(1) பக்கங்களின் எண்ணிக்கை 60

(2) புதுக்கித் திருப்பிய நாள் 7/92

(3) ஆதாரங் குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

பொதுப்பணித் துறை

அரசாணை எண். 3414-15 W அச்சகம்

மு. கோப்புத் தாள் எண். பலவகை

நாள் : 13.12.1892. 199 .

2.

படி கையாளவோ கூடாது.

8,006—6-9-90.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From W. P. AUSTIN, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, dated 28th October 1892, No. 2871.

In continuation of my No. 2299, dated 16th September, I have now the honour to submit, for the information of Government and the Right Honorable the Secretary of State for India, a report upon the Madras Harbour for the quarter ending 30th September 1892.

2. During this period 158 vessels with a net registered tonnage of 261,781 have entered the Harbour and eight vessels of a tonnage 1,262 net registered anchored outside.

3. Appended are returns of imports and exports for the half year 1st April to 30th September, which disclose a general falling off in all articles of importance, with the exception of coal imported and tanned skins and hides exported.

4. This is due to the general distress which has prevailed in the districts for want of rain until the past south-west monsoon set in and to the uncertainty of exchange.

5. It is satisfactory to note that the increasing importance of the gold mines in the province of Mysore continues to maintain the demand for British coal, and that the tanning industry shows no depression.

6. The decline in imports of stores and material by the Madras and South Indian Railway Companies is even more marked during the quarter under review than in the preceding three months.

7. The imports of rice and food-grains, which, owing to scarcity, had attained large dimensions during the year 1891–92, have been, since 30th June, reduced to small quantities, and this indicates returning prosperity in the surrounding districts.

8. As the south-west monsoon has been plentiful, the ordinary articles of import and export should show a recovery from their present depressed condition in the near future; but the permanent continuance of commercial prosperity at this port must depend upon the facilities given by direct communication between the shipping and railways, and, unless this is afforded, the expenditure upon the Harbour will, to a great extent, be wasted and will merely impose a heavy burden upon local trade, for the large payments to Government on account of interest and refund of capital advances prohibit for the present any reduction in dues.

9. It is to be noted that the receipts under all heads for the half year aggregated Rs. 2,82,857, while interest payable to Government under section 30 of the Harbour Trust Act and repayment of loan amounted to Rs. 2,87,039, in other words more than six months' receipts are required to meet these two liabilities of the Trust.

10. The Bombay Port Trust, with a very much larger indebtedness to Government and an enormously greater trade, has to refund to Government only the same sum as Madras, viz., one lakh of rupees annually, and, not only this, for from the last report of the Bombay Trust it would appear that the Bombay Government does not require the Bombay Trust to refund this amount annually as a matter of course, but permits it to be utilised upon capital expenditure.

11. The Trustees of the Madras Harbour would bring prominently to notice the disadvantage in this respect under which Madras labours, and would request that Government may take the matter into consideration, with a view to granting some remission in this very heavy impost upon the trade of the port.

12. The total expenditure of the Trust, including interest and refund, amounted to Rs. 3,89,406, or Rs. 1,06,549 in excess of receipts, but the current half year, as these two items will not recur in it, should restore the equilibrium, and, according to estimate, leave a small addition to the credit balance at the end of the year.

13. It is unsatisfactory that this result can only be attained by maintaining the existing rates of Harbour dues, for it was anticipated that the construction of the Harbour would tend to reduce charges.

14. This end has not been arrived at yet, and cannot be, while the Trust has to make such large payments annually for interest and refund of advances, which, as pointed out above, appear to be out of all proportion to the volume of the trade at this port as compared with Bombay.

15. I annex a very interesting report from the Board's Acting Engineer of the progress made upon the reconstruction of the Harbour during the quarter. Progress has been comparatively slow on account of the greater depth at which the pier heads are founded and the necessity for excavating the rubble base.

16. The Board would request that the special attention of Sir Alexander Rendle may be invited to para. 3 of the Engineer's report regarding the laterite foundation, which, it will be noted, came up, when dredged, to a large extent in the form of gravel, indicating the unsuitability of this kind of material to form the base for a pier.

17. This laterite when deposited some 12 to 15 years since consisted, it is understood, of pieces of considerable dimension, and the report made by the Engineer that it is now merely gravel seems to indicate that the action of the sea-water upon it in that comparatively short time has tended to disintegrate it.

18. The stability of the whole structure would appear to depend in a considerable degree upon that of the pier heads; and it is understood that Sir Alexander Rendle attached great importance to this when he directed them to be founded deeper and built with a wider section.

19. If the base is composed of unsuitable material, the permanent stability of the pier heads would appear to be endangered, and the Trustees would esteem it a favour if they might be furnished with Sir Alexander Rendle's views at his earliest possible convenience, more especially as to his opinion regarding the founding of the iron caisons containing concrete *en masse* upon such a foundation.

20. The progress at the North pier has been considerably better than at the South for reasons given by the Engineer.

21. The new all-round titan crane has worked well, except in minor details as reported, which defects the builders would probably like to be informed of.

22. The accretion of sand to the south of the Harbour has been less than normal; and it is to be noted, in conjunction with this, that the bay caused by erosion to the north of the extended revetment is not of so deep an indentation as has

usually been formed during the south-west monsoon at the end of the old revetment, where it terminated at Cassimode, before being extended further north.

23. The subsidence of the stone in rear of the revetment, indicating, as the Board's Engineer observes, that the action of the sea draws away the sand from under the rubble, it is a matter which must be closely watched, for the erosion to the north of the Harbour apparently points to an indefinite future expenditure extended to an indefinite period.

24. It is satisfactory to note that the sea bottom within the Harbour remains practically unchanged.

25. Referring to the accounts appended to the Engineer's report, it is to be observed that the expenditure upon the works up to 30th September left a balance of Rs. 5,45,707 available to complete the Harbour, while the estimated cost of completing the works amounts to Rs. 6,30,680.

26. This apparent excess does not indicate any anticipated additional expenditure over the revised sanctioned estimate; the difference is accounted for by the fact that the proceeds of sale of plant cannot be brought to account till realised after completion of the works and credit has been taken in the estimates for this.

27. The balance of sanctioned advances of cash available is, therefore, in round numbers 5½ lakhs of rupees, while about an extra lakh will be required to complete the sanctioned work, the excess being recouped, it is anticipated, sale of plant.

ENCLOSURES.

Statement of Receipts and Charges from 1st April to 30th September 1892.

Opening balance—				RS.	A.	P.	RS.	A. P.
Government securities (par value 5,00,000)	...	...	...				4,67,097	8 10
1. Cash in the Bank of Madras	...			6,77,942	3	2		
2. General cash in office	...	...		108	6	6		
3. Advance for contingencies	...	...		500	0	0		
							6,78,550	9 8
							11,45,648	2 6
Receipts.								
I. Harbour Dues collections—								
Beach import	...	...	...	72,989	15	8		
Pier do.	...	...	...	29,885	9	2		
Beach export	...	...	...	8,888	1	7		
Pier do.	...	...	...	23,670	3	7		
Storage	...	...	...	1,140	13	2		
Wharfage	...	...	...	4,435	5	4		
Cranage	...	...	...	13,072	1	10		
Penalties (section 84)	...	...	...	...				
Demurrage ...				...				
							1,54,082	2 4
Porterage—								
Beach	...	...	...	28,564	13	2		
Pier	...	...	...	16,153	11	3		
Haulage	...	...	...	4,733	12	9		
Miscellaneous	...	...	...	2,550	3	9		
							52,002	8 11
Miscellaneous—								
Harbour Trust properties				832	1	10		
Provisions ...	...	...	...	319	12	6		
Water collection	...	...		1,851	0	0		
Sundries	...	...	...	89	0	5		
							3,091	14 9

II. Contribution from Port Funds ...	RS.	A.	P.	RS.	A.	P.	RS. 65,000	A. P. 0 0
III. Interest realised on Government of India 4 per cent. promissory notes	...			...			8,680	13 6
						Total ...	14,28,505	10 0
Charges.								
I. Interest (under section 30) ...	...			1,87,039	7	10		
II. Repayment of loan for construction of Harbour	...			1,00,000	0	0	2,87,039	7 10
III. Establishment, &c.—								
1. Chairman's salary	2,400	0	0					
2. Secretary's do.	4,550	0	0					
3. Correspondence department.	1,733	12	0					
4. Accounts department ...	3,019	3	9					
5. Cash department	1,938	6	10					
6. Traffic department (Shore staff)	13,006	9	10					
7. Preventive service	6,246	12	0					
8. Do. boatmen ...	594	10	1					
9. Contribution to Government for pensions	426	2	8					
10. Fees to Trustees	3,090	0	0					
11. Contribution to Provident fund	49	1	11				37,054	11 1
IV. Contingencies—								
(*a*) Subject to regular audit—								
Postage	31	15	6					
Telegrams	101	8	0					
Furniture								
Fees for audit	450	8	0					
Law charges								
Stationery and printing ...	35	0	0					
Advertisement charges ...	1,716	10	10					
Uniform for preventive service	2	6	0					
	280	0	0				2,618	0 4
(*b*) Admissible without detail audit—								
Overtime fees to establishment.	2,062	13	6					
Do. to preventive service and boatmen.	1,324	5	4					
Miscellaneous	1,841	4	11				5,228	7 9
V. Refunds							1,515	6 7
VI. Petty construction and repairs—								
New works	10,396	13	2					
Repairs	9,499	12	6					
Tools and plant	...						19,896	9 8
VII. Porterage—								
1. Coolies, pier	6,627	2	1					
2. Do. Beach and Custom-house	21,681	14	9					
3. Madras Railway Company ...	483	5	6					
4. South Indian Railway Company	136	15	0					
5. Coasting cargo	404	8	1					
6. Boat hire	1,196	3	9					
7. Claims for losses and damage.	533	13	4					
8. Engine charges	724	9	1					
9. Refunds	438	6	7					
10. Steam-crane charges	1,340	13	7					
11. Contribution to cooly Provident fund	450	10	0				34,018	5 9

Contingencies—	RS.	A.	P.	RS.	A.	P.	RS.	A. P.
(*a*) Subject to regular audit—								
Postage								
Receipt stamps	6	11	0					
Telegrams	...							
Furniture								
Tarpaulins	152	0	0					
Law charges	25	0	0					
Stationery and printing ...	411	13	0					
Advertisement charges ...	...							
Lighting pier and yards ...	732	8	0					
							1,328	0 0
(*b*) Admissible without detail audit—								
Miscellaneous	...						707	6 11
						Total Expenditure ...	3,89,466	7 11
Balance on 30th September 1892—								
Government securities (par value 9,00,000)...	...			8,97,311	4	10		
Cash in the Bank of Madras ...	1,41,068	8	10					
General cash in office	219	4	5					
Advance for contingencies ...	500	0	0					
				1,41,787	13	3		
							10,39,099	2 1
						Total ...	14,28,505	10 0

(Signed) H. E. HOPE ROSS,
Chief Accountant.

I.—Statement of goods imported from Foreign ports.

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Apparel and effects ...	Packages ...	1,579	1,368	1,217	851	1,347	212	154	366
Alum ...	Barrels ...	424	495	504	1,233	326	456	50	206
Asphalte, tar and pitch ...	Casks ...	2,296	2,797	3,133	3,623	4,439	913	392	1,305
Acids ...	Cases ...	791	1,484	775	1,362	1,854	799	304	1,103
Arms and guns ...	Do. ...	188	516	235	126	442	122	28	150
Arrack ...	Casks ...	665	832	773	346	884	146	312	458
Blankets ...	Bales ...	68	25	36	58	119	4	16	20
Beef and pork ...	Cases ...	1	2	..	..	36	..	..	..
Bricks ...	100 ...	580	420	1,497	222	1,021	170	..	170
	Cases ...	7,658	6,697	5,864	6,506	6,123	2,242	2,312	4,554
Beer ...	Barrels ...		2,160	935	110	1,140	639	138	777
	Hogsheads ...	7,170	4,424	3,649	8,217	6,808	2,517	1,579	4,096
Boiler ...	No. ...	45	38	19	32	51	7	6	13
Corks ...	Bundles ...	181	191	133	88	88	14	13	27
Canvas ...	Bales ...	384	140	77	244	121	59	38	97
Candles ...	Cases ...	11,911	14,278	20,539	18,515	16,637	8,329	9,047	17,376
Colours ...	Do. ...	898	1,980	1,056	2,698	3,838	465	1,147	1,612
Confectionery provisions and oilmanstores ...	Do. ...	17,425	17,042	14,214	17,896	23,305	5,047	4,253	9,300
Crockery and glassware ...	Crates and casks ...	2,990	2,942	3,018	4,099	4,538	1,104	739	1,843
Chalk ...	Barrels ...	292	377	95	178	370	15	50	65
Cement ...	Casks ...	6,742	17,203	8,868	7,049	14,522	4,315	1,430	5,745
Cast-iron pipes and tubes ...	Tons ...	451	683	1,009	950	335	435	370	805
Camphor ...	Tubs ...	2,615	2,675	1,516	1,556	4,739	1,091	1,132	2,223
Coal, coke and fuel ...	Tons ...	6,054	13,773	11,992	16,688	..	..	..	..
Coal ...	Do. ...	..	..	..	..	33,686	17,283	10,494	27,777
Coke ...	Do. ...	..	..	..	..	578	101	510	611
Crackers ...	Cases ...	1,200	879	975	1,134	470	..	724	724
Copper plates and tiles ...	No. ...	3,883	498	5,012	1,594	4,802	90	109	199
Corrugated iron ...	Packages ...	258	51	449	2,913	805	506	486	992
Dynamite ...	Cases ...	2,009	4,998	6,450	9,230	13,040	3,220	310	3,530

I.—Statement of goods imported from Foreign ports—*cont.*

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Earthenware	Crates	3,837	2,104	794	1,913	2,318	220	376	596
Fire clay	Casks	43	234	147	23	2,738	56	..	56
Flour	Bags and barrels	785	483	675	367	1,317	296	275	571
Flannel	Bales	56	74	23	58	54	3	9	12
Gunpowder	Packages	700	476	962	1,746	6,667	1,100	2,608	3,708
Harmonium	Cases	8	4	11	9	39	..	3	3
Hardware	Cases and casks	7,670	4,247	2,924	3,964	8,234	1,906	1,331	3,237
Hops	Packages	615	269	115	129	129	19	17	36
Iron	Tons	19,902	17,771	12,762	13,138	13,737	6,946	4,928	11,869
Iron safes	No.	411	577	343	241	296	90	36	126
Kerosine oil	Cases	86,489	245,024	248,505	345,000	397,862	28,400	25,835	54,235
Lime water	Do.	126	108	31	45	..	..	..	..
Malt	Bags	61	565	609	354	445	88	300	388
Millinery and haberdashery	Cases	2,043	1,540	1,393	1,356	1,609	233	551	784
Matches	Do.	6,087	11,739	4,528	7,916	10,665	2,689	2,277	4,966
Machinery	Tons	640	1,752	1,799	1,000	3,039	886	707	1,593
Nails	Kegs	9,971	19,256	4,409	13,287	13,744	4,471	664	5,135
Oil and turpentine	Drums	3,963	6,984	8,863	6,942	7,225	2,365	1,903	4,268
Piece-goods and twist	Cases and bales	76,822	105,495	97,383	82,049	86,079	17,281	17,346	..
Paper	Bales	5,526	3,236	8,988	4,646	6,646	1,857	1,021	2,878
Piano	No.	102	102	135	123	153	28	28	56
Printing types	Cases	419	330	348	263	492	409	138	547
Pig lead	No.	1,013	1,895	2,647	1,420	2,198	266	342	608
Paint	Kegs	5,784	7,837	7,945	7,467	7,758	3,833	3,652	7,485
Rattan	Bundles	4,945	949	5,527	883	3,823	2,117	662	2,779
Soaps	Cases	1,544	2,075	2,191	1,906	1,650	172	140	312
Salt	Do.	938	488	620	225	383	104	80	184
Steel	Cases and casks	..	921	5,577	874	864	281	188	469
Steel bundles and bars	No.	..	..	..	5,746	11,261	2,836	421	4,257
Steel hoop	Bundles	..	..	..	12,566	5,567	1,189	209	1,189
Shovels	Do.	..	..	..	..	..	197	..	406
Soda-water bottles	Crates	34	173	13	747	275	152	139	291
Sulphur	Casks	708	846	997	840	1,395	355	64	491
Shot	Packages	495	925	831	583	752	1	..	1
Specie	Packages	306	220	348	240	177	..	5,947	12,090
Sugar	No.	34,366	32,262	39,934	48,364	48,408	6,143	203	456
Slates and pencils	Bags	1,877	1,830	1,541	1,115	1,229	253	20	268
Spelter	Cases	..	..	..	2,250	2,152	248	248	409
Saw	Cakes	303	1,389	645	1,101	1,242	161	..	2,144
Twine and rope	Cases	7,465	13,343	3,265	11,342	836	2,144	..	34
Tin plates	Bales and coils	362	24	7	83	438	30	61	91
	Boxes	3,611	4,194	3,771	4,994	6,608	845	600	1,445
Wine and spirits	Cases	38,227	45,173	46,479	40,857	37,877	10,793	11,632	22,425
	Casks	..	2,094	3,240	2,739	863	111	327	438
	Puncheons	2,195	256	392	149	869	109	54	163
Window glasses	Cases	4,498	1,987	5,158	8,297	5,972	2,779	2,705	5,484
White and red lead	Kegs	1,040	859	969	495	581	141	213	357
Yellow metal	Cases	3,141	907	2,722	4,309	3,076	451	447	898
Zinc sheets	Packages	1,096	1,221	1,174	595	2,749	476	371	847
Horses	No.	619	837	696	611	816	3	297	300
Ponies	Do.	3	3	6	17	70	3	53	56
Cows	Do.	2	5	5	..	59	..	5	5
Dogs	Do.	21	14	13	10	13	..	..	..
Elephants	Do.	..	..	1	25	10	..	..	..

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

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Stores	Packages	186,911	34,697	81,723	51,879	82,105	13,429	2,111	15,540
Fuel	Tons	..	..	171	467	3,605	389	..	389
Coke	Do.	4,884	5,587	9,753	4,673	..	..	..	..
Coal	Do.	608	997	645	889	1,437	141	..	141
Timber	Do.	718	52	2,702	4,801	27	..	..	..
Fire brick	100	831	1,622	1,483	3,860	2,477	569	42	611
		..	141	140	165	116	..	..	..

III.—Statement of stores imported by the South Indian Railway Company.

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Stores	Packages	140,270	109,131	894,812	618,937	68,282	6,718	4,901	10,619
Fuel	Tons	..	856	..	..	..	..	..	..
Coke	Do.	..	..	..	..	14	..	..	..
Coal	Do.	3,091	5,276	6,582	5,980	..	..	..	..
Timber	Do.	..	10	..	..	..	..	..	..
Boiler	No.	..	..	10	55	4	..	5	5

IV.—Statement of goods imported from Coast ports.

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Apparel and effects	Packages	149	378	414	634	451	105	55	160
Alum	Barrels	15	51	56	..	10	5	76	81
Acids	Cases	50	149	11	99	89	11	5	16
Animals	No.	..	..	..	210	..	10	..	10
Arms and guns	Cases	21	15	49	10	45	4	1	5
Boilers	No.	2	3	1	7	2	..	..	..
Bricks and tiles	100	1,577	120	1,239	1,630	1,396	..	10	10
Coffee	Bags	757	715	461	349	379	366	95	461
Candles	Cases	996	1,871	682	..	..	..	..	..
Colours	Do.	635	1,667	1,067	1,541	1,226	378	861	1,239
Crockery and glassware	Do.	216	782	413	305	322	96	87	183
Coal	Tons	1	2,351	186	14,884	13,249	690	3,692	4,292
Carpets	Bales	137	112	178	187	77	20	25	45
Camphor and benjamin	Tubs	1,647	1,483	1,585	4,640	682	248	419	667
Copra	Bags	2,844	191	124	..	32	..	..	..
Cocoanuts	No.	..	..	10	..	..	..	..	..
Crackers	Cases	..	..	..	..	..	..	..	..
Copper	Do.	772	1,350	1,061	..	1,667	356	384	740
Do.	Tiles and ingots	..	..	11,053	1,071	96	..	..	..
Cutch and lac	Packages	..	..	..	5,703	4,415	369	725	1,094
Cocoanuts	No.	10,339	900	600	..	3	..	..	..
Earthenware	Crates	37	169	89	23	393	1,424	..	1,424
Do.	Pipes	630	2,080	..	..	2,626	886	2,339	3,225
Firewood	Tons	396	1,212	892	..	..	..	..	..
Flour	Bags and barrels	1,689	2,819	4,353	4,177	7,248	2,334	2,889	5,223
Gunnies	Bales	7,197	7,993	11,863	10,786	7,930	381	1,024	1,405
Gram and peas, &c.	Bags	168,359	125,942	191,357	225,739	271,682	78,695	109,441	188,136
Garlic	Do.	3,897	1,899	7,077	8,523	2,945	20	970	990
Hardware	Cases	737	542	469	695	641	120	88	208
Horns	Bundles	1,068	702	1,043	681	880	239	311	550
Hides	Bales	7,138	4,449	7,400	6,936	6,127	3,321	2,311	5,632
Iron	Tons	839	277	467	400	231	48	49	97
Iron safes	No.	8	65	47	19	31	10	11	21
Jaggery	Bundles	3,945	6,116	5,796	5,574	6,598	773	1,522	2,295
Machinery	Tons	6	171	100	251	138	15	6	21
Millinery and haberdashery	Cases	155	254	268	189	208	41	58	99
Oil and turpentine	Drums	2,244	2,794	2,540	2,846	3,340	1,686	1,357	3,043
Paddy	Bags	..	..	..	..	..	34,781	14,429	49,210
Piece-goods	Cases and bales	5,080	7,306	6,237	3,038	3,802	514	963	1,477
Paper	Bales	3,223	3,820	5,003	3,985	3,128	662	1,138	1,800
Paint	Kegs	49	212	1,098	99	224	14	210	224
Piano	No.	7	6	7	6	15	4	4	8
Rice	Bags	42,490	26,769	69,446	223,781	1,147,048	76,303	45,699	122,002
Rose-water	Cases	877	1,409	1,867	715	1,434	762	557	1,319
Seeds	Bags	14,285	13,066	13,212	12,044	30,406	7,898	6,745	14,743
Skins	Bales	8,314	5,729	5,727	5,387	6,199	1,130	948	2,078
Silk	Do.	1,045	837	883	825	1,051	170	280	450
Sandalwood	Bundles	227	145	297	63	143	3	26	29
Sugar	Bags	4,163	6,900	2,816	2,134	1,381	158	190	348
Specie	No.	107	201	184	37	202	14	40	54
Sundries	Packages	44,567	43,462	38,472	40,653	47,533	13,376	10,059	23,435
Soap	Cases	12	105	179	383	445	6	..	6
Sulphur	Casks	..	48	173	..	471	334	..	334
Spice	Packages	..	..	..	3,674	359	182	68	250
Twine and rope	Bales and coils	1,545	1,164	541	942	839	101	240	341
Tin plates	Boxes	630	1,118	1,322	708	1,807	93	289	382
Twist	Bales	3,782	4,064	3,434	1,338	1,126	209	600	809
Turmeric	Bags	4,635	5,790	8,421	10,751	7,224	1,086	1,515	2,601
Timber	Tons	14,273	17,277	17,889	16,850	15,137	2,550	2,586	5,176
Tea	Cases	3,830	1,431	3,813	4,785	1,321	2,272	864	3,136
Yellow metal	Do.	636	155	342	809	6	193	107	300
Horses	No.	2	..	..	..	1	8	..	8

V.—Statement of goods exported to foreign ports.

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Beer and ale	Cases	22	13	30	..	18	2	7	9
	Casks	91	..	2	..	30	..	..	..
	Hogsheads	..	1	1	..	3	..	..	..
Cinchona bark	Bales	2,791	2,185	1,299	1,346	471	110	327	437
Chillies	Bags and bundles	6,333	2,225	3,262	1,362	2,760	..	..	..
Cigars	Cases	1,120	1,239	1,422	942	1,249	146	139	285
Coffee	Bags	14,879	22,456	15,515	52,708	23,764	12,162	3,406	15,568
Cotton	Bales	52,304	55,173	101,837	77,922	48,202	8,512	8,387	16,899
Cotton twist	Do.	2,893	3,960	5,956	8,271	4,229	2,294	2,907	5,201
Coriander and cmum seeds	Bags	8,861	9,281	11,610	1,385	8,218	361	260	621
Carpets	Bales	526	645	726	524	418	50	90	140
Coal	Tons	50	182	118	..	905	213	..	213
Deer horns	Packages	866	874	1,366	1,311	1,574	364	743	1,107
Explosive	Cases	9	14	25	..	21	..	1	1
Firewood	Tons	8	23	..	..	..	..	..	..
Four-wheel carriage	No.	3	30	3	2	8	1	1	2
Ground nuts	Bags	105,529	95,612	206,096	190,320	93,132	11,610	11,110	22,720
Gram, peas, &c.	Do.	3,379	937	1,454	..	519	..	..	..
Horns, cow and buffalo	Tons	242	199	66	84	62	15	4	19
Hides, tanned	Bales and bundles	20,376	17,858	17,532	16,466	21,848	5,444	7,352	12,796
Indigo	Cases and chests	27,482	22,762	27,618	24,453	14,622	2,762	2,781	5,543
Iron	Tons	..	29	23	..	2	..	..	..
Jaggery	Bags	79,358	23,520	111,033	34,135	28,985	13,736	..	13,736
Myrabolams	Bags	1,744	195	452	2,576	235	60	60	60
Miscellaneous	Packages	19,381	23,607	17,990	16,335	37,808	8,290	8,889	17,179
Onions	Bags and baskets	6,089	7,979	9,078	12,022	21,963	4,458	935	5,393
Oil	Casks	933	331	587	50	434	18	4	22
Piece-goods	Bales and cases	4,033	3,372	3,419	5,843	6,205	1,076	1,281	2,356
Potatoes	Bags and baskets	2,892	3,537	2,703	2,284	2,437	157	..	157
Poonac	Bags	14,847	13,116	15,187	26,134	33,880	5,962	4,165	10,127
Piano	No.	3	10	8	3	41	5	2	7
Paddy	Bags	5,250	17,589	65,475	2,059	1,139	1	..	1
Rice	Bags	1,145	1,382	2,052	1,809	699	342	384	726
Redwood	Tons	..	..	..	..	..	..	..	..
Seeds, gingelly and castor	Bags	132,296	20,137	86,411	19,021	1,813	652	65	717
Skins, sheep and goat, tanned	Bales	31,249	32,498	30,399	31,209	32,194	7,435	10,035	17,470
Sandalwood	Bundles	840	672	687	1,728	1,534	43	..	43
	Cases	714	135	321	..	332	..	18	18
	Casks	49	5	87	..	977	1	39	40
Spirits and wine	Puncheons	..	..	18	..	..	..	..	..
	Bags	912	1,112	7,296	..	599	21	1	22
Sugar	Boxes	164	153	33	55	94	21	..	21
Species	Bundles	3,578	8,277	2,549	1,156	6,445	1,969	1,467	3,436
Tamarind	Bags	24,230	1,898	1,526	..	2,169	217	20	237
Turmeric	Cases	4,300	4,275	3,822	2,384	2,265	424	785	1,209
Tea	No.	..	..	..	3	1	..	..	..
Two-wheel carriage	Bales	991	970	1,043	1,196	1,021	436	443	879
Wool	Tons	98	3	5	..	107	..	..	..
Yellow metal									

VI.—Statement of goods exported to Coast ports.

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1891.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Beer and ale	Cases	262	249	456	289	352	81	86	167
	Casks	28	16	110	150	189	15	10	25
	Hogsheads	..	161	10	47	7	1	5	6
Cinchona bark	Bales	80	178	186	..	395	..	84	84
Chillies	Bags and bundles	2,341	2,908	5,535	4,592	2,064	1,264	1,126	2,390
Cigars	Cases	857	1,488	1,298	1,345	1,418	311	277	588
Coffee	Bags	567	506	674	605	507	806	334	1,140
Cotton	Bales	2,977	1,972	5,761	8,521	5,721	382	1,312	1,694
Cotton twist	Do.	2,933	3,816	8,076	5,103	4,693	754	956	1,710
Coriander and cmum seeds	Bags	2,435	2,728	7,071	4,783	2,970	1,531	1,012	2,543

VI.—Statement of Goods exported to Coast ports—*cont.*

—	Packages.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Carpets	Bales	10	34	26	45	68	14	11	25
Coal	Tons	249	..	94	976	275	25	..	25
Deer horns	Packages	4	85	7	84	108	1	..	1
Explosive	Cases	152	201	303	55	2,668	315	32	347
Eggs	Pots	2,631	2,717	3,882	2,801	1,165	167	193	360
Firewood	Tons	67	28	8	..	2	..	..	..
Four-wheel carriage	No.	21	26	9	34	21	9	5	14
Ground-nuts	Bags	22,711	30,757	20,996	61,463	27,790	7,737	731	8,528
Gram, peas, &c.	,,	701	15,204	8,987	3,568	521	66	587	653
Horns, cow and buffalo	Tons	79	198	336	30	310	28	68	96
Hides	Bales and bundles	246	407	495	506	379	111	109	220
Indigo	Cases and chests	227	406	829	412	165	..	16	16
Iron	Tons	321	989	743	850	2,244	885	1,517	2,402
Jaggery	Bags	433	376	296	..	268	88	4	90
Kerosine-oil	Cases	250	1,516	4,680	3,463	10,327	212	216	428
Myrabolams	Bags	714	322	139	535	1,054	1	6	7
Miscellaneous	Packages	26,540	12,419	20,868	36,308	50,510	12,262	11,366	23,628
Onions	Bags and baskets	16,838	9,705	11,616	21,141	22,442	2,036	4,512	6,548
Oil	Casks	1,771	790	1,844	1,281	807	285	43	328
Piece-goods	Bales and cases	3,273	3,429	3,613	6,259	5,615	1,566	2,336	3,902
Potatoes	Bags and baskets	14,485	24,229	21,992	26,470	23,637	918	7,881	8,799
Poonac	Bags	8,121	2,210	1,469	4,752	4,770	6,023	3,355	9,378
Piano	No.	..	5	42	24	23	2	3	5
Paddy	Bags	18,655	27,149	4,019	11,426	..	..	250	250
Rice	,,	3,370	6,790	8,198	8,098	5,448	3,076	1,924	5,000
Redwood	Tons	223	52	194	..	119	48	539	587
Seeds, gingelly and castor	Bags	56,137	19,374	28,756	57,157	16,803	101	252	653
Skins, sheep and goat, tanned	Bales	635	510	758	1,271	721	30	166	256
Sandalwood	Bundles	993	224	342	1,856	153	54	9	63
	Cases	2,629	2,143	2,098	3,049	2,982	1,255	772	2,027
Spirits	Casks	44	150	162	250	727	86	210	296
	Puncheons	..	2	16	54	18	1	2	3
Sugar	Bags	265	460	2,307	2,093	773	564	338	902
Species	Boxes	401	278	164	154	236	169	132	301
Tamarind	Bundles	5423	2,016	3,598	17,197	3,624	4,340	1,254	5,594
Turmeric	Bags	11,491	8,972	463	4,719	13,258	5,218	2,762	7,980
Tea	Cases	51	55	544	298	341	17	15	32
Two-wheel carriage	No.	4	14	8	27	15	4	2	6
Wool	Bales	9	37	567	475	769	147	190	337
Yellow metal	Tons	23	88	25	47	53	12	4	16

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

Department.	Description.	Class.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Accountant-General	Specie, silver	Boxes.	2,423	1,789	1,109	1,176	403	100	..	100
	,, copper	,,	352	335	1,320	3,475	5,100	..	..	..
	Silver and copper	,,	..	174	..	..	..	..	..	..
	Notes	,,	4	19	21	8	32	..	..	..
	Packages	No.	7	..	1	..	27	..	..	..
State Railway	Packages and pieces.	,,	11,940	593	..	3	..	..	1	1
	Rails	,,	26,602	..	..	..	..	..	..	..
	Sleepers	,,	78,513	..	..	..	..	..	..	..
	Bridge works	Tons.	267	..	..	..	..	..	..	..
Public Works Department.	Boilers	No.	2	2	..	..	..	..	..	..
	Coal	Tons.	..	106	44	60	50	..	..	..
	Iron	,,	63	220	442	250	271	..	20	20
	Stores	Pkgs.	3,084	1,691	1,127	2,049	15,148	2,023	1,130	3,153
Ordnance	Coal	Tons.	136	86	1,968	939	..	..	..	..
	Ammunition	Boxes.	2,160	1,303	51	..	2,148	..	..	..
	Stores	Pkgs.	11,336	15,838	22,268	22,898	13,017	4,067	1,152	5,219
Madras Harbour Works	Cement	Casks.	11,168	36,764	40,241	30,875	1,869	..	..	..
	Stores	Pkgs.	790	321	1,009	895	3,869	..	..	..
	Coal	Tons.	..	..	496	886	..	..	..	..

VII.—Statement of Stores, &c., imported by Government—*cont.*

Department.	Description.	Class.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Clothing ..	Packages ..	No.	2,526	1,773	2,821	1,527	1,983	589	635	1,224
Police ..	,, ..	,,	211	248	135	935	122	98	51	149
Salt Revenue ..	,, ..	,,	69	75	115	190	272	220	56	276
Post office ..	,, ..	,,	1,733	980	1,858	1,739	1,119	198	249	447
Medical ..	,, ..	,,	2,879	1,384	1,616	1,250	1,779	415	50	465
Telegraphs ..	,, ..	,,	34,690	6,899	16,414	19,211	34,768	1,752	1,949	3,701
Stationery ..	,, ..	,,	1,503	1,088	743	611	732	19	107	126
Stamps ..	,, ..	,,	1,263	1,435	1,499	1,647	1,961	186	656	842
Commissariat ..	,, ..	,,	3,841	1,811	1,779	4,384	8,588	2,013	1,204	3,217
Gazette Press ..	,, ..	,,	91	52	32	2,414	161	7	126	133
Marine ..	,, ..	,,	147	32	182	511	729	117	107	224
Superintendent, Railway Mail Service ..	,, ..	,,	270	52	31	..	..	73	133	206
Revenue Survey ..	,, ..	,,	103	252	52	32	297	203	101	310
Agriculture ..	,, ..	,,	28	1	6	292	380			
Government Central Museum ..	,, ..	,,	13	6	4	10	15	3	2	5
Under-Secretary to Government ..	,, ..	,,	81	87	84	94	235	439	28	467
Superintendent of Prisons ..	,, ..	,,	6	3	9	..	1	2	3	5
Revenue Board ..	,, ..	,,	36	65	36	139	424		15	15
Forests ..	,, ..	,,	66	31,811	175	1,318	1,196	2	1	3
Bank of Madras ..	Specie, silver ..	Boxes.	..	..	3	..	..	..	..	..
	,, copper ..	,,	..	..	56	..	..	..	..	..
Presidency College.	Packages ..	No.	..	..	13	40	28	7	..	7
School of Arts ..	,, ..	,,	..	2	2	..	3	..	..	..
Sanitary Commissioner ..	,, ..	,,	..	1	..	..	..	..	..	..
Inspector of Cattle Diseases ..	,, ..	,,	..	116	10	..	9	..	6	8
Chemical Examiner	,, ..	,,	49	25	15	32	31	2	2	2
Medical College ..	,, ..	,,	11	50	2	64	73	1	10	11
Deputy Collectors ..	,, ..	,,	12	..	..	14	9	..	..	..
Camp equipage ..	,, ..	,,	5	..	1	..	..	..	7	9
Astronomer ..	,, ..	,,	4	11	6	6	23	2	3	8
Presidency Pay Master ..	,, ..	,,	1	8	6	13	2	5	3	4
Registration ..	,, ..	,,	19	24	2	3	7	1	..	..
Director of Public Instruction ..	,, ..	,,	43	..	9	5	9	..	137	137

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

Department.	Description.	Class.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Accountant General.	Specie, silver ..	Boxes.	342	118	174	20	411	27	9	36
	,, copper ..	,,	176	136	216	330	365	173	25	198
	,, notes ..	,,	4	5	4	10	6	4	3	7
	,, packages	No.	1	1	1	6	4	..	1	1
Bank of Madras ..	,, silver ..	Boxes.	..	..	10	..	34	..	..	..
,, ,, ..	,, copper ..	,,	..	..	37	..	..	33	29	62
Ordnance ..	Packages & pieces	No.	7,476	5,765	25,038	6,564	8,595	1,083	1,123	2,206
Public Works Department										
Clothing ..	,, ..	,,	1,100	4,420	18,358	429	1,784	141	23	164
Police ..	,, ..	,,	1,401	916	1,018	1,264	1,327	225	483	708
Salt Revenue ..	,, ..	,,	690	749	849	727	889	95	495	590
Medical ..	,, ..	,,	152	330	493	306	591	84	293	377
Telegraph ..	,, ..	,,	1,794	1,049	1,868	1,552	1,367	518	273	791
Stationery ..	,, ..	,,	4,078	856	1,126	9,462	8,845	35	120	155
Stamps ..	,, ..	,,	915	777	393	799	693	153	132	285
Commissariat ..	,, ..	,,	177	165	171	195	220	53	45	98
Gazette Press ..	,, ..	,,	5,881	5,128	5,179	7,761	7,971	740	788	1,528
Marine ..	,, ..	,,	328	445	567	476	526	114	128	242
Revenue Board ..	,, ..	,,	926	419	397	268	390	92	122	214
Revenue Settlement ..	,, ..	,,	29	26	52	79	77	18	5	23
Revenue Survey ..	,, ..	,,	154	157	55	87	51	29	33	62
	,, ..	,,	80	31	77	74	75	56	233	289

VIII.—Statement of Stores, &c., exported by Government—*cont.*

Department.	Description.	Class.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Superintendent of Prisons	Packages and pieces ..	No.	63	151	91	71	69	36	90	125
Registration ..	,, ..	,,	29	80	61	61	66	..	..	..
Conservator of Forests ..	.. ..	,,	35	28	49	31	34	3	4	7
Quartermaster-General ..	.. ..	,,	28	..	..	..	..	..	4	4
Government Central Museum ..	,, ..	,,	9	7	6	9	10	4	15	19
Deputy Collectors ..	,, ..	,,	12	20	..	..	2	9	..	9
Camp equipage ..	.. ..	,,	244	..	..	..	..	..	..	..
Government Astronomer ..	.. ..	,,	6	5	2	..	..	11	2	13
Agriculture ..	,, ..	,,	7	..	..	5	15	2	1	3
General Hospital ..	,, ..	,,	3	..	..	..	..	..	..	..
State Railways ..	,, ..	,,	98	293	..	..	100	..	..	..
Inspector of Cattle Diseases ..	.. ..	,,	9	11	11	3	3	1	..	1
Chemical Examiner	..	,,	1	..	1	3	..	..	1	1
Director of Public Instruction ..	.. ..	,,	2	9	2	16	10	3	1	4
Registrar of University ..	.. ..	,,	12	14	16	16	13	..	..	..
Collectors ..	.. ..	,,	1	..	..	..	10	..	..	..
Curator of Government Garden, Ooty ..	,, ..	,,	2	..	2	12	11	..	..	..
Engineer, Harbour Trust Board ..	,, ..	,,	..	..	1	..	..	..	..	..
Crown Officer, High Court ..	,, ..	,,	..	1	8	13	14	6	3	9
School of Arts ..	,, ..	,,	..	1	..	..	..	..	..	..
Chief Secretary to Government, Public Department ..	,, ..	,,	..	4	1	..	2	..	..	..
Registrar-General of Births, Deaths and Marriages ..	,, ..	,,	..	..	..	..	..	..	..	..
Inam Commissioner.	,, ..	,,	..	..	1	..	1	..	..	..
Consulting Engineer to Government Railways.	,, ..	,,	..	..	4	36	20	..	..	..

REPORT of progress on the Madras Harbour Works for the quarter ending 30th September 1892.

This report is accompanied by the following plan and statements:—

(*a*) A plan of the harbour to a scale of 200 feet to an inch showing in red the position of work done during the quarter, contours of the bottom of the harbour plotted from soundings taken by the Assistant Engineer in August and September of this year, and for comparison, the contours of the survey of 1889. The positions of the high-water marks of the 30th September and of the 30th June from the end of the revetment south of the harbour to south of the south pier are also shown.

(*b*) 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.

(*c*) A statement showing work done under different sub-heads and particulars of cement received and issued.

2. The different parts of the harbour works are reported on in the following paragraphs.

3. *North Pier.*—The progress on the north pier has gone on steadily during the quarter, and consists of the setting of ninety-seven blocks in the pier head, making up four courses and one block of a fifth course. The last two of these courses are the first courses on the curved

superstructure forming the pier head. The removal of stone and blocks from the bed of the old pier forms by far the largest item of work. Out of a total of ninety-two days in the quarter, sixty-five days were occupied in the preparation of the beds, and only ten in setting blocks, the balance being Sundays and holidays and days on which the sea was too rough to allow of work. The material removed was mostly laterite, and to a large extent came up in the form of gravel, indicating the unsuitability of this kind of stone to form the base of a pier. The open tined Priestman's grab was quite unsuited to the removal of this small material and a close interlocking tined grab was purchased from the Madras Railway and which has done good work. The all-round Titan has been used on this pier throughout the quarter, and has proved its usefulness for setting blocks in the superstructure, as well as for dropping the wave-breaker blocks; some alterations are, however, required to enable it to produce the best results in dredging operations. Some of the cast-iron rollers on which the upper part of the crane revolves, and which are hollow, have failed by cracking, and these have been replaced by solid rollers.

4. As the fifth course above alluded to was completed a few days after the end of the quarter, there remain thirteen courses (or about 68 feet) to be set before the cylindrical head is commenced. The iron work for the caisson for the north pier was received in July.

5. *South Pier.*—The progress on the south pier consists of the setting of 24 blocks or one course. The comparatively slow progress is accounted for by the fact, that the material to be removed at the south pier consists of blocks to a much larger extent than at the north pier, which cannot be dredged, and involving the employment of divers and the number of days on which the state of the sea would not allow the divers to work. At the end of the quarter there remained sixteen courses to be set before the commencement of the cylindrical head.

6. *Block-making.*—The fourteen blocks reported last quarter as still required have been made, thus completing the number wanted for the whole work.

7. *Foreshore, North of the Harbour.*—As will be seen from the plan submitted with this report, the usual bay has formed at the northern extremity of the revetment and, as was to be expected, the stone continues to be drawn seawards from the front slope. A sinking of the stone in rear of the revetment appears to indicate, that the action of the sea at this season still draws away sand from underneath the stone bank.

8. *Foreshore, South of the Harbour.*—The shore line has advanced, as was to be expected, since the end of last quarter, and the high-water mark was about 1,008 feet from the shore end of the pier on the 30th September. For comparison the line showing the high-water mark at the same date last year has been plotted from last year's plan and, as will be seen, is slightly in advance of this year's line. The system of observing the high-water mark is, however, not sufficiently accurate to avoid the possibility of giving an erroneous impression of the advance or retirement of the shore line when the difference is small; as the actual heights of tides on the same dates of different years vary and also the observation is affected by the state of the sea. From the observations taken it would appear that the actual difference between the shore line, south of the harbour on the 30th September 1891 and 30th September 1892 is little or nothing; a more accurate method of observing this has been ordered for the future.

9. *Sea bottom within the Harbour.*—Referring to the contours plotted from soundings taken by the Assistant Engineer (shown in red on the accompanying plan) and comparing them with the contours of the survey of 1889, the following remarks are made on the alteration of the bottom of the harbour.

10. The shore appears to have advanced seawards between the iron pier and the north pier. There is not much alteration in the bottom up to the six fathom contour, a bend in the two-and-a-half fathom contour being probably due to the stranding of the S.S. *Waverly* in November last. The six-and-a-half fathom contours show a certain amount of advance, and the seventh and seven-and-a-half fathom contour shows a certain amount of advance, and the seventh little or no alteration opposite the entrance.

11. *Miscellaneous.*—The Harbour Master's office was completed and handed over to the Deputy Conservator of the Port during the quarter.

12. The attempt to pick up the chains attached to the inner line of moorings was unsuccessful, and had to be abandoned on account of the S.S. *Waverly* in November divers employed on this work any longer.

13. The expenditure on the harbour works to the end of the quarter including establishment and contingencies is Rs. 1,18,37,679 out of a total estimated cost of Rs. 1,23,83,386 having a balance of Rs. 5,45,707.

(Signed) F. J. WILSON,
Ag. Engineer, Harbour Trust Board.

MADRAS,
19th October 1892.

Progress Statement No. 30.

MADRAS HARBOUR WORKS.

STATEMENT showing progress during quarter ending 30th September 1892 as shown on accompanying Plan No. 29.

No. of Item.	Particulars and Quantity of Work, &c.	Sub-heads of work.	North Pier.			South Pier.			Concrete block-making.	Protective works.	Total expenditure during the quarter.
			Rubble base.	Pier head.	Wave-breaker.	Rubble base.	Pier head.	Wave-breaker.			
	Note.—The Figures in red denote for comparison, progress and quantity of work done in quarter ending 30th September 1891.										
		Column.	A	B	C	F	G	H	P	Q	R
1	Concrete blocks—Set by divers	..	..	75	..	..	46	..	..	..	..
		..	..	97	..	..	24	..	..	..	..
2	Do. made for superstructure	..	..	9	..	..	5	..	14	..	..
		..	..	138¾	..	..	75¾	..	214½	..	..
3	Do. do. Pier head	..	..	25	..	..	12½	..	..	..	..
		..	..	22½	..	..	6½	..	..	..	..
4	Total out-turn of concrete	..	..	..	..	..	..	..	..	..	..
5	Advance or progress of completed superstructure.	..	..	..	..	..	..	..	..	..	..
		163	32,246	381	271	9,726	349	12,176	42	55,354	
6	Approximate expenditure under sub-heads of work.										

* Includes Rs. 20,728 cost of N.P. Caisson.

Nil Casks of Cement received on works during quarter ending 30th September 1892
2674 Casks of Cement issued for on works during quarter ending 30th September 1892
8,959½ Casks of Cement balance in store at end of quarter ending 30th September 1892

	Tons.	Cwts.	Quars.	Lbs.
	Nil			
	267	12	2	8
	1,604	9	0	23

Quantity due on indents.—*Nil.*

	Rs.
Estimated sum required to complete the works at the commencement of the quarter except establishment tools and plant and contingencies	6,86,034
2. Cost of work done during the quarter	55,354
	6,30,680
3. Estimated cost of additional works found necessary during the quarter	"
4. Estimated cost of completing the works from and after the end of quarter	6,30,680

MADRAS H. W. OFFICE,
19th October 1892.

(Signed) F. J. WILSON,
Ag. Engineer, Harbour Trust Board.

COMPARISON of expenditure to date with sanctioned estimate for the quarter ending 30th September 1892.

Sub-head of work.	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.
	Quantity.	Rate.	Per.	Cost.	Total.	Quantity.	Rate.	Expenditure. 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
Expenditure up to 31st December 1891.		RS. A. P.		RS.	RS.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1. Works	..	..	..	55,09,324	..	..	..	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. Alteration and extension of block ground .. Prely.	..	..	..	5,892	5,892	..	..	5,882 3 5	..	5,882 3 5	9 13 6	5,892 0 11
North Pier.												
5. Ordinary rubble deposited from breakwater .. Tons.	13,930	1 12 0	Ton.	24,378	..	13,929¾	1 12 0	24,377 9 0	..	24,377 9 0	..	24,377 9 0
6. Ordinary rubble deposited from boats .. .. ,,	206,896	2 0 5	,,	4,19,218	..	208,862½	2 1 5	4,30,570 10 2	395 14 1	4,30,966 8 3	4,404 12 2	4,35,371 4 5
7. Concrete blocks for building .. .. .. C. yds.	51,320	11 8 0	C. yds.	5,90,110	..	46,250$\frac{139}{216}$	11 12 3	5,23,363 15 4	20,728 12 9	5,44,092 2 1	..	5,44,092 72 1
8. Setting blocks at commencement of new work .. ,,	2,615	2 1 1	,,	5,415	..	2,615¾	2 1 1	5,414 11 2	..	5,414 11 2	..	5,414 11 2
9. Setting blocks from 2,200 to 3,600 feet .. .. ,,	36,520	2 14 3	,,	1,05,569	..	36,446$\frac{7}{8}$	2 15 9	1,08,813 14 8	..	1,08,813 14 8	..	1,08,813 14 8
10. Setting blocks at pier head. ,,	12,185	9 8 11	,,	1,16,424	..	7,218$\frac{121}{216}$	9 8 2	55,087 13 2	10,970 2 11	66,058 0 1	2,596 15 7	68,654 15 8
11. Concrete in mass for filling. ,,	263	4 8 3	,,	1,188	..	263	4 8 3	1,188 0 7	..	1,188 0 7	..	1,188 0 7
12. Wave-breaker blocks .. ,,	288	9 5 7	,,	2,692	..	288	9 5 7	2,692 0 0	..	2,692 0 0	..	2,692 0 0
13. Wave-breaker concrete blocks .. .. ,,	77,355	10 14 11	,,	8,45,591	..	65,870$\frac{3}{8}$	11 5 7	7,47,669 15 2	..	7,47,669 15 2	..	7,47,669 15 2
14. Depositing concrete blocks. ,,	77,932	1 0 0	,,	77,928	..	66,465$\frac{4}{16}$	1 0 6	67,768 10 7	788 0 11	68,556 11 6	9 7 8	68,566 3 2
15. Concrete in protection to rubble base	1,986	10 4 1	,,	20,358	..	1,069$\frac{3}{8}$	7 11 6	8,262 3 3	..	8,262 3 3	..	8,262 3 3
16. Cramps, iron .. .. No.	331	9 10 1	Each.	3,188	..	291	8 4 5	2,408 12 4	..	2,408 12 4	..	2,408 12 4
17. Concrete capping .. C. yds.	16,352	11 3 10	C. yds.	1,83,798	..	573½	19 13 10	11,393 14 7	..	11,393 14 7	..	11,393 14 7
18. Cost of north pier caisson and setting in position and filling same as items 26, 27, 33 and 34	..	..	,,	84,750	..	..	..	..	660 13 7	660 13 7	20,087 6 2	20,748 3 9
Total for North Pier ..	..	..	..	..	24,80,607	..	..	19,89,012 2 0	33,543 12 3	20,22,555 14 3	27,098 9 7	20,49,654 7 10
South Pier.												
19. Ordinary rubble deposited from boats .. .. Tons.	175,078	2 9 0	Ton.	4,49,052	..	1,70,774	2 9 10	4,41,301 12 9	334 8 9	4,41,616 5 6	4,925 14 8	4,46,572 4 2
20. Large rubble deposited from breakwater .. ,,	8,615	1 12 0	,,	15,076	..	8,614¾	1 12 0	15,075 13 0	..	15,075 13 0	..	15,075 13 0
21. Concrete blocks for building .. .. .. C. yds.	45,066	11 3 1	C. yd.	5,04,510	..	39,415$\frac{18}{72}$	11 3 3	4,36,155 4 2	5,504 7 0	4,41,659 11 2	..	4,41,659 11 2
22. Setting blocks at commencement .. .. ,,	2,556	3 1 6	,,	7,912	..	2,556	3 1 6	7,911 13 3	..	7,911 13 3	..	7,911 13 3
23. Setting blocks from 2,550 to 3,700 feet .. .. ,,	30,160	3 7 11	,,	1,05,461	..	30,160⅓	3 7 11	1,05,461 9 4	..	1,05,461 9 4	..	1,05,461 9 4
24. Setting blocks at pier head .. .. ,,	12,250	11 1 3	,,	1,36,845	..	6,693$\frac{13}{72}$	14 12 9	87,836 2 3	8,479 8 11	96,315 11 2	2,812 13 9	99,128 8 11
25. Concrete in mass for filling .. .. .. ,,	602	7 9 1	,,	4,555	..	602	7 9 1	4,554 14 4	..	4,554 14 4	..	4,554 14 4
26. Concrete in cylindrical pier head .. .. ,,	2,355	15 0 9	,,	35,325	..	..	..	..	..	..	..	..
27. Concrete in filling in between coursed block work and caisson .. ,,	184	15 0 0	,,	2,760	..	..	..	..	..	..	..	..
28. Wave-breaker concrete blocks .. .. ,,	47,231	11 1 6	,,	5,24,070	..	38,754$\frac{1}{72}$	11 3 8	4,35,252 11 7	..	4,35,252 11 7	..	4,35,252 11 7
29. Depositing concrete blocks. ,,	47,714	1 5 8	,,	64,708	..	39,236$\frac{25}{216}$	1 6 5	54,467 12 4	317 9 5	54,785 5 9	134 12 0	54,920 1 9
30. Concrete in protection to rubble base .. .. ,,	1,700	9 10 6	,,	16,420	..	1,107$\frac{7}{12}$	13 6 11	13,676 11 10	1,204 0 0	14,880 11 10	..	14,880 11 10
31. Cramps, Iron .. .. No.	259	11 7 7	Each.	2,972	..	210	10 14 9	2,293 8 5	..	2,293 8 5	..	2,293 8 5
32. Concrete capping .. C. yds.	16,247	11 5 8	C. yd.	1,84,495	..	663$\frac{1}{12}$	21 2 4	14,146 0 4	..	14,146 0 4	..	14,146 0 4
33. Iron caisson .. .. No.	1	..	,,	18,000	..	..	..	21,451 11 8	276 6 5	21,728 2 1	4 4 0	21,732 6 1
34. Preparing base for and setting cylindrical pier head .. .. ,,	..	..	,,	28,665	..	..	..	..	..	..	..	..
Total for South Pier ..	..	..	..	..	21,00,826	..	..	16,39,585 13 3	16,126 8 6	16,55,712 5 9	7,877 12 5	16,63,590 2 2
Extending the Rubble Revetment protecting the foreshore north of harbour.												
35. Rubble Stone Revetment. Tons.	70,600	2 1 0	Ton.	1,45,613		74,953½	1 8 10	1,15,936 8 6	437 8 9	1,16,374 1 3	..	1,16,374 1 3
36. Railway Lines	..	..	..	9,849		..	..	10,914 10 10	..	10,914 10 10	..	10,914 10 10
	..	..	..	..	1,55,462	..	..	1,26,851 3 4	437 8 9	1,27,288 12 1	..	1,27,288 12 1
37. Tools and plant	..	..	..	..	6,11,656	..	..	6,33,379 8 4	2,550 9 1	6,35,930 1 5	1,030 7 3	6,36,960 8 8
38. Contingencies	..	..	..	..	2,17,415	..	..	1,71,218 4 1	1,005 7 3	1,72,223 11 4	7,354 8 7	1,79,578 3 11
39. Establishment	..	..	..	..	5,34,369	..	..	4,92,579 6 4	13,817 15 4	5,06,397 5 8	55 0 0	5,06,452 5 8
40. Materials at side (concrete blocks in yards) .. .. C. yds.	..	..	..	..	..	15,638$\frac{7}{12}$	14 0 8	2,25,257 13 3	—12,403 4 10	2,12,854 8 5	6,706 15 8	2,19,561 8 1

Comparison of expenditure to date with sanctioned estimate for the quarter ending 30th September 1892—contd.

Sub-head of work.	As per estimate sanctioned by Secretary of State Despatch No. 1, dated 7th January 1892.			As executed.							
	Quantity.	Rate.	Per.	Cost.	Expenditure.			Arrears not paid.	Value of work done up to date, columns 11 and 12.		
				Total.	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
		Rs. A. P.		Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.			Rs. A. P.
Recouping the Rabbit Reclamation for Sanctioned Scheme of Harbour.					6,064 15 9	— 48 0 0	6,016 15 9					6,016 15 9
41. Advances to work-people					32,89,331 5 9	55,030 8 4	53,44,361 14 1	* 50,133 3 0	53,94,995 1 1			
Total of Estimate and value of work done					— 60,268 13 8	—1,105 0 5	— 61,373 14 1		— 61,373 14 1			
Deduct probable recoveries due to sales of Tools and Plant					32,29,262 8 1	53,925 7 11	52,83,188 0 0	50,133 3 0	53,33,621 3 0			
Total					1,15,83,753 6 11	52,925 7 11	1,16,37,678 14 10	53,133 3 0	1,16,87,812 1 10			
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 completing work after quarter ending 30th September 1892												

Expenditure up to 31st March 1892 from commencement of works .. Rs. 1,16,47,374 1 1
Do. during current official year from 1st April 1892 to 30th September 1892 .. 1,90,304 13 9 Grant for 1892-93, Rs. 57,700.
Total outlay to 30th September 1892 .. 1,18,37,678 14 10

(Signed) F. J. WILSON,
Ag. Engineer, Harbour Trust Board.

MADRAS,
19th October 1892.

From the Chairman, Harbour Trust Board, dated Madras, 22nd November 1892, No. 3019.

No. 1864, Marine.

Transferred to the Public Works Department.

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

28th November 1892.

ORDER—dated 13th December 1892, No. 3414 W., Public Works.

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

2. The question raised in paras. 10 and 11 of the Chairman's letter should be brought forward separately and in a more complete form for the orders of Government. Paras. 8—14 of the report deal with matters outside the scope of the Secretary of State's instructions in para. 4 of his despatch communicated with G.O., No. 430 W., dated 12th February 1892.

These should be strictly followed in future.

[Here enter No. 3415 W., Public Works, dated 13th December 1892.]

(True Extract.)

(Signed) G. T. WALCH,
Ag. Secretary to Govt., P.W.D.

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

ENDORSEMENT—dated 13th December 1892, No. 3415 W., Public Works.

Copy of the above, with a plan showing the progress of the work, forwarded to the Government of India.

(By Order.)

(Signed) G. T. WALCH,
Ag. Secretary to Govt., P.W.D.

Exd. S. J. Pereira.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1892} Madras.

PUBLIC WORKS.

Dated December, 13th.

Read.

Encl.

G.O., 13th Dec. 1892, Nos. 3414, 3415 W.

DECEMBER.

Madras Harbour Works

Forwarding the progress report of the — for the quarter ending 30th September 1892, with plan.

PUBLIC WORKS DEPARTMENT.

LETTER—to

THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

MY LORD,

In continuation of our despatch No. $\frac{13}{2011}$ W., dated 2nd November 1892, we have the honour to forward, herewith, the progress report of the Madras Harbour Works for the quarter ending 30th September 1892, and beg to invite attention to the request of the Board that Sir Alexander Rendle's opinion should be taken as to the suitability or otherwise of the laterite used to form the base of the piers.

2. The report is accompained by a plan of the Harbour showing the position of the work done during the quarter, contours of the bottom of the harbour and the position of high-water marks.

We have the honour to be,

My Lord,

Your Lordship's most obedient, humble servants,

(Signed) WENLOCK.

(„) H. E. STOKES.

(„) J. H. GARSTIN.

FORT ST. GEORGE,
13th December 1892.

Exd. S. J. Pereira.

GOVT. OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Right Honorable the Secretary of State for India.

No. $\frac{13}{3414\ W.}$ dated 13th Dec. 1892.

Forwarding the progress report of the Madras Harbour Works for the quarter ending 30th September 1892, with plan.

13

HARBOUR TRUST BOARD OFFICE,
MADRAS, 28*th October* 1892.

No. 2841

18

From

WARE AUSTIN, ESQUIRE, I.C.S.,
CHAIRMAN, HARBOUR TRUST BOARD,
Madras.

To

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

SIR,

In continuation of my No. 2299, dated 16th September I have now the honour to submit, for the information of Government and the Right Honorable the Secretary of State for India, a report upon the Madras Harbour for the quarter ending 30th September 1892.

2. During this period 155 vessels with a net registered tonnage of 261,781 have entered the Harbour and eight vessels of a tonnage 1,262 net register anchored outside.

3. Appended are returns of imports and exports for the half year, 1st April to 30th September, which disclose a general falling off in all articles of importance, with the exception of coal imported and tanned skins and hides exported.

4. This is due to the general distress which has prevailed in the districts, for want of rain, until the past south-west monsoon set in: and to the uncertainty of exchange.

5. It is satisfactory to note that the increasing importance of the gold mines in the Province of Mysore continues to maintain the demand for British coal: and that the tanning industry shows no depression.

6. The decline in imports of stores and material by the Madras and South Indian Railway Companies is even more marked during the quarter under review than in the preceding three months.

7. The imports of rice and food grains, which, owing to scarcity, had attained large dimensions during the year 1891-92, have been, since 30th June, reduced to small quantities, and this indicates returning prosperity in the surrounding Districts.

8. As the south-west monsoon has been plentiful the ordinary articles of import and export should show a recovery from their present depressed condition in the near future; but the permanent continuance of commercial prosperity at this Port must depend upon the facilities given by direct communication between

the Shipping and Railways, and unless this is afforded, the expenditure upon the Harbour will, to a great extent, be wasted; and will merely impose a heavy burden upon local trade: for the large payments to Government, on account of interest and refund of Capital advances, prohibit for the present any reduction in dues.

9. It is to be noted that the receipts under all heads for the half year aggregated Rs. 2,82,857: while interest payable to Government under Section 30 of the Harbour Trust Act, and repayment of loan, amounted to Rs. 2,87,039; in other words more than six months' receipts are required to meet these two liabilities of the Trust.

10. The Bombay Port Trust with a very much larger indebtedness to Government, and an enormously greater trade, has to refund to Government only the same sum as Madras, *viz.* one lakh of rupees annually; and not only this: for from the last report of the Bombay Trust it would appear that the Bombay Government does not require the Bombay Trust to refund this amount annually, as a matter of course, but permits it to be utilised upon capital expenditure.

11. The Trustees of the Madras Harbour would bring prominently to notice the disadvantage in this respect under which Madras labours; and would request that Government may take the matter into consideration, with a view to granting some remission in this very heavy impost upon the trade of the Port.

12. The total expenditure of the Trust, including interest and refund, amounted to Rs. 3,89,406 or Rs. 1,06,549 in excess of receipts; but the current half year, as these two items will not recur in it, should restore the equilibrium, and according to estimate leave a small addition to the credit balance, at the end of the year.

13. It is unsatisfactory that this result can only be attained by maintaining the existing rates of Harbour dues, for it was anticipated that the construction of the Harbour would tend to reduce charges.

14. This end has not been arrived at yet; and cannot be, while the Trust has to make such large payments annually for interest and refund of advances, which as pointed out above appear to be out of all proportion to the volume of the Trade at this Port, as compared with Bombay.

15. I annex a very interesting report, from the Board's Acting Engineer, of the progress made upon the re-construction of the Harbour during the quarter. Progress has been comparatively slow, on account of the greater depth at which the Pier Heads are founded, and the necessity for excavating the rubble base.

16. The Board would request that the special attention of Sir Alexander Rendle may be invited to para. 3 of the Engineer's report, regarding the laterite foundation, which it will be noted came up, when dredged, to a large extent in the form of gravel, indicating the unsuitability of this kind of material to form the base for a Pier.

17. This laterite when deposited some 12 to 15 years since, consisted, it is understood, of pieces of considerable dimension, and the report made by the Engineer that it is now merely gravel seems to indicate that the action of the sea water upon it, in that comparatively short time, has tended to disintegrate it.

18. The stability of the whole structure would appear to depend in a considerable degree upon that of the pier heads; and it is understood that Sir Alexander Rendel attached great importance to this, when he directed them to be founded deeper and built with a wider section.

19. If the base is composed of unsuitable material the permanent stability of the pier heads would appear to be endangered, and the Trustees would esteem it a favour if they might be furnished with Sir Alexander Rendle's views, at his earliest possible convenience, more especially as to his opinion regarding the founding of the iron caisons, containing concrete *en masse*, upon such a foundation.

20. The progress at the North pier has been considerably better than at the South, for reasons given by the Engineer.

21. The new all-round titan crane has worked well, except in minor details, as reported; which defects the builders would probably like to be informed of.

22. The accretion of sand to the south of the Harbour has been less than normal; and it is to be noted in conjunction with this, that the bay caused by erosion to the north of the extended revetment is not of so deep an indentation as has usually been formed during the south-west monsoon at the end of the old revetment, where it terminated at Cassimode, before being extended further north.

23. The subsidence of the stone in rear of the revetment, indicating as the Board's Engineer observes, that the action of the sea draws away the sand from under the rubble, it is a matter which must be closely watched; for the erosion to the north of the Harbour apparently points to an indefinite future expenditure, extended to an indefinite period.

24. It is satisfactory to note that the sea bottom within the Harbour remains practically unchanged.

25. Referring to the accounts appended to the Engineer's report it is to be observed that the expenditure upon the works up to 30th September left a balance of Rs. 5,45,707 available to complete the Harbour, while the estimated cost of completing the works, amounts to Rs. 6,30,680.

26. This apparent excess does not indicate any anticipated additional expenditure over the revised sanctioned estimate; the difference is accounted for by the fact that the proceeds of sale of plant cannot be brought to account till realised after completion of the works, and credit has been taken in the estimates for this.

27. The balance of sanctioned advances of cash available is therefore in round numbers 5½ lakhs of rupees, while about an extra lakh will be required to complete the sanctioned work; the excess being recouped, it is anticipated, by sale of plant.

I have the honour to be,
Sir,
Your obedient Servant,

Secretary.

Chairman, Harbour Trust Board.

Statement of Receipts and Charges, from 1st April to 30th September 1892.

Opening balance—				
Government securities (par value 5,00,000)			4,67,097 8 10	
1. Cash in the Bank of Madras ...	6,77,942 3 2			
2. General Cash in Office	108 6 6			
3. Advance for Contingencies... ...	500 0 0			
			6,78,550 9 8	
				11,45,648 2 6
Receipts.				
I. Harbour Dues collections—				
Beach Import	72,989 15 8			
Pier do.	29,885 9 2			
Beach Export	8,888 1 7			
Pier do.	23,670 3 7			
Storage	1,140 13 2			
Wharfage	4,435 5 4			
Cranage	13,072 1 10			
Penalties (Section 84)	... ...			
Demurrage	... ...			
				1,54,082 2 4
Porterage—				
Beach	28,564 13 2			
Pier	16,153 11 3			
Haulage	4,733 12 9			
Miscellaneous	2,550 8 9			
				52,002 8 11
Miscellaneous—				
Harbour Trust Properties	832 1 10			
Provisions...	319 12 6			
Water Collection	1,851 0 0			
Sundries	89 0 5			
				3,091 14 9
II. Contribution from Port Funds ...				65,000 0 0
III. Interest realized on Government of India 4 per cent. Promissory Notes.				8,680 13 6
Total Rupees ...				14,28,505 10 0
Charges.				
I. Interest (under section 30) ...	...		1,87,039 7 10	
II. Repayment of Loan for Construction of Harbour	...		1,00,000 0 0	
				2,87,039 7 10
III. Establishment, &c.—				
1. Chairman's salary	2,400 0 0			
2. Secretary's do.	4,550 0 0			
3. Correspondence Department ...	1,733 12 0			
4. Accounts Department	3,019 3 9			
5. Cash Department...	1,938 6 10			
6. Traffic Department (Shore Staff) ...	13,006 9 10			
7. Preventive Service	6,246 12 0			
8. Do Boatmen ...	594 10 1			
9. Contribution to Government for Pensions	426 2 8			
10. Fees to Trustees	3,090 0 0			
11. Contribution to Provident Fund...	49 1 11			
				37,054 11 1

IV. Contingencies.—							
(a) Subject to Regular Audit.—							
Postage				Rs.	A.	P.	Rs. A. P.
Receipt Stamps				31	15	6	
Telegrams				101	8	0	
Furniture				...	...	...	
Fees for Audit				450	8	0	
Law Charges				...	...	...	
Stationery and Printing				35	0	0	
Advertisement charges				1,716	10	10	
Uniform for Preventive Service ...				2	6	0	
				280	0	0	
(b) Admissible without Detail Audit—							2,618 0 4
Overtime Fees to Establishment ...				2,062	13	6	
Do. to Preventive Service and Boatmen				1,324	5	4	
Miscellaneous				1,841	4	11	
V. Refunds							5,228 7 9
VI. Petty Construction and Repairs.—							1,315 6 7
New works...							
Repairs				10,396	13	2	
Tools and plant				9,499	12	6	
				...	...	...	19,896 9 8
VII. Porterage.—							
1. Coolies, Pier ...				6,627	2	1	
2. Do. Beach and Custom House ...				21,681	14	9	
3. Madras Railway Company... ...				483	5	6	
4. South Indian Railway Company ...				136	15	0	
5. Coasting Cargo				404	8	1	
6. Boat Hire				1,296	3	9	
7. Claims for losses and damage ...				724	9	1	
8. Engine Charges				438	6	7	
9. Refunds				1,310	13	7	
10. Steam Crane Charges				450	10	0	
11. Contribution to Cooly Provident Fund							34,018 5 9
Contingencies.—							
(a) Subject to Regular Audit.—							
Postage				...	...	...	
Receipt Stamps				6	11	0	
Telegrams				...	...	...	
Furniture				...	...	...	
Tarpaulins				152	0	0	
Law Charges				25	0	0	
Stationery and Printing				411	13	0	
Advertisement Charges				...	...	...	
Lighting Pier and yards				732	8	0	
							1,328 0 0
(b) Admissible without Detail Audit—							
Miscellaneous							707 6 11
Total Expenditure ...				...		...	3,89,406 7 11
Balance on 30th September 1892.—							
Government securities (Par value 9,00,000)				...		8,97,311 4 10	
Cash in the Bank of Madras				1,41,068	8	10	
General Cash in Office				219	4	5	
Advance for Contingencies				500	0	0	1,41,787 13 3
							10,39,099 2 1
Total Rupees ...				...		...	14,28,505 10 0

ACCOUNTS DEPARTMENT,
HARBOUR TRUST BOARD,
1892.

H. E. HOPE ROSS,
Chief Accountant.

I. STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS.

—	Packages.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Apparel and Effects ...	Packages...	1,579	1,368	1,217	851	1,347	212	154	366
Alum	Barrels ...	424	496	504	1,233	326	156	50	206
Asphalte, Tar, & Pitch.	Casks ...	2,296	2,797	3,133	3,623	4,439	913	392	1,305
Acids	Cases ...	791	1,484	775	1,362	1,854	799	304	1,103
Arms and Guns ...	,, ...	188	516	235	126	442	122	28	150
Arrack	Casks ...	665	632	773	346	884	146	312	458
Blankets... ...	Bales ...	68	25	36	58	119	4	16	20
Beef and Pork ...	Cases ...	1	2	...	...	36	...	...	...
Bricks ...	100 ...	580	420	1,497	222	1,021	170	...	170
Beer	Cases ...	7,658	6,697	5,664	6,606	6,123	2,242	2,312	4,554
	Barrels ...	...	2,160	935	110	1,140	639	138	777
	Hogsheads ...	7,170	4,424	3,849	8,217	6,808	2,517	1,579	4,096
Boiler	No. ...	45	33	19	32	51	7	6	13
Corks	Bundles ...	181	191	133	88	88	14	13	27
Canvas	Bales ...	334	140	77	244	121	59	38	97
Candles	Cases ...	11,911	14,278	20,589	18,515	16,637	8,329	9,047	17,376
Colours	,, ...	898	1,980	1,056	2,698	3,838	465	1,147	1,612
Confectionery Provisions and Oilmanstores	,, ...	17,425	17,042	14,214	17,896	23,395	5,047	4,253	9,300
Crockery & Glassware.	Crates & Casks.	2,990	2,942	3,018	4,099	4,538	1,104	739	1,843
Chalk	Barrels ...	292	377	95	178	370	15	50	65
Cement	Casks ...	6,742	17,203	8,868	7,049	14,522	4,315	1,430	5,745
Cast Iron Pipes and Tubes ...	Tons ...	451	683	1,009	950	335	435	370	805
Camphor ...	Tubs ...	2,615	2,675	1,560	1,556	4,739	1,091	1,132	2,223
Coal, Coke and fuel ...	Tons ...	6,054	13,773	11,992	16,688	...	...	...	...
Coal	,, ...	...	...	...	...	33,686	17,283	10,494	27,777
Coke	,, ...	...	...	...	...	578	101	510	611
Crackers... ...	Cases ...	1,200	879	975	1,154	470	...	724	724
Copper Plates and Tiles	No. ...	3,883	498	5,012	1,594	4,802	90	109	199
Corrugated Iron ...	Packages...	258	51	449	2,913	805	506	496	992
Dynamite ...	Cases ...	2,009	4,998	6,450	9,230	13,040	3,220	310	3,530
Earthenware ...	Crates ...	3,837	2,104	794	1,913	2,318	220	376	596
Fire Clay ...	Casks ...	43	234	147	23	2,768	56	...	56
Flour	Bags and Barrels.	785	483	675	867	1,317	296	275	571
Flannel ...	Bales ...	56	74	23	58	54	3	9	12
Gunpowder ...	Packages...	700	476	962	1,746	6,667	1,100	2,608	3,708
Harmonium ...	Cases ...	8	4	11	9	30	...	3	3
Hardware ...	Cases & Casks.	7,670	4,247	2,924	3,954	8,234	1,906	1,331	3,237
Hops ...	Packages	615	200	115	129	129	19	17	36
Iron ...	Tons ...	19,902	17,771	12,762	18,138	13,737	6,946	4,923	11,869
Iron Safes ...	No. ...	411	577	343	241	296	90	36	126
Kerosine Oil ...	Cases ...	86,489	248,024	248,505	345,000	397,862	28,400	25,835	54,235
Lime Water ...	,, ...	126	108	31	45	...	...	...	...
Malt ...	Bags ...	61	565	609	354	445	88	300	388
Millinery and Haberdashery ...	Cases ...	2,043	1,640	1,393	1,356	1,669	293	551	784
Matches	,, ...	6,087	11,739	4,928	7,916	10,665	2,639	2,277	4,916
Machinery ...	Tons ...	640	1,752	1,799	1,600	3,099	886	707	1,593
Nails	Kegs ...	9,971	19,256	4,409	13,287	13,744	4,471	664	5,135
Oil and Turpentine ...	Drums ...	3,963	6,984	8,863	6,942	7,225	2,365	1,903	4,268
Piece Goods ... { Piece Goods	Cases&Bales	76,522	105,495	97,383	82,649	85,979	17,281	11,045	...
Piece Goods ... { Twist.								4,282	
Paper ...	Bales ...	5,526	3,236	3,988	4,646	6,546	1,857	1,021	2,878

STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS—concluded.

—	Packages.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Piano ...	No. ...	102	102	135	123	153	28	28	56
Printing Types ...	Cases ...	419	330	348	263	492	409	138	547
Pig Lead ...	No. ...	1,013	1,895	2,647	1,420	2,198	266	342	608
Paint ...	Kegs ...	5,784	7,837	7,945	7,457	7,758	3,833	3,652	7,485
Rattan ...	Bundles ...	4,945	949	6,527	883	3,823	2,117	662	2,779
Soaps ...	Cases ...	1,544	2,075	2,191	1,996	1,650	172	140	312
Salt ...	,, ...	938	488	620	225	383	104	30	134
Steel ...	Cases & Casks	...	921	3,577	874	864	281	188	469
Steel Bundles and Bars ...	No. ...	...	...	...	5,746	11,261	3,836	421	4,257
Steel Hoop ...	Bundles ...	...	...	...	12,566	5,567	1,189	...	1,189
Shovels ...	,, ...	34	173	18	747	275	197	209	406
Sodawater Bottles ...	Crates ...	708	846	997	840	1,395	462	489	951
Sulphur ...	Casks ...	425	825	831	633	752	335	66	401
Shot ...	Kegs ...	306	220	348	240	177	...	1	1
Sundries ...	Packages ...	34,366	32,262	39,934	48,364	48,408	6,143	5,947	12,090
Specie ...	No. ...	1,877	1,330	1,541	1,115	1,229	253	203	456
Sugar ...	Bags ...	...	...	...	2,250	2,152	248	20	268
Slates and Pencils ...	Cases ...	303	1,389	645	1,101	1,242	161	248	409
Spelter ...	Cakes ...	7,465	13,343	3,255	11,342	836	2,144	...	2,144
Saw ...	Cases ...	49	34	7	68	70	30	4	34
Twine and Rope ...	Bales & Coils	362	71	221	183	448	65	26	91
Tin Plates ...	Boxes ...	3,611	4,194	3,771	4,994	5,608	845	600	1,445
Wine and Spirits {	Cases ...	38,227	45,178	46,479	40,857	37,877	10,793	11,896	22,689
	Casks ...	...	2,094	3,240	2,739	863	111	327	438
	Puncheons ...	2,195	256	892	149	369	109	54	163
Window Glasses ...	Cases ...	4,498	1,987	5,158	8,297	5,972	2,779	2,705	5,484
White and Red Lead	Kegs ...	1,040	859	969	495	681	144	213	357
Yellow Metal ...	Cases ...	3,141	967	2,722	4,309	3,076	451	447	898
Zinc Sheets ...	Packages ...	1,096	1,221	1,174	595	2,749	476	371	847
Horses ...	No. ...	619	837	696	611	816	3	297	300
Cows ...	,, ...	3	3	6	17	70	3	53	56
Dogs ...	,, ...	2	5	5	...	59	...	5	5
Elephants ...	,, ...	21	14	13	10	13	...	...	...
	,, ...	...	...	1	25	10	...	...	...

STATEMENT OF STORES IMPORTED BY THE MADRAS RAILWAY COMPANY.

—	Packages.	1887-88	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 92.	Quarter ending 30th Sept. 92.	Total for the six months ending 30th Sept. 1892.
Stores {	Packages ...	186,911	34,697	81,723	51,879	82,105	13,429	2,111	15,540
	Tons ...	...	...	171	467	3,609	389	...	389
Fuel ...	,, ...	4,884	5,587	9,753	4,673	...	...	...	...
Coke ...	,, ...	608	997	645	839	1,437	141	...	141
Coal ...	,, ...	718	52	2,702	4,301	27	...	...	...
Timber ...	,, ...	831	1,622	1,483	3,860	2,477	569	42	611
Fire Brick ...	100 ...	...	141	140	165	115	...	...	...

III. STATEMENT OF STORES IMPORTED BY THE SOUTH INDIAN RAILWAY COMPANY.

—	Packages.	1887-88	1888-89	1889-90.	1890-91.	1891-92	Quarter ending 30th June 92.	Quarter ending 30th Sept. 92.	Total for the six months ending 30th Sept. 1892.
Stores ...	Packages ...	140,270	109,131	694,812	618,937	68,282	5,718	4,901	10,619
Fuel ...	Tons ...	...	856	...	...	...	...	...	...
Coke ...	,, ...	...	...	...	...	14	...	...	...
Coal ...	,, ...	3,091	5,276	6,582	5,980	...	...	...	...
Timber ...	,, ...	...	10	...	...	...	...	5	5
Boiler ...	No. ...	...	...	10	55	4	...	...	...

IV. STATEMENT OF GOODS IMPORTED FROM COAST PORTS.

	Packages.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Apparel and Effects	Packages ...	149	378	414	634	451	105	55	160
Alum ...	Barrels ...	15	51	56	...	10	5	76	81
Acids ...	Cases ...	50	149	11	99	89	11	5	16
Animals ...	No. ...	...	...	...	210	...	10	...	10
Arms and Guns ...	Cases ...	21	15	49	10	45	4	1	5
Boilers ...	No. ...	2	3	1	7	2	...	...	...
Bricks and Tiles ...	100 ...	1,577	120	1,239	1,630	1,396	...	10	10
Coffee ...	Bags ...	757	715	461	349	379	366	95	461
Candles ...	Cases ...	995	1,871	682	...	...	...	...	...
Colours ...	,, ...	635	1,667	1,067	1,541	1,225	378	861	1,239
Crockery and Glass-ware ...	,, ...	216	782	413	305	322	96	87	183
Coal ...	Tons ...	1	2,351	186	14,884	13,249	600	3,692	4,292
Carpets ...	Bale ...	137	112	178	187	77	20	25	45
Camphor and Benja-min ...	Tubs ...	1,647	1,483	1,585	4,640	682	248	419	667
Copra ...	Bags ...	2,844	191	124	...	32	...	...	...
Crackers ...	Cases ...	...	10	...	...	...	...	...	...
Copper ...	,, ...	772	1,350	1,061	...	1,667	356	384	740
Do. ...	Tiles & Ingots ...	...	...	11,053	1,071	96	...	...	...
Cutch & Lac ...	Packages ...	...	...	...	5,703	4,415	369	725	1,094
Cocoanuts ...	No. ...	10,399	900	600	...	3	...	...	...
Earthenware ...	Crates ...	97	169	30	23	302	1,424	...	1,424
Do. ...	Pipes ...	690	2,080	...	...	2,626	886	2,339	3,225
Firewood ...	Tons ...	396	1,212	892	...	...	...	...	...
Flour ...	Bags & Barrels ...	1,689	2,819	4,352	4,177	7,248	2,334	2,889	5,223
Gunnies ...	Bales ...	7,197	7,993	11,863	10,780	7,950	...	...	...
Gram and Peas, &c.	Bags ...	1,68,359	125,942	191,357	225,739	271,682	73,695	1,09,441	1,83,136
Garlic ...	,, ...	3,897	1,899	7,077	8,523	2,945	20	970	990
Hardware ...	Cases ...	737	542	469	605	641	120	88	208
Horns ...	Bundles ...	1,068	702	1,043	681	880	239	311	550
Hides ...	Bales ...	7,138	4,413	7,400	6,926	6,127	3,351	2,311	5,662
Iron ...	Tons ...	639	277	457	400	231	48	49	97
Iron Safes ...	No. ...	6	65	47	19	31	10	11	21
Leaves ...	Bundles ...	6,945	5,116	5,796	5,574	6,598	773	1,522	2,295
Machinery ...	Tons ...	6	171	109	251	158	15	6	21
Millinery and Haber-dashery ...	Cases ...	155	254	268	189	208	41	58	99
Oil and Turpentine.	Drums ...	2,244	2,794	2,540	2,846	3,340	1,686	1,357	3,043
Paddy ...	Bags ...	...	...	...	...	...	34,781	14,429	49,210
Piece Goods ...	Cases and Bales	5,080	7,306	6,237	3,628	3,802	514	963	1,477
Paper ...	Bales ...	3,223	3,820	5,003	3,985	3,128	662	1,138	1,800
Paint ...	Kegs ...	49	212	1,098	99	224	14	210	224
Piano ...	No. ...	7	6	7	5	15	4	4	8
Rice ...	Bags ...	42,400	26,769	69,446	228,751	1,147,048	76,303	45,699	1,22,002
Rose Water ...	Cases ...	877	1,409	1,867	715	1,434	762	557	1,319
Seeds ...	Bags ...	14,285	13,066	13,212	12,044	30,406	7,998	6,745	14,743
Skins ...	Bales ...	8,314	5,729	5,727	5,387	6,199	1,130	948	2,078
Silk ...	,, ...	1,045	837	883	825	1,051	170	280	450
Sandalwood ...	Bundles ...	227	145	297	63	143	3	23	29
Sugar ...	Bags ...	4,163	6,900	2,816	2,131	1,381	158	190	348
Specie ...	No. ...	107	201	184	87	202	14	40	54
Sundries ...	Packages ...	44,567	43,462	38,472	40,653	47,583	13,376	10,059	23,435
Soap ...	Cases ...	12	105	179	363	445	6	...	6
Sulphur ...	Casks ...	...	48	173	...	471	334	...	334
Spice ...	Packages ...	...	...	...	3,674	359	182	68	250
Twine and Rope ...	Bales and Coils	1,545	1,161	541	942	839	101	240	341
Tin Plates ...	Boxes ...	680	1,118	1,322	708	1,207	93	289	382
Twist ...	Bales ...	3,782	4,064	3,434	1,338	1,126	209	600	809
Turmeric ...	Bags ...	4,635	5,790	8,421	10,751	7,224	1,086	1,515	2,601
Timber ...	Tons ...	14,273	17,277	17,889	16,850	15,137	2,590	2,586	5,176
Tea ...	Cases ...	3,830	1,421	2,813	4,785	1,321	2,272	864	3,136
Yellow Metal ...	,, ...	636	155	342	809	6	193	107	300
Horses ...	No. ...	2	...	...	...	1	8	...	8

V. STATEMENT OF GOODS EXPORTED TO FOREIGN PORTS.

—	Packages.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Beer and Ale	Cases	22	13	30	...	18	2	...	2
	Casks	21	...	2	...	60	...	7	7
	Hogsheads	...	...	1	...	3	...	...	...
Cinchona Bark	Bales	2,791	2,185	1,299	1,346	471	110	327	437
Chillies	Bags & Bundles	6 333	2,225	3,262	1,362	2,760	...	...	...
Cigars	Cases	1,120	1,230	1,423	942	1249	146	139	285
Coffee	Bags	14,879	23,456	15,515	22,708	23,764	12,152	3,406	15,558
Cotton	Bales	82,394	55,173	101,837	77,922	48,202	8,512	8,387	16,899
Cotton Twist	"	2,893	3,960	5,956	8,271	4,229	2,294	2,907	5,201
Coriander and Omum Seeds	Bags	3,891	9,281	11,610	1,385	8,218	361	260	621
Carpets	Bales	526	645	725	524	418	50	90	140
Coal	Tons	50	182	115	...	905	213	...	213
Deer Horns	Packages	866	874	1,366	1,311	1,574	364	743	1,107
Explosive	Cases	9	14	25	...	21	...	1	1
Firewood	Tons	8	28	...	...	...	...	...	...
Four-wheel Carriage.	No.	3	30	3	2	8	1	1	2
Ground Nuts	Bags	1,05,529	95,642	206,996	190,320	93,132	11,610	11,110	22,720
Gram, Peas, &c.	"	3,379	937	1,454	...	519	...	...	...
Horns, Cow and Buffalo	Tons	242	199	66	84	62	15	4	19
Hides, Tanned	Bales & Bundles.	20,376	17,858	17,532	16,460	21,848	5,444	7,352	12,796
Indigo	Cases & Chests.	27,482	22,762	27,618	24,453	14,622	2,762	2,781	5,543
Iron	Tons	20	29	23	...	2	...	...	...
Jaggery	Bags	79,358	23,520	111,032	84,135	28985	13,736	...	13,736
Myrabolams	Bags	1,744	193	452	2,576	235	60	...	60
Miscellaneous	Packages	19,381	23,607	17,990	16,335	37,808	8,290	8,889	17,179
Onions	Bags & Baskets	6,089	7,979	9,078	12,022	21,964	4,458	935	5,393
Oil	Casks	933	331	587	50	434	18	4	22
Piece-goods	Bales and Cases.	4,033	3,372	3,419	5,843	6,205	1,075	1,281	2,356
Potatoes	Bags & Baskets.	2,892	3,837	2,703	2,284	2,437	157	...	157
Poonac	Bags	14,847	13,116	15,187	26,184	33,880	5,962	4,165	10,127
Piano	No.	3	10	8	3	41	5	2	7
Rice	Bags	5,250	17,589	65,475	2,059	1,138	1	...	1
Redwood	Tons	1,145	1,382	2,032	1,809	699	342	384	726
Seeds, Gingelly and Castor	Bags	1,32,295	20,137	80,411	19,021	1,313	652	65	717
Skins, Sheep and Goat, Tanned	Bales	31,249	32,498	30,309	31,209	32,194	7,435	10,035	17,470
Sandalwood	Bundles	840	672	637	1,728	1,534	43	...	43
Spirits and Wine	Cases	714	135	381	...	332	...	18	18
	Casks	49	5	87	...	977	1	39	40
	Puncheons	...	...	18	...	...	...	...	...
Sugar	Bags	912	1,112	7,296	...	599	21	1	22
Species	Boxes	164	153	33	55	94	21	...	21
Tamarind	Bundles	3,573	8,277	2,549	1,156	6,445	1,969	1,467	3,436
Turmeric	Bags	24,230	1,898	1,526	...	2,159	217	20	237
Tea	Cases	4,300	4,275	3,822	2,384	2,265	424	785	1,209
Two-wheel Carriage.	No.	...	...	...	2	1	...	...	...
Wool	Bales	991	970	1,043	1,196	1,021	436	443	879
Yellow Metal	Tons	98	3	5	...	107	...	...	...

VI. STATEMENT OF GOODS EXPORTED TO COAST PORTS.

—	Packages.	1887-88	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Beer and Ale	Cases	262	249	456	289	352	81	86	167
	Casks	28	16	110	159	159	15	10	25
	Hogsheads	...	161	10	47	7	1	5	6
Cinchona Bark	Bales	80	178	186	...	395	...	84	84
Chillies	Bags & Bundles	2,341	2,968	5,535	4,592	2,664	1,264	1,126	2,390
Cigars	Cases	857	1,488	1,298	1,345	1,418	311	277	588
Coffee	Bags	567	506	574	605	507	806	334	1,140
Cotton	Bales	2,977	1,972	4,761	8,521	5,721	882	1,312	2,144
Cotton Twist	"	2,923	3,816	3,075	5,103	4,698	784	950	1,734
Coriander and Omum Seeds	Bags	2,435	2,728	7,071	4,783	2,970	1,531	1,012	2,543
Carpets	Bales	10	34	26	45	68	14	11	25
Coal	Tons	249	...	94	976	275	25	...	25
Deer Horns	Packages	4	85	7	84	108	1	...	1
Explosive	Cases	152	201	303	55	2,668	315	32	347
Eggs	Pots	2,631	2,717	3,882	2,801	1,165	157	193	350
Firewood	Tons	67	28	8	...	2	...	...	...
Four-wheel Carriage.	No.	21	26	9	34	21	9	5	14
Groundnuts	Bags	22,711	30,757	20,996	61,463	27,790	7,797	731	8,528
Gram, Peas, &c.	"	701	15,204	8,987	3,568	521	65	587	653
Horns, Cow and Buffalo	Tons	79	198	336	30	310	28	68	96
Hides	Bales & Bundles	246	407	495	506	379	111	109	220
Indigo	Cases & Chests.	227	405	829	412	165	...	16	16
Iron	Tons	324	989	743	850	2,244	885	1,517	2,402
Jaggery	Bags	433	376	296	...	258	86	4	90
Kerosine Oil	Cases	250	1,516	4,680	3,463	10,327	212	216	428
Myrabolams	Bags	714	322	139	535	1,054	1	6	7
Miscellaneous	Packages	26,540	12,419	20,868	36,398	50,510	12,262	11,366	23,628
Onions	Bags & Baskets	15,838	9,705	11,516	21,141	22,442	2,036	4,512	6,548
Oil	Casks	1,771	790	1,844	1,231	807	285	43	328
Piece Goods	Bales & Cases	3,273	3,429	3,613	6,259	5,615	1,566	2,336	3,902
Potatoes	Bags & Baskets	14,485	24,229	21,992	26,470	23,637	918	7,881	8,799
Poonac	Bags	3,121	2,210	1,469	4,752	4,770	6,025	3,355	9,378
Piano	No.	...	...	5	42	24	23	2	4	6
Paddy	Bags	18,655	27,149	4,019	11,426	...	...	250	250
Rice	"	3,370	6,790	8,198	8,098	5,448	3,076	1,924	5,000
Redwood	Tons	223	62	194	...	119	48	689	687
Seeds, Gingelly and Castor	Bags	56,137	19,374	28,756	57,157	16,803	401	252	653
Skins, Sheep & Goat, Tanned	Bales	635	510	758	1,271	721	90	166	256
Sandalwood	Bundles	998	224	342	1,856	153	54	9	63
Spirits	Cases	2,629	2,143	2,098	3,049	2,982	1,255	772	2,027
	Casks	44	150	162	250	727	86	210	296
	Puncheons	...	2	16	54	13	1	2	3
Sugar	Bags	265	460	2,307	2,093	773	564	338	902
Species	Boxes	401	278	164	154	236	169	132	301
Tamarind	Bundles	5,423	2,010	3,598	17,197	3,624	4,340	1,254	5,594
Turmeric	Bags	11,491	8,972	463	4,719	19,258	5,218	2,762	7,980
Tea	Cases	51	55	544	298	341	17	15	32
Two-wheel Carriage.	No.	4	14	8	27	15	4	2	6
Wool	Bales	9	37	567	475	769	147	190	337
Yellow Metal	Tons	23	88	25	47	53	12	4	16

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

Department.	Description.	Class.	1887-88	1888-89	1889-90.	1890-91	189192.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Accountant-General.	Specie Silver.	Boxes	2,423	1,789	1,109	1,176	403	100	...	100
	,, Copper.	,,	352	335	1,320	3,475	5,100	...	...	...
	Silver&Copper	,,	...	174	...	...	...	...	...	...
	Notes ...	,,	4	19	21	8	32	...	...	...
	Packages ...	No.	7	...	1	...	27	...	1	...
State Railway...	Packages&Pieces	,,	11,940	593	...	3	...	...	...	...
	Rails	,,	26,602	...	...	...	...	...	...	...
	Sleepers ...	,,	78,513	...	...	...	...	...	...	...
	Bridge Works	Tons	267	...	...	...	...	...	...	...
Public Works Department	Boilers ...	No.	2	2	...	...	2	...	...	...
	Coal ...	Tons	...	106	44	60	56	...	20	20
	Iron ...	,,	63	220	442	250	271	...	...	...
	Stores ...	Pkgs.	3,084	1,691	1,127	2,049	15,148	2,023	1,130	3,153
Ordnance	Coal ...	Tons	136	86	1,968	939	...	...	...	...
	Ammunition..	Boxes	2,160	1303	51	...	2,148	...	...	...
	Stores ...	Pkgs.	11,336	15,838	22,268	22,898	13,017	4,067	1,152	5,219
Madras Harbour Works	Cement ...	Casks	11,168	35,764	40,241	30,375	1,869	...	...	...
	Stores ...	Pkgs.	790	321	1,009	895	3,869	...	...	...
	Coal ...	Tons.	...	...	...	...	...	...	...	...
Clothing ...	Packages ...	No.	2,525	1,773	2,831	1,527	1,983	589	635	1,224
Police ...	,, ...	,,	211	248	135	338	122	98	51	149
Salt Revenue ...	,, ...	,,	69	75	115	190	272	220	56	276
Post Office ...	,, ...	,,	1,733	980	1,858	1,739	1,119	198	249	447
Medical ...	,, ...	,,	2,879	1,384	1,616	1,250	1,779	415	50	465
Telegraphs ...	,, ...	,,	34,690	6,899	16,414	19,211	34,768	1,752	1,949	3,701
Stationery ...	,, ...	,,	1,503	1,088	743	611	782	19	107	126
Stamps ...	,, ...	,,	1,262	1,435	1,499	1,647	1,961	186	656	842
Commissariat ...	,, ...	,,	3,841	1,811	1,779	4,384	8,588	2,013	1,204	3,217
Gazette Press ...	,, ...	,,	...	...	...	...	...	...	126	133
Marine ...	,, ...	,,	147	32	182	511	729	117	107	224
Supt., Railway Mail Service ...	,, ...	,,	270	52	31	...	...	...	...	206
Revenue Survey...	,, ...	,,	103	252	52	32	297	73	183	310
Agriculture ...	,, ...	,,	28	1	6	222	380	209	101	5
Government Central Museum ...	,, ...	,,	13	6	4	10	15	3	2	467
Under-Secy. to Government ...	,, ...	,,	...	81	87	84	94	235	439	28
Supt. of Prisons...	,, ...	,,	6	3	9	...	1	2	3	5
Revenue Board ...	,, ...	,,	36	65	36	139	424	...	15	15
Forests ...	,, ...	,,	66	31,811	175	1,318	1,196	2	1	3
Bank of Madras	Specie Silver.	Boxes	...	...	3	...	...	...	...	...
	,, Copper	,,	...	...	56	...	...	...	...	7
Presidency College	Packages ...	No.	...	...	13	40	28	7	...	...
School of Arts ...	,, ...	,,	...	2	2	...	3	...	...	...
Sanitary Commissioner ...	,, ...	,,	...	1	...	...	...	...	...	...
Inspector of Cattle Diseases ...	,, ...	,,	...	116	10	...	9	...	...	8
Chemical Examiner	,, ...	,,	49	25	15	32	31	2	6	2
Medical College...	,, ...	,,	11	50	2	64	73	...	2	11
Dy. Collectors ...	,, ...	,,	12	...	...	14	9	1	10	...
Camp Equipage ...	,, ...	,,	5	...	1	...	...	...	...	9
Astronomer ...	,, ...	,,	4	11	6	6	23	2	7	8
Presidency Pay Master ...	,, ...	,,	1	8	6	13	2	5	3	4
Registration ...	,, ...	,,	19	24	2	3	7	1	3	137
Director of Public Instruction ...	,, ...	,,	43	...	9	5	9	...	137	

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

Department.	Description.	Class.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Total for the six months ending 30th Sept. 1892.
Accountant General	Specie Silver.	Boxes.	342	118	174	20	411	27	9	36
	,, Copper,	,,	176	136	216	330	965	173	25	198
	,, Notes,..	,,	4	5	4	10	6	4	3	7
	,, Packages	No.	1	1	1	6	4	...	1	1
Bank of Madras...	,, Silver...	Boxes.	...	...	10	...	34	...	...	...
,, ,, ...	,, Copper.	,,	...	...	37	...	...	33	29	62
Ordnance ...	Packages & Pieces.	No.	7,476	5,765	25,038	6,564	8,595	1,088	1,123	2,206
Public Works Department ...	,, ...	,,	1,100	4,420	18,358	429	1,784	141	23	164
Clothing ...	,, ...	,,	1,401	916	1,018	1,254	1,327	225	483	708
Police ...	,, ...	,,	690	749	849	727	889	95	495	590
Salt Revenue ...	,, ...	,,	152	330	493	306	591	84	293	377
Medical ...	,, ...	,,	1,794	1,049	1,868	1,552	1,367	518	273	791
Telegraph ...	,, ...	,,	4,078	355	1,125	9,462	8,845	35	120	155
Stationery ...	,, ...	,,	915	777	398	799	693	153	132	285
Stamps ...	,, ...	,,	177	165	171	195	220	53	45	98
Commissariat ...	,, ...	,,	5,881	5,128	5,179	7,761	7,971	740	788	1,528
Gazette Press ...	,, ...	,,	328	445	567	476	526	114	128	242
Marine ...	,, ...	,,	926	419	307	268	390	92	122	214
Revenue Board ...	,, ...	,,	29	26	52	79	77	18	5	23
Revenue Settlement	,, ...	,,	154	157	55	87	51	29	33	62
Revenue Survey...	,, ...	,,	80	31	77	74	75	56	233	289
Superintendent of Prisons ...	,, ...	,,	63	151	91	71	69	35	90	125
Registration ...	,, ...	,,	29	80	61	61	66	...	...	...
Conservator of Forests ...	,, ...	,,	35	28	42	31	34	3	4	7
Quarter-Master General...	,, ...	,,	28	...	...	...	...	...	4	4
Government Central Museum ...	,, ...	,,	9	7	6	9	10	4	15	19
Deputy Collectors.	,, ...	,,	12	20	...	...	2	9	...	9
Camp Equipage ...	,, ...	,,	244	...	...	...	...	...	...	...
Government Astronomer ...	,, ...	,,	6	3	2	...	...	11	2	13
Agriculture ...	,, ...	,,	7	...	...	5	15	2	1	3
General Hospital..	,, ...	,,	3	...	...	...	...	...	...	...
State Railways ...	,, ...	,,	98	293	...	...	100	...	...	...
Inspector of Cattle Diseases ...	,, ...	,,	9	11	11	3	3	1	...	1
Chemical Examiner.	,, ...	,,	1	...	1	3	...	...	1	1
Director of Public Instruction. ...	,, ...	,,	2	9	2	16	10	3	1	4
Registrar of University ...	,, ...	,,	12	14	16	16	13	...	...	...
Collectors ...	,, ...	,,	1	...	...	...	10	...	...	...
Curator of Government Garden, Ooty	,, ...	,,	2	...	2	12	11	...	...	...
Engineer, H. T. Board ...	,, ...	,,	...	...	1	...	...	...	...	...
Crown Officer, High Court ...	,, ...	,,	...	1	8	13	14	6	3	9
School of Arts ...	,, ...	,,	...	1	...	...	...	...	...	...
Secretary to Government, Public Department ...	,, ...	,,	...	4	1	...	2	...	...	...
Registrar-General of Births, Deaths and Marriages ...	,, ...	,,	...	...	...	...	...	...	...	...
Inam Commissioner	,, ...	,,	...	...	1	...	1	...	...	...
Consulting Engineer to Government Railways ...	,, ...	,,	...	...	4	36	20	...	...	...

To

THE SECRETARY,
Harbour Trust Board.

No 1517 P.

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

Report of Progress on the Madras Harbour Works for the Quarter ending 30th September 1892.

This report is accompanied by the following plan and statements :—

(*a*) A plan of the harbour to a scale of 200 feet to an inch showing in red the position of work done during the quarter, contours of the bottom of the harbour plotted from soundings taken by the Assistant Engineer in August and September, of this year, and for comparison, the contours of the survey of 1889. The positions of the high water marks of the 30th September and of the 30th June, from the end of the revetment South of the harbour, to South of the South pier, are also shown.

(*b*) 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.

(*c*) A statement showing work done under different sub-heads and particulars of cement received and issued.

2. The different parts of the harbour works are reported on in the following [illegible]

3. **North pier**.—The progress on the North pier has gone on steadily during the quarter, and consists of the setting of ninety-seven blocks in the pier head, making up four courses, and one block of a fifth course. The last two of these courses, are the first courses on the curved superstructure forming the pier head. The removal of stone and blocks from the bed of the old pier, forms by far the largest item of work. Out of a total of ninety-two days in the quarter, sixty-five days were occupied in the preparation of the beds, and only ten in setting blocks, the balance being Sundays and holidays and days on which the sea was too rough to allow of work. The material removed was mostly laterite, and to a large extent came up in the form of gravel, indicating the unsuitability of this kind of stone to form the base of a pier. The open tined Priestman's grab was quite unsuited to the removal of this small material and a close interlocking tined grab was purchased from the Madras Railway and which has done good work. The all round titan has been used on this pier throughout the quarter, and has proved its usefulness for setting blocks in the superstructure, as well as for dropping the wavebreaker blocks; some alterations are, however, required to enable it to produce the best results in dredging operations. Some of the cast iron rollers on which the upper part of the crane revolves, and which are hollow, have failed by cracking, and these have been replaced by solid rollers.

4. As the fifth course above alluded to was completed a few days after the end of the quarter, there remain thirteen courses (or about 68 feet) to be set before the cylindrical head is commenced. The iron work for the caisson for the North pier was received in July.

5. **South pier.**—The progress on the South pier consists of the setting of 24 blocks, or one course. The comparatively slow progress is accounted for by the fact, that the material to be removed at the South pier consists of blocks to a much larger extent than at the North pier, which cannot be dredged, and involving the employment of divers, and the number of days on which the state of the sea would not allow the divers to work. At the end of the quarter there remained sixteen courses to be set before the commencement of the cylindrical head.

6. **Blockmaking.**—The fourteen blocks reported last quarter as still required have been made, thus completing the number wanted for the whole work.

7. **Foreshore North of the Harbour.**—As will be seen from the plan submitted with this report the usual bay has formed at the Northern extremity of the revetment and as was to be expected, the stone continues to be drawn seawards from the front slope. A sinking of the stone in rear of the revetment appears to indicate, that the action of the sea at this season still draws away sand from underneath the stone bank.

8. **Foreshore South of the Harbour.**—The shore line has advanced as was to be expected, since the end of last quarter and the high water mark was about 1,298 feet from the shore end of the pier on the 30th September. For comparison the line showing the high water mark of the same date last year has been plotted from last year's plan, and as will be seen is slightly in advance of this year's line. The system of observing the high water mark is however not sufficiently accurate to avoid the possibility of giving an erroneous impression of the advance or retirement of the shore line when the difference is small; as the actual heights of tides on the same dates of different years vary, and also the observation is affected by the state of the sea. From the observations taken it would appear that the actual difference between the shore line South of the harbour on the 30th September 1891 and 30th September 1892 is little or nothing; a more accurate method of observing this has been ordered for the future.

9. **Sea bottom within the Harbour.**—Referring to the contours plotted from soundings taken by the Assistant Engineer (shown in red on theaccompanying plan) and comparing them with the contours of the survey of 1889, the following remarks are made on the alteration of the bottom of the harbour.

10. The shore appears to have advanced seawards between the iron pier and the North pier. There is not much alteration in the bottom up to the six fathom contour, a bend in the two and a half fathom contour being probably due to the stranding of the S. S. "Waverly" in November last. The six and a half fathom contour shows a certain amount of advance, and the seventh and seven and a half fathom contours show a reduction in depth at the sides of the harbour but little or no alteration opposite the entrance.

11. **Miscellaneous.**—The harbour master's office was completed and handed over to the Deputy Conservator of the Port during the quarter.

12. The attempt to pick up the chains attached to the inner line of moorings was unsuccessful and had to be abandoned on account of the cost that would have been incurred in keeping divers employed on this work any longer.

13. The expenditure on the harbour works to the end of the quarter including establishment and contingencies is Rs. 1,18,37,679 out of a total estimated cost of Rs. 1,23,83,386 leaving a balance of Rs. 5,45,707.

HARBOUR WORKS OFFICE,
MADRAS, 19*th October* 1892.

F. J. WILSON,
Ag. Engineer, Harbour Trust Board.

Progress Statement No. 30.

MADRAS HARBOUR WORKS.

Statement showing Progress during Quarter ending 30th September 1892 as shown on accompanying Plan No. 29.

NOTE.—The Figures in **red** denote for comparison, progress and quantity of work done in quarter ending 30th September 1891.

No. of Item.	Particulars and Quantity of Work, &c.	Sub-heads of Work. Column.	North Pier. Rubble Base. A	North Pier. Pier Head. B	North Pier. Wave-breaker. C	South Pier. Rubble Base. F	South Pier. Pier Head. G	South Pier. Wave-breaker. H	Concrete Block Making. P	Protective Works. Q	Total Expenditure during the Quarter. R
1	Concrete Blocks—Set by Divers		...	**75** 97	...	...	**45** 24	...	..	..	..
2	Do. made for Superstructure ...		...	...	...	...	...	...	...	...	...
3	Do. do. Pier Head ...		...	9	...	...	5	...	14	...	...
4	Total out-turn of Concrete ...		...	138¾	...	...	75¾	...	214½	...	...
5	Advance or progress of completed Superstructure ...		...	**25** 22½	...	...	**12½** 6½	...	...	...	...
6	Approximate Expenditure under Sub-heads of Work ...Rupees...		163	* 32,246	381	271	9,726	349	12,176	42	55,354

* Includes Rs. 20,728 cost of N. P. Caisson

Nil Casks of Cement received on Works during quarter ending 30th September 1892 =

267½ Do. issued for do. do. = Tons. Cwts. Qurs. lbs. Nil

8,959½ Do. Balance in store at end of do. = 47 16 0 8

1,604 9 0 23

Quantity due on indents. Nil.

Estimated sum required to complete the works at the commencement of the quarter except Establishment Tools and Plant and contingent charges ... Rs. 6,86,034

2. Cost of work done during the quarter ... ... „ 55,354

„ 6,30,680

3. Estimated cost of additional works found necessary during the quarter ... ... „

4. Estimated cost of completing the works from and after the end of quarter ... „ 6,30,680

MADRAS H. W. OFFICE,
19th October 1892.

F. J. WILSON,
Ag. Engineer, Harbour Trust Board.

MADRAS HARBOUR WORKS.

COMPARISON OF EXPENDITURE TO DATE WITH SANCTIONED ESTIMATE FOR THE QUARTER ENDING 30th SEPTEMBER 1892.

Sub-head of Work.	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.
								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.		Rs.	Rs.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Expenditure up to 31st December 1884.													
1 Works	.....	...	...	55,09,324	...		...	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 Alteration and extension of block ground	Prety...	...	...	5,892	5,892	...	...	5,882 3 5	...	5,882 3 5	9 13 6	5,892 0 11	
North Pier.													
5 Ordinary rubble deposited from breakwater.	Tons 13,930	1 12 0	Ton	24,378		13,929½	1 12 0	24,377 9 0	... ...	24,377 9 0	.....	24,377 9 0	
6 Do from boats	,, 2,06,896	2 0 5	,,	4,19,218		2,08,362½	2 1 5	4,30,570 10 2	395 14 1	4,30,966 8 3	4,404 12 2	4,35,371 4 5	
7 Concrete blocks for building	C. yds. 51,320	11 8 0	C. yd.	5,90,110		46,250 48	11 12 3	5,23,563 15 4	20,728 12 9	5,44,092 2 1	....	5,44,092 12 1	
8 Setting blocks at commencement of new work	,, 2,615	2 1 1	,,	5,415		2,615½	2 1 1	5,414 11 2	... ...	5,414 11 2	....	5,414 11 2	
9 Do. from 2,200 to 3,600 feet	,, 36,526	2 14 3	,,	1,05,569		36,446½	2 15 9	1,08,813 14 8	... ...	1,08,813 14 8	... ...	1,08,813 14 8	
10 Do. at Pierhead	,, 12,185	9 8 11	,,	1,16,424		7,218 84	9 8 2	55,987 13 2	10,970 2 11	65,058 0 1	2,596 15 7	68,654 15 8	
11 Concrete in mass for filling	,, 263	4 8 3	,,	1,188		262 116	4 8 3	1,188 0 7	... ...	1,188 0 7	....	1,188 0 7	
12 Warebreaker blocks	,, 288	9 5 7	,,	2,692		288	9 5 7	2,692 0 9	... ...	2,692 0 9	....	2,692 0 9	
13 Do. concrete blocks	,, 77,356	10 14 11	,,	8,45,591		65,870½	11 5 7	7,47,969 15 2	... ...	7,47,969 15 2	....	7,47,969 15 2	
14 Depositing do.	,, 77,932	1 0 0	,,	77,928		66,465 58	1 0 6	67,768 10 7	788 0 11	68,556 11 6	9 7 8	68,566 3 2	
15 Concrete in protection to Rubble Base	,, 1,986	10 4 1	,,	20,358		1,069½	7 11 6	8,262 3 3	... ...	8,262 3 3	....	8,262 3 3	
16 Cramps, Iron	No. 331	9 10 1	Each	3,188		291	8 4 5	2,408 12 4	... ...	2,408 12 4	....	2,408 12 4	
17 Concrete capping	C. yds. 16,352	11 3 10	C. yd.	1,81,798		573½	19 13 10	11,393 14 7	... ...	11,393 14 7	....	11,393 14 7	
18 Cost of North Pier Caisson and setting in position and filling same as items 26, 27, 33 and 34	,, ...	... ...	,,	84,750		...	... ...	... ...	689 13 7	689 13 7	20,087 6 2	20,748 3 9	
Total for North Pier	.....	... ...	...	...	24,80,607			19,81,012 2 9	30,548 12 3	20,22,555 14 8	27,098 9 7	20,49,654 7 10	
19 Ordinary rubble deposited from breakwater.	Tons 1,49,000	1 12 0	Ton	2,60,750		1,49,000	1 12 0	2,60,750 0 0	... ...	2,60,750 0 0	....	2,60,750 0 0	
20 Large do. deposited from breakwater	,, 8,611	1 12 0	,,	15,070		8,611	1 12 0	15,070 8 0	... ...	15,070 8 0	....	15,070 8 0	
21 Concrete blocks for building	C. yds. 15,045	11 3 1	C. yd.	1,81,310		39,445 42	11 5 3	4,56,532 1 3	3,506 0 8	4,60,038 11 11	....	4,60,038 11 11	
22 Setting blocks at commencement	,, 3,556	2 1 6	,,	7,312		3,556	2 1 6	7,311 15 3	... ...	7,311 15 3	....	7,311 15 3	
23 Do. from 2,200 to 3,600 feet	,, 4,960	2 14 3	,,	14,341		4,960	2 14 3	14,341 2 0	... ...	14,341 2 0	....	14,341 2 0	
24 Do. at Pierhead	,, 1,655	9 8 11	,,	15,855		981½	9 8 2	7,607 2 2	1,334 14 10	8,941 13 0	353 14 0	9,295 11 0	
25 Concrete in mass for filling	,, 36	4 8 3	,,	162		36	4 8 3	162 0 0	... ...	162 0 0	....	162 0 0	
26 Concrete blocks	,, 10,705	10 14 11	,,	1,17,055		9,124½	11 5 7	1,03,511 15 2	... ...	1,03,511 15 2	....	1,03,511 15 2	
27 Depositing do.	,, 10,705	1 0 0	,,	10,705		9,124½	1 0 6	9,406 10 7	108 0 11	9,514 11 6	1 7 8	9,516 3 2	
28 Warebreaker concrete blocks	,, 47,231	11 1 6	,,	5,24,670		39,229½	11 5 8	4,38,852 12 4	45 2 5	4,38,897 14 9	13 12 0	4,38,911 6 9	
29 Depositing do. do.	,, 47,719	1 5 8	,,	64,708		39,229½	1 6 5	54,467 14 4	45 2 5	54,512 16 9	13 12 0	54,526 8 9	
30 Concrete in protection to Rubble Base	,, 1,700	9 10 6	,,	16,420		1,197½	18 6 11	13,676 11 10	1,204 0 0	14,880 11 10	....	14,880 11 10	
31 Cramps, Iron	No. 250	11 7 7	Each	2,972		219	13 14 9	2,293 8 5	... ...	2,293 8 5	....	2,293 8 5	
32 Concrete capping	C. yds. 16,247	11 3 8	C. yd.	1,84,495		668½	21 2 4	14,145 0 4	... ...	14,145 0 4	....	14,145 0 4	
33 Iron Caisson	No. 1	...	,,	18,000		...	... ...	21,451 11 8	276 6 5	21,728 2 1	4 4 0	21,732 6 1	
34 Preparing Base for and setting Cylindrical Pierhead	,, ...	...	,,	28,655		...	... ...	... ...	... ...	... ...	....	... ...	
Total for South Pier	.....	... ...	...	...	21,00,826	...	... ...	16,39,585 13 3	16,126 8 6	16,55,712 5 9	7,877 12 3	16,63,590 2 0	
Extending the Rubble Revetment protecting the foreshore North of Harbour.													
35 Rubble Stone Revetment	Tons 70,600	2 1 0	Ton	1,45,613		73,933½	1 8 10	1,15,936 8 6	437 8 9	1,16,374 1 3	....	1,16,374 1 3	
36 Railway Lines	....	... ...	...	9,849		...	... ...	10,914 10 10	... ...	10,914 10 10	....	10,914 10 10	
					1,55,462			1,26,851 3 4	437 8 9	1,27,288 12 1	....	1,27,288 12 1	
37 Tools and Plant	....	... ...	...	...	6,11,656	...	... ...	6,33,379 8 4	2,550 9 1	6,35,930 1 5	1,030 7 3	6,36,960 8 8	
38 Contingencies	....	... ...	...	...	2,17,415	...	...	1,71,218 4 1	1,004 7 3	1,72,223 11 4	7,354 8 7	1,79,578 3 11	
39 Establishment	....	... ...	...	...	1,84,909	...	... ...	5,01,579 6 4	13,817 15 4	5,05,397 5 8	55 0 0	5,06,452 5 8	
40 Materials at site (concrete blocks in yards)	C. yds.	... ...	...	...	...	13,738½	14 0 8	2,25,357 13 2	12,403 4 9	2,12,854 8 5	6,706 12 8	2,19,561 8 1	
41 Advances to work people	....	... ...	...	...	...	...	... ...	6,001 15 9	— 48 0 0	6,016 15 9	....	6,016 15 9	
Total of Estimate and value of work done	....	... ...	...	...	62,06,227	...	... ...	52,89,831 5 9	55,030 8 4	53,44,861 14 1	50,133 3 0	53,91,995 1 1	
Deduct Probable recoveries on account of Tools and Plant	....	... ...	...	...	2,77,331	...	... ...	—60,568 13 8	—1,105 0 5	—61,673 14 1	....	—61,673 14 1	
Total	....	... ...	...	...	58,28,896	...	... ...	52,29,262 8 1	54,823 7 11	52,83,188 0 0	50,133 3 0	53,33,321 3 0	
Total of revised Estimate sanctioned in Secretary of State Despatch, plus expenditure before 31st December 1884	....	... ...	...	...	1,23,83,386	...	... ...	1,17,83,753 6 11	53,928 7 11	1,18,37,678 14 10	50,133 3 0	1,18,87,812 1 10	
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	....	... ...	...	...	1,23,83,386	...	... ...	... ...	... ...				
Deduct Total Expenditure as per column 11	....	... ...	...	...	1,18,37,679	...	... ...	... ...	... ...				
Total Estimated Cost of Completing Work after Quarter ending 30th September 1892	....	... ...	...	...	5,45,707	...	... ...	... ...	... ...				

Expenditure up to 31st March 1892 from commencement of works ... Rs. 1,89,56,656
During current official year from 1st April 1892 to 30th September 1892 ... Do 53,33,321
Total outlay to 30th September 1892 ... Rs. 5,47,00

Madras,
19th October 1892.

F. J. WILSON,
Ag. Engineer, Harbour Trust Board.

24

MARINE DEPARTMENT.

From

THE CHAIRMAN,
HARBOUR TRUST BOARD,
MADRAS.

To

THE CHIEF SECRETARY TO GOVERNMENT,
Marine Department.

DATED 28th } October 1892
RECEIVED
DESPATCHED 12th November
ENCLOSURE Plan referred to at page 13
No. 2841

SUBJECT.

Submitting Report for quarter ending 30th September 1892.

LAWRENCE ASYLUM PRESS.

25

MARINE DEPARTMENT.

From

THE CHAIRMAN,
Harbour Trust Board,
MADRAS.

To

The Chief Secretary to Government,
Marine Department.

Dated 28th October 1892.

Rec'd 2nd November 1892.

Registered No 2597

SUBJECT.

Submitting Report for quarter ending 30 September 1892.

Harbour Trust Board Office.

MADRAS, 22nd November 1892

No. 3019

From Ware Austin Esquire I.C.S

Chairman, Harbour Trust Board,
MADRAS.

To The Honble J.F. Price I.C.S

Chief Secretary to Government,
Marine Department.

Sir

I have the honour to acknowledge the receipt of reference No. 1043 dated 18th instant, and as directed submit herewith a signed copy of the report of the Harbour Trust Board for the quarter ending 30th September 1892.

I have the honour to be
Sir
Your obedient Servant

Chairman

MARINE DEPARTMENT.

From

THE CHAIRMAN,
HARBOUR TRUST BOARD,
MADRAS.

To

THE CHIEF SECRETARY TO GOVERNMENT,
Marine Department

DATED 22nd
RECEIVED 24th } November 1892.
ENCLOSURE (None) 3 (Three)

No. 3019

SUBJECT.

Submitting signed copy of report for quarter ending 30th September 92

Transferred.

LAWRENCE ASYLUM PRESS.

No. 2065 W dy 9-7-88
" 2390 W - 6-8-88
" 1062 W - 18-4-89
" 479 W - 14-2-90
" 910 W - 20-3-90
" 1791-88 W - 2-7-91
" 577 W - 22-2-92
" 430 W - 12-2-92.
" 3011-2 W - 2-11-92
" 12 - 2-11-92
3011 W

20 ✓

Dy. 28 November 92 to 1864

Transferred to the Public Works Department

Lieutenant Chief Secretary

3 D R.
24/11.

30.12

PUBLIC WORKS DEPARTMENT.

13 Dec. Carlworks.

28.

W. No. 3414 - W dy 13 December 92

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following Letter from the Chairman, Harbour Trust Board, dated 28th October 1892, No. 2871.

~~Read the following~~

Letter from the Chairman, Harbour Trust Board, No. 3019 dated 22nd November 1892.

Endorsement in the Marine Dept. No. 1864 dy 28th Nov. 1892

~~Letter from the Chairman, Harbour Trust Board No. 3110 dated 3rd December 1892.~~

21 P

Steamers borne on the Trust Fund in Part I of this report (a general detail of the last quarterly report which was in the new form) are entirely not affected in a progress report on the Harbour works and that the Trustees should be told to omit such matters in future. They are certainly not within the scope of the order of July 88. But I think there have been some more recent orders of which advantage has been taken. Are there any?

WLG
8 Dec.

WLG
8 Dec

To

The Chairman
Harbour Trust Board

Marine Dept. 8 Dec

Please see S.O. 430 W 12/2/92 - prohibiting the financial head of para 44 of the Sec.y of State's despatch to Harbours mentioning only those connected with progress of the works

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

2. The question raised in paras 10 and 11 of the Chairman's letter should be brought forward separately, and in a more complete form, for the orders of Govt. Paras 8-14 of the report deal with matters outside the scope of the 4 specific instructions in para 4 of the despatch under reference. No. 430 W of 12 Feb 92 & No. then draw the attention in future

P.E. No. 3414 W dy 13 Dec 92

Copy of the above with a plan showing the progress of the work forwarded

of India.

Inclosure 1 to 4/1/92

No. 135
No. 34 W of 13 Dec. 92

To The Rt. Honble the Secretary of State for India.

My Lord.

In continuation of our Despatch No. 12 dated 2d November 1892 (30 11 W) we have the honour to forward herewith the progress report of the Madras Harbour Works for the quarter Ending 30 September 1892, and beg to invite attention to the request of the Board that Sir Alexander Rendle's opinion should be taken as to the suitability or otherwise of the laterite used to form the base of the piers.

2. The report is accompanied by a plan of the harbour showing the positions of the work done during the quarter, contours of the bottom of the harbour, and the position of high water marks.

We have etc

29

22 O

Pers 6.1492 F.R. 6/1/92

Dr 15/1/92

N.S.

C & = 11816

Govt. of 1892 Madras.

PUBLIC WORKS.

Dated 13th December 1892. No. 3414 W/ 3415

13 / 3414

Madras Harbour Works.

Forwarding progress

Passing orders on report of the —— for the quarter ending 30th September 1892

Madras Harbour Works

Forwarding the progress report of the —— for the quarter ending 30th Sept/92, with plans

Forwarding the progress report of the Madras Harbour Works for the quarter ending 30th Sept/92, with plans