and this is shown, by the fact that on three occasions, the blocks slipped, from undermining; and on the last occasion unfortunately the large Priestman's tined grab was crushed, but not beyond repair; which will be ready for work next season, but to avoid a stoppage of work, in a similar accident, a second grab has been secured locally.

6. The progress therefore recorded is 5 courses, or 26' 10½" of temporary work built, which brings up the total length of the north arm to 3790' 10½" from shore, or 5 out of the necessary 6 temporary courses were set in the Quarter.

7. I am happy to add, that since September, the 6th and last course of blockwork at the north pier, has been set; and thereby, the foundation of the North Pier Caisson prepared, levelled, and compressed, to prevent settlement.

8. The erection of the Iron Caisson for the north pier was commenced on the 8th August, and as the climate of India, and the passage out, has changed the color, and lost all identity of the paint marks, of where the portions belong, careful sorting, and rough fitting together had to be done in the block yard first, for remarking, previous to erection on the sea shore.

9. **Wavebreaker.**—The wavebreaker screen was, as reported last Quarter, brought up to the full section as far as the permanent work; but no protection of this nature could be given to the six temporary courses as the wavebreaker blocks, if deposited, would have rolled forward, and have blocked up the hollow, which it is necessary to have clear, in January next, previous to setting the caisson, so that, at this point, the old pier head has had to be weakened, by removing one row of partly overthrown blocks, to prevent undermining; and to unite the old and new work as closely as possible; and as some of these old upper blocks have had to be left in a somewhat doubtful position; I quite expect to report a change in their position, should this temporary work have to stand the pressure, of a severe storm.

10. **South Pier Head.**—The total 78 working days available for work during the Quarter were portioned out, to 64 days in dredging, slinging and raising by Divers, the numerous pieces of broken blocks, 4 days to preparing and levelling the beds, and 10 days to setting the 72 blocks, in position; which formed the progress, of 3 completed courses, or an advance of 16' 1½" against an advance of only 6½' in the same Quarter last year.

11. The total length of the completed work at the south pier, is therefore 3868' 1½" from the first block set on shore, and there remains 3 courses, or 16½ feet of permanent work, and 6 courses, or 32½ feet of temporary work to be built before the caisson can be set to complete the south pier head.

12. **Protective Works North of the Harbour.**—The general state of the sea during the Quarter, having been calm, no further appreciable movement in the revetement has taken place, with the exception of at a point opposite Carlton House, where the steep bank has found a more natural slope, which may at any time, bring a high sea uncomfortably close to the compound wall; in which case, more stone must be immediately added, and charged to 'maintenance of revetement,' as the provisions for constructing this work have now been exhausted; and the work must be strengthened, until no further settlement takes place.

13. The high water mark along the line of revetement remains the same, but at the extreme end the anticipated bay is rapidly forming, as shown upon the accompanying tracing, but no buildings can be endangered by this anticipated erosion.

14. **Foreshore South of Harbour.**—Upon the plan of the Harbour attached to this report, are shown the high water marks of 30th September 1892 and 1893, and 30th June 1893, and the advance of foreshore measures near the pier 90 feet during the Quarter; or 120 feet in the past 12 months.

15. **Sea bottom within the Harbour.**—All through the Quarter, the soundings for the Marine Survey of the Harbour and Roadstead were taken, whenever the state of the sea was calm enough; and the survey is now complete with the exception of a few soundings near the entrance. This chart will be completed, and reported upon as soon as possible.

The high water mark inside the Harbour has advanced on an average 60 feet, north of the iron pier, while it has receded 70 feet at the south of the Harbour, which shows no permanent advance, but the usual transfer of sand from one side of the Harbour to the other, according to the monsoon.

16. **Summary of Progress.**—The following is the summary of the progress made on the Harbour Works during the Quarter under review:—

Statement Showing Progress during Quarter ending 30th September 1893, as shown on accompanying No. 33 (a) and 33 (b).

Note.—The Figures in red denote for comparison progress and quantity of work done in quarter ending 30th September 1894.		Sub-heads of Work.		NORTH PIER.						SOUTH PIER.				RAILWAY LINE.				Total Expenditure during the Quarter 30th September 1893.				
No.	Item.	Particulars and Quantity of Work, &c.	Columns.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1	Rubble Stone deposited from boats ... Tons...			Rubble Base.	Pier Head.	Wavebreaker.	Concrete Capping.	Base Protection.							At Works.	At Quays.	Sand Line.	Beach Improvements.	Palladium Quarters Out.	Concrete Blockmaking.	Protective Works.	
2	Do. do. from wagons...																					
3	Total quantity Rubble Stone received on Works																					
4	Do. Blasted Chips do. ...				97					24												
5	Concrete Blocks—Set by Divers ... Number...				119					23												
6	Do. Deposited in Wave-breaker Temporarily																					
7	Do. made for Superstructure					64																
8	Do. do. Pier Head																					
9	Wrought Iron Cramp fixed in position																					
10	Total out-turn of Concrete Cabs yds																					
11	Advance on progress of completed superstructure ... Ry. feet				21					64												
					9410					1611												

Note.—The Figures in red denote for comparison progress and quantity of work done by quarter ending 30th September 1893.

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Nil Casks of Cement received on Works during ending 30th September 1893 containing ...
 46 1/2 Do. do. issued for do. do.
 876 1/2 Do. do. Balance in Store at end of do. do.

MADRAS, 11th November 1893.

A. LEE PUGSON,
 Engineer, Harbour Trust Board

48
 22

17. **Miscellaneous**—In 1892 it was reported that the inner line of moorings had been lost, and were abandoned, and reported buried in all. 9th of these 9 moorings, were found, and were correctly buoyed off, at once.

18. The original chains found, were laying upon the sand, and not buried, which is a satisfactory proof that silt has not taken place at these points since 18

19. The property of the Trust known as Carlton House, at Koramuram, taken in hand for thorough repairs, necessary, previous to the setting in of monsoon.

20. The usual repairs and upkeep of all Machinery, Cranes, Railway lines, & for the Traffic Department was continued, and no accidents of any nature occurred during the Quarter.

Memorandum to accompany statement of progress for the quarter ending 30th September 1893.

- | | |
|--|-------------|
| 1. Estimated sum required to complete the works at the commencement of the quarter, except Establishment, Tools and Plant and contingent charges | Rs. 5,37,66 |
| 2. Cost of work done during the Quarter | 25,14 |
| | 5,13,67 |
| 3. Estimated cost of additional work found necessary during the Quarter | |
| 4. Estimated cost of completing the works from and after the end of Quarter | 5,12,67 |

A. LEE POOSON.

Engineer, Harbour Trust Board.

HARBOUR WORKS OFFICE,
MADRAS, 11th November 1893.

MADEIRA HARBOUR WORKS.

COMPARISON OF EXPENDITURE TO DATE WITH SANCTIONED ESTIMATE FOR THE QUARTER ENDING 30TH SEPTEMBER 1893.

As per Estimate Sanctioned in Secretary of State Despatch No. 1, Dated 7th January 1892.						As Executed.						Arrears not paid.		Value of work done up to date, columns 11 and 12.		REMARKS.	
Schedule of Work.						Expenditure.											
Quantity.	Rate.	Per.	Cost.	Total.	Quantity.	Rate.	Total up to end of last Quarter.	During the Quarter.	Up to date.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14				
	Rs.	A. P.	Ma.	Rs.		Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.		
EXPENDITURE UP TO 31st DECEMBER 1894.																	
1. Works				55,00,324				55,09,324	8 10			55,09,324	8 10			55,09,324	8 10
2. Establishment				5,29,904				5,29,904	0 0			5,29,904	0 0			5,29,904	0 0
3. Tools and Plant				5,15,262				5,15,262	6 0			5,15,262	6 0			5,15,262	6 0
Total					65,54,490			65,54,490	14 10			65,54,490	14 10			65,54,490	14 10
REVISED ESTIMATE.																	
4. Allocation and settlement of work to civil				5,892	5,892			5,892	0 11			5,892	0 11			5,892	0 11
NORTH BIRK.																	
5. Ordinary rubble deposited from breakwater	13,367	1 12 9	Yds.	21,378		13,367	1 12 9	21,377	9 0			21,377	9 0			21,377	9 0
6. Do. Do. deposited from breakwater	2,115	2 8 5	Yds.	5,113		2,115	2 8 5	4,31,285	13 3			4,31,285	13 3	4,085	7 2	4,35,371	4 2
7. Concrete blocks for building	59,736	12 0 1	C. Yds.	7,168,116		59,736	12 0 1	5,84,577	4 4	25,115	14 10	6,09,691	3 2			6,09,693	3 2
8. Setting blocks at commencement of new work	2,615	2 1 1		5,265		2,615	2 1 1	5,414	11 2			5,414	11 2			5,414	11 2
9. Do. Do. from 2.00 to 2.70 feet	26,447	2 1 2		55,143		26,447	2 1 2	1,08,813	14 8	8,243	0 0	1,12,056	2 8			1,13,056	14 8
10. Do. Do. at 1.00 feet	11,731	2 0 1		23,499		11,731	2 0 1	91,003	12 4	17,933	10 4	1,08,946	7 1	2,723	14 8	1,11,669	5 9
11. Concrete in mass for filling	235	4 8 3		1,153		235	4 8 3	1,188	0 7			1,188	0 7			1,188	0 7
12. Wave breaker blocks	285	9 3 7		2,662		285	9 3 7	2,692	0 0			2,692	0 0			2,692	0 0
13. Do. concrete blocks	77,355	10 13 11		8,83,591		77,355	10 13 11	7,69,572	7 8			7,69,572	7 8			7,69,572	7 8
14. Depositing do.	77,382	1 0 0		77,382		77,382	1 0 0	68,653	8 3			68,653	8 3	9	7 8	68,662	15 11
15. Concrete in protection to Habide Base	1,980	10 4 1		20,358		1,980	10 4 1	20,093	12 0	56	4 9	20,100	1 7	2	5 3	20,152	7 4
16. Cramps, iron	363	9 10 2	Each	3,385		363	9 10 2	3,422	0 2			3,422	0 2			3,422	0 2
17. Concrete setting	16,332	1 3 0	C. Yds.	1,83,798		16,332	1 3 0	11,421	11 7			11,421	11 7			11,421	11 7
18. Preparing Base for rail setting Columns				81,750				20,897	2 0	3,495	15 7	21,698	1 7	527	10 9	21,930	12 4
Total for North Birk					14,80,007			11,42,413	11 10	49,84	13 11	21,92,258	9 5	7,368	14 0	21,99,617	2 0
SOUTH BIRK.																	
19. Ordinary rubble deposited from breakwater	13,367	1 12 9	Yds.	21,378		13,367	1 12 9	4,41,668	0 0			4,41,668	0 0	4,925	14 8	4,46,594	7 8
20. Do. Do. deposited from breakwater	2,115	2 8 5	Yds.	5,113		2,115	2 8 5	15,075	13 9			15,075	13 9			15,075	13 9
21. Concrete blocks for building	59,736	12 0 1	C. Yds.	7,168,116		59,736	12 0 1	4,62,182	10 7	15,199	14 7	4,77,372	3 2			4,77,372	3 2
22. Setting blocks at commencement of new work	2,615	2 1 1		5,265		2,615	2 1 1	7,911	13 8			7,911	13 8			7,911	13 8
23. Do. Do. from 2.00 to 2.70 feet	26,447	2 1 2		55,143		26,447	2 1 2	1,03,461	9 4	3,243	0 0	1,08,704	9 4			1,08,704	9 4
24. Do. Do. at 1.00 feet	11,731	2 0 1		23,499		11,731	2 0 1	1,16,943	11 7	15,474	12 0	1,32,417	7 7	2,789	11 8	1,35,151	8 3
25. Concrete in mass for filling	235	4 8 3		1,153		235	4 8 3	4,559	14 4			4,559	14 4			4,559	14 4
26. Do. Do. concrete blocks	285	9 3 7		2,662		285	9 3 7	2,683	0 0			2,683	0 0			2,683	0 0
27. Wave breaker blocks	47,231	11 1 0		5,24,070		47,231	11 1 0	4,45,911	7 1			4,45,911	7 1			4,45,911	7 1
28. Depositing do.	47,214	1 5 8		64,708		47,214	1 5 8	55,147	0 2			55,147	0 2			55,147	0 2
29. Concrete in protection to Habide Base	1,709	10 4 1		16,629		1,709	10 4 1	14,932	9 1			14,932	9 1			14,932	9 1
30. Cramps, iron	232	11 7 7	Each	2,972		232	11 7 7	2,334	11 1			2,334	11 1			2,334	11 1
31. Concrete setting	16,247	1 3 0	C. Yds.	1,84,495		16,247	1 3 0	1,146	0 4			1,146	0 4			1,146	0 4
32. Iron Cannon	1			18,000		1		2,750	1 1			2,750	1 1			2,750	1 1
33. Preparing Base for rail setting Columns				28,065													
Total for South Birk					31,00,896			17,08,020	8 9	36,592	3 7	17,44,612	12 4	7,659	10 4	17,52,272	6 8
EXPENDITURE FOR MOBILE DEPARTMENT PROTECTING THE JOINTS NORTH OF HARTOON.																	
34. Mobile Stone Revetment	74,000	2 1 0	Yds.	1,45,010		74,000	2 1 0	1,31,777	11 6	7,129	7 1	1,38,907	2 7	99	8 0	1,39,006	10 7
35. Railway Lines				9,840				10,914	10 10			10,914	10 10			10,914	10 10
36. Tools and Plant				6,11,556				6,46,944	2 2	2,024	6 0	6,48,968	8 8	298	12 6	6,49,267	5 2
37. Continuances				2,17,413				1,88,865	7 7	1,499	7 3	1,90,358	14 10	255	3 8	1,90,614	2 6
38. Establishment				5,24,560				5,44,511	2 9	5,256	4 2	5,39,554	14 7			5,39,554	14 7
39. Materials and labour for works in period								27,595	14 1	40,516	10 6	87,079	10 7	4,243	5 1	91,322	8 8
40. Additional works found necessary								51,030	1 2	51,030	1 2	51,030	1 2			51,030	1 2
Total of Estimate and value of work done					61,96,227			47,841	8 0	2,224	0 1	71,063	8 1			71,063	8 1
41. Balance Estimate sanctioned for 30 days of Tools and Plant				2,77,334				4,35,559	8 1	48,956	1 1	54,841	5 9	2	10 915	55,04,430	4 9
Total					58,29,896			1,00,059	6 11	48,956	1 1	1,10,39,006	8 6	10,915	5 7	1,20,58,921	13 7
Total of revised Estimate sanctioned in Secretary of State Despatch, plus expenditure before 31st December 1894																	
Estimated Cost of additional works found necessary up to end of last Quarter																	
Estimated Cost of additional works found necessary during quarter ending																	
Total Estimated Cost for completion of works																	
Deduct Total Expenditure as per column 11																	
Total Estimated Cost of completion works in quarter ending 30th September 1895																	

MADRAS,
11th November 1893.

G. MOOTHOSA WMY NAIDU,
Accountants
M. H. Works Office.

A. LEE POGSON,
Engineer, Harbour Trust Board.

$$\begin{array}{r} 48 \\ 24 \end{array}$$

MARINE DEPARTMENT.

FROM

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS

TO

THE CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

DATE

3RD

December 1893.

RECEIVED

Dr. Pl. 132

ENCLOSURES — TWO TRACINGS.

Page 2083

SUBJECT.

QUARTERLY REPORT OF THE MADRAS HARBOUR.

Submitting the ——— from 1st July to
30th September 1893.

48/20

1720 1720 1720

87 15 15

Government of Madras.

DISPOSAL.

1893.

P. W. DEPARTMENT.

No.

dated

CURRENT No. 10730

From

The Marine Dept

No. 2645-60 of 16-10-93

$\frac{9}{26450}$ 16-10-93

ENCLOS.

(2 plans)

in duplicate

No. 2260

Dated 16.12.93

Received 18.12.93

25-C

SUBJECT.

Madras Harbour

Submitting report upon
the progress made in
the reconstruction of
the — for the quarter
ending 30.9.93.

MARINE DEPARTMENT

Form

TELEGRAMS

Marine Department

Marine Department

Marine Department

Marine Department

Marine Department

Marine Department

Marine Department

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Marine Department

No 48 W of 9 January 1894

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

W of 9

Letter from the Chairman

Harbour Trust B.E. Madras N.E. No 3083 of 3rd Dec/93

and there in the Marine Dept. " 2260 of 16 Dec/93

Concluded

7/16 Dec/93

Transferred to the Public Works Department

Reference made

to the Marine Dept.

W of 9

P. 25 W of 9

To The Chairman N.T. Board
" Marine Dept.

Ordered to be forwarded for the information of the Secy. of State and the Govt. of India.

(N.E. No 49 W of 9 Jan/94)

Copy of the above, with two plans showing the progress of the work, forwarded to the Govt. of India.

(N.E. No 48 W of 9 Jan/94)
To The Right Honble the Secy. of State for India
My Lord, In continuation

P. 26
DESPATCHED
12 JAN 94

of our despatch No. 2645H,
dated 16th October/93, we
have the honour to
forward, herewith the
progress report of the
Madras Harbour Works
for the quarter ending
30th September/93.

2. The report is ac-
-companied by two plans
showing the positions and
quantity of work done
during the quarter.

WBS
18-10-93

S

2
11/10
revised report
to be packed post
15/11/94

48/29

10/2/93

3

unpaid

6

January 4 1893

Madras Harbour
Works

The progress report
of the _____
for the quarter
ending 30 Sept
1893 ordered to
be forwarded
to the Secretary
of State and the
Govt of India.

90

Forwarding
copy of the progress
report of the _____
for the quarter
ending 30 Sept
with two plans
showing the progress of
work 90

70

Forwarding
progress report
of the _____ for
9.2.30.9.93
together with two
plans showing
the position &
quantity of work
done during
the quarter.