Date taken out.	For what purpose.			Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			

Very Urgent
Quick Soon

Marine (1897) Department.

G.O., No. 520-21 Mar

DATED 9. June 97

[Despatch Abstract.]

Madras Harbour Trust Board: Recording certain observations on the Administration Report of the — for the year 1896-97.

Madras Harbour Trust Board: Forwarding copy & Proc: Recording certain observations on the Administration Report of the — for the year 1896-97.

Rec'd & entered 12/6/97.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
	316	Mar	31.3.97				

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Government {1897} of Madras.

MARINE.

Recd. } 1897. *Enclosures*

Regd. *Spare copies*

G.O., Nos. 520, 521, 9th June 1897.

JUNE.

Madras Harbour Trust Board

Forwarding copy of Proceedings recording certain observations on the Administration Report of the — for the year 1896–97.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

Read—the following paper:—

From the Chairman, Harbour Trust Board, Madras, dated 23rd April 1897, No. 464.

Order—No. 520, Marine, dated 9th June 1897.

The following observations are recorded on the Administration report of the Harbour Trust Board for the year 1896–97.

2. The Board consisted of ten members and held 28 meetings, of which one was a special meeting to consider the budget. In the previous year there were 29 meetings. The average attendance of members was 7·6 as against 8 in 1895–96; the Chairman being present at all the meetings of the Board.

Revenue Account.

3. *Receipts.*—The following statement shows the receipts as compared with those of the previous year:—

Particulars.	1895–96.	1896–97.	Difference.
	Rs.	Rs.	Rs.
(1) Contribution from Port Funds	33,900	2,44,688	+2,10,788
(2) Harbour Dues	3,93,455	4,50,457	+ 57,002
(3) Porterage	1,00,892	1,18,317	+ 17,425
(4) Interest on Government paper	14,074	16,259	+ 2,185
Total ..	5,42,321	8,29,721	2,87,400

There was a satisfactory advance both under harbour dues and porterage, and a total increase of Rs. 2,87,400, of which a large proportion is due to the contribution from Port funds; Rs. 1,00,000 being repayment of the debt due by Coast ports, and Rs. 1,00,400 on account of the dredger "Wenlock" which the Harbour Trust Board has agreed to take over from Government at that valuation. The increase under dues and porterage is the result of greater activity in trade. The dues on imports rose from Rs. 2,48,020 in 1895–96 to Rs. 2,89,194 in the year under review, and those on exports from Rs. 74,305 to Rs. 77,206. There was also an increase amounting to Rs. 17,425 under porterage. Coal and railway material under imports and jaggery under exports, exhibited an advance, and the proportion of indigenous, as compared with foreign coal was largely in excess of the previous years' transactions. The

following table shows that there has been a steady increase in the tonnage of coal and its allied products imported during the past ten years:—

Year.	Coal.	Coke.	Patent fuel.	Total.
	tons.	tons.	tons.	tons.
1887–88	10,000	608	4,884	15,492
1888–89	21,645	997	6,443	29,085
1889–90	23,970	645	9,753	34,368
1890–91	41,888	1,389	5,613	48,890
1891–92	47,010	2,017	..	49,027
1892–93	63,600	1,322	2,953	67,875
1893–94	80,568	1,734	..	82,302
1894–95	97,500	1,663	..	99,166
1895–96	131,621	2,781	50	134,452
1896–97	148,607	2,052	..	150,659

The following statement shows the total tonnage of the port during the same period:—

Years.	Pier.			Beach.			Grand Total.
	Import.	Export.	Total.	Import.	Export.	Total.	
	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1887–88	86,258	54,562	140,820	124,721	51,445	176,166	316,986
1888–89	85,133	47,262	132,395	116,464	41,741	158,205	290,600
1889–90	88,419	66,208	154,627	158,240	46,317	204,557	359,184
1890–91	100,154	58,855	159,009	188,383	44,580	232,963	391,972
1891–92	97,987	56,046	154,033	249,414	32,893	282,307	436,340
1892–93	80,339	55,514	135,853	197,504	30,424	227,928	363,781
1893–94	81,719	58,912	140,631	203,532	39,748	243,280	383,911
1894–95	89,181	62,545	151,726	196,095	41,643	237,738	389,464
1895–96	90,641	58,297	148,938	240,056	40,777	280,833	429,771
1896–97	114,665	66,285	180,950	270,940	36,656	307,596	488,546

Rs.

* Excludes—

(*a*) Advances to Construction account 11,405

(*b*) Government Securities purchased 2,87,420

† Excludes Rs. 4,14,047 advanced to Construction account.

4. *Charges.*—The total expenditure amounted to Rs. 7,46,646 * as against Rs. 5,59,527 † in 1895–96. The following are the chief variations as compared with the previous year:—

Increases.

	Rs.
(1) Secretary's salary	1,278
(2) Exchange compensation allowance	1,254
(3) Engineer's department	23,101
(4) Fees for audit	9,867
(5) Miscellaneous (contingencies without detailed audit)	5,198
(6) Porterage establishment	9,462
(7) Coolies, Beach	7,377
(8) Do. Pier	4,508
(9) Do. Custom House	1,157
(10) Overtime fees to establishment	2,090
(11) Miscellaneous (Porterage)	2,059
(12) Capital Account—Expenditure on major works met from Revenue	1,66,800

Decrease.

(1) Interest	16,135
(2) Traffic Department (Shore staff)	7,989
(3) Preventive service	2,031
(4) Petty construction and repairs	19,405

The causes of variation are explained in paragraphs 18 and 20 of the report.

Capital Account.

5. It is stated in paragraph 19 of the Trustees' report that the capital account opened with a balance due to Government of Rs. 50,79,227 on the 1st April 1896, but it is observed that no separate capital account has been included in the report. The account is said to close with a balance of Rs. 49,79,227 on the 31st March 1897.

6. The following table gives the number and tonnage of vessels which entered and left the port as compared with those of the previous year :—

Description of vessels.	1895–96.		1896–97.	
	Number.	Tons.	Number.	Tons.
Vessels entered.				
Steam ships, mercantile	656	1,184,644	662	1,180,664
Sailing ,,	1	1,400	..	..
Sailing native crafts	86	9,628	104	10,633
Men-of-war, Government ships and transports	11	15,828	10	25,225
Total ..	754	1,211,500	776	1,216,522
Vessels left.				
Steam ships, mercantile	657	1,185,999	660	1,178,823
Sailing ,,	1	1,400	..	..
Sailing native crafts	85	9,219	102	10,517
Men-of-war, &c.	11	15,828	10	25,225
Total ..	754	1,212,446	772	1,214,565

7. The estimates for the proposed boat basin are still under preparation by the officers of the Public Works Department. Considerable economy is expected to result in the shipment charges upon bulky goods when the boat basin is brought into use.

8. The question as to the custody of goods referred to in paragraph 27 is still under consideration in the Revenue Department, and the Public Works Department is dealing * with the proposals made as to the future construction and control of the works.

* G.O., No. 35, Marine, dated 11th January 1897.

9. The Provident funds have proved useful to the employés of the Board, many of whom have largely benefited by the advantages offered.

10. The Biden Home account opened with a balance of Rs. 2,956–9–1. The receipts during the year were Rs. 1,210–2–8 and the charges Rs. 1,510–9–0. The fund thus closed with a sum of Rs. 2,656–2–9 to credit.

11. The harbour was completed during the year in accordance with the sanctioned design. The total cost of reconstruction was Rs. 61,98,018 as explained in paragraph 21 of the report. If to this be added the outlay previously incurred, the total cost of the works will amount to Rs. 1,27,52,508. But this sum does not represent the whole of the expenditure which will be necessary to render the harbour thoroughly efficient. A boat basin will probably have to be constructed, and increased facilities for landing coal and horses afforded. Dredging will also have to be provided for.

12. The question of raising a loan by means of debentures to extinguish the debt due to Government and meet the cost of additional works is at present in abeyance.

13. The appointment of a fourth Harbour Master is under the consideration of Government.

14. Finally, His Excellency the Governor in Council desires to express his satisfaction at the result of the Trustees' administration of the affairs of the port.

The report, which is admirably drawn up, shows good management and progress in all departments ; the credit for which must be largely shared by the late Chairman Mr. Austin, who has now retired after a long period of office extending over six years.

15. The photographs which accompany the report also deserve commendation as works of great merit.

[Here enter No. 521, Marine, dated 9th June 1897.]

(True Extract.)

(Signed) D. McNEIL CAMPBELL, Colonel, R.E.,
Secretary to Government.

To the Chairman, Harbour Trust Board.
,, the Presidency Port Officer.
,, the Financial Department.
,, the Revenue Department.
,, the Chairman, Chamber of Commerce.
,, the Chairman, Madras Trade Association.
,, the Secretary to the Port Trust, Bombay.
,, W. Austin, Esq. (through India Office).

Endorsement—No. 521, Marine, dated 9th June 1897.

Copy forwarded to the Government of India, Finance and Commerce Department.

(By order.)

(Signed) D. McNEIL CAMPBELL, Colonel, R.E.,
Secretary to Government.

Exd. T. K. Narayana Aiyangar.

ADMINISTRATION REPORT OF THE TRUSTEES

OF

THE MADRAS HARBOUR,

FOR THE OFFICIAL YEAR

1896-97.

PUBLISHED BY AUTHORITY.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1897.

ADMINISTRATION REPORT OF THE TRUSTEES

OF

THE MADRAS HARBOUR,

FOR THE OFFICIAL YEAR 1896-97.

The Trustees have the honour to submit their report on the administration of the Madras Harbour Board for the official year 1896-97.

Constitution of the Board.

2. The Board consisted during the period of the following 10 members :—

Elected by the Chamber of Commerce.

1. Hon'ble Mr. G. L. Chambers, resigned in April 1896, and was succeeded by Mr. W. S. Shaw.
2. Mr. H. Scott.
3. Mr. R. J. Black, resigned in November 1896, and was succeeded by Mr. C. B. Simpson.

Elected by the Trades' Association.

4. Mr. J. F. Davies.

Nominated by Government.

Officials.

5. Mr. Ware Austin, I.C.S., Chairman.
6. Commander H. A. Street, R.I.M.
7. Mr. F. J. Wilson.

Non-officials.

8. Mr. Cowasjee Eduljee Panday.
9. Mr. Mirza Mehdy Ispahani.
10. M.R.Ry. G. Subrayalu Chetty Garu, resigned in December 1896, and was succeeded by M.R.Ry. C. Kaliyanasundaram Chetty Rai Bahadur.

Meetings held.

3. The Board held 28 meetings; and, in February, one special meeting, under section 37 of Act II of 1886, to consider the Budget Estimate of Receipts and Charges for the year 1897-98. A committee was appointed under section 17 (3), and held five meetings to consider and report to the Board upon the proposed issue of a debenture loan and in reference to proposed Harbour improvements.

The average attendance, exclusive of the Chairman who has attended all meetings of the Board, has been 7·6 against 8 in 1895-96.

Debenture loan.

4. The proposal to issue a debenture loan was brought forward by the Hon'ble Mr. G. L. Chambers, at the meeting of the Board held on the 8th day of November 1895, when a memorandum was read proposing, with reference to the notice given by him at the immediately preceding meeting, that, subject to the consent of His Excellency the Governor in Council under section 34, Act II of 1886, the Trustees should issue a debenture loan under section 36, to repay to the Secretary of State for India the sum due on account of advances made by Government for Harbour construction, and to provide funds for Harbour improvements.

5. It was resolved to address Government, with a view to obtaining a reduction in the interest payable under section 30 from $4\frac{1}{2}$ to $3\frac{1}{2}$ per cent., and to solicit the favour of early orders to enable the Trustees to take advantage of the then favourable position of the money market for the issue of a loan, should Government decline to reduce the rate of interest.

Reduction in rate of interest.

6. In addressing Government upon the subject on the 18th November 1894, Mr. LeFanu pointed out that the Madras Trust was heavily handicapped with its comparatively small income, in having to pay such large sums annually by way of interest and refund of capital advances, which had amounted for the preceding five years to Rs. 19,50,860, including a voluntary extra refund of Rs. 5,00,000 in August 1894, when it was anticipated that the Harbour would then be shortly completed, without the necessity of borrowing any further advance to finish it; but unexpected delay in completing the work had occurred, the Board had been compelled to apply for an additional loan and the Trustees were advised that a protective groyne to the south of the Harbour and other works were absolutely necessary, which it was estimated would add a still further expenditure on capital account of Rs. 16,50,000.

Refund of capital advances.

7. The position of the Board at that time was as follows:—

Outstanding liabilities, 1894–95.

	Rs.
Capital debt at the end of 1894–95	47,24,242
Completion Estimate	3,69,122
Total Debt ...	50,93,364
Contemplated expenditure upon Harbour improvements	16,50,000
Total to be provided for out of loan and invested funds	67,43,364

It was, therefore, proposed to issue a loan of Rs. 60,00,000.

8. The Board had in cash and investments Rs. 9,50,000, total Rs. 69,50,000, which would it was estimated have left an available surplus balance of about two lakhs of rupees, over and above the sum to be repaid to Government and the contemplated expenditure upon protective works and Harbour improvements. The issue of the proposed loan would have substituted for the outstanding balance due to Government a debt to the public of Rs. 60,00,000, upon which it was shown interest could be paid at $3\frac{1}{2}$ per cent. per annum, and a sinking fund provided sufficient to extinguish the loan in thirty years.

9. In its order upon the Board's proposal, Government declined to reduce the rate of interest, and favoured the Trust with a memorandum from the Financial Department revising the forecast which had accompanied the Board's proposals.

Revised proposals.

This revised forecast calculated that the Board could reckon upon receiving only 3 per cent. per annum upon investments, instead of $3\frac{1}{2}$ as anticipated by the trustees, and provided for interest upon the debenture loan at the rate of 4 per cent. instead of at $3\frac{1}{2}$.

The result, however, arrived at by Government satisfactorily showed that the trust could, even under these circumstances, repay the proposed debenture loan of Rs. 60,00,000 in full at the end of a period of thirty years.

10. The matter was in July 1896 referred to the Government of India, the sanction of His Excellency the Governor-General in Council being required to the issue of the loan under section 34, Act II of 1886, and under date Simla, 10th September 1896, sanction was accorded under that section to the issue of a debenture loan of Rs. 50,00,000 bearing interest at either $3\frac{1}{2}$ or $3\frac{3}{4}$ per cent. per annum; and it was stipulated that three months' notice should be given by the Trust before repayment, during the course of the year 1896–97, of the outstanding balance due to Government.

Sanction to issue debenture loan received from Government of India.

11. During the interval which had elapsed between the time that the Board proposed the issue of the loan, and sanction being accorded, the money market became unfavourable, and the Trustees have, since September 1896, deemed it unwise to make the offer to the public, as in the state of the money market during the past six months there appeared little prospect of floating such a loan successfully.

Unfavourable condition of the money market.

The Trustees have therefore addressed Government, requesting that the matter may be allowed to remain in abeyance, for the present.

12. In criticising the Board's forecast, Government pointed out that no allowance had been made for the natural expansion of trade, which might be expected to take place at Madras within the next thirty years, and had this been done the position of the Trust would have been shown to be much stronger. The trade of this port and the financial position of the Trust have steadily improved year by year, and the year 1896–97, which has just closed, shows a very satisfactory advance upon previous years.

13. The opening balance in the Revenue account on the 1st April 1896 was as follows:—

Revenue account.

Government $3\frac{1}{2}$ per cent. pro-notes *par* value Rs. 4,13,900, net cost to the Trust Rs. 4,00,064, market value at 104 per cent. Rs. 4,30,456; cash in the Bank of Madras, Rs. 3,48,523, in office Rs. 1,025,

Cash and investments; opening balance.

contingent advance Rs. 500, total cash Rs. 3,50,048. Total cash and Securities Rs. 7,80,504, exclusive of the standing advance to the Traffic Manager of Rs. 500 for porterage charges, and of Rs. 15 with the Cashier for postage and receipt stamps.

14. The cash receipts during the year has been—

Revenue account. Receipts, 1896–97.

	Rs.
Contribution from Port funds	2,44,688
Landing, shipping, cranage and other dues	4,50,457
Porterage dues	1,18,317
Interest on Government Securities	16,259
Total ...	8,29,721

The corresponding figures last year were—

Receipts, 1895–96.

	Rs.
Contribution from Port funds	33,900
Dues on goods landed and shipped	3,93,455
Porterage dues	1,00,892
Interest on Government paper	14,074
Total ...	5,42,321

The differences between these items are—

Increased receipts.

	Rs.
Contribution from Port funds	2,10,788
Dues on goods landed and shipped	57,002
Porterage dues	17,425
Interest on Government paper	2,185
Increase ...	2,87,400

The usual contribution from Port funds has been swelled by the payment of Rs. 1,00,000 cash received on the 31st March 1897, under G.O., No. 273, Financial, dated 26th March 1897, in part

Contribution from Port funds.

payment of the outstanding balance due to Madras by Coast ports, and a sum of Rs. 1,00,400 by the transfer to the Trust, at that valuation, of the dredger "Wenlock," which is to become the property of the Board on delivery at Madras, up to which time she remains at the risk of Government.

The increase in dues upon goods landed and shipped, Rs. 57,002, is the result of increased trade; and porterage dues, Rs. 17,425, to the same cause, the coal trade and railway material being the chief contributing items of import.

Net increase of Harbour Dues.

Revenue account closing balance.

15. The closing balance on the 31st March 1897 is as follows:—

Government paper (*par* value Rs. 4,93,900) taken at 101 per cent. the current market rate upon that date, Rs. 4,98,839. This, it will be observed, shows a loss of 3 per cent. as against the market rate of 104 per cent. the value at the beginning of the financial year, a difference on the closing holdings of Rs. 14,817, but the net loss on the transactions in Government paper during the year under review has amounted to Rs. 16,794, and is so shown in the balance sheet, the difference being accounted for by the variations in the rates of purchase during the period, which have ranged from Rs. 104-4-0 down to Rs. 100-6-0.

The cash in hand on the 31st March 1897 was —

	Rs.
In the Bank of Madras	3,35,794
In office	748
Total ...	3,36,542

There is also outstanding advanced from Revenue for construction purposes the sum of Rs. 11,405 which will be brought to account when sanction is obtained to proceed with Harbour improvements.

Closing balances of 1896-97 and 1895-96 compared.

16. The closing balances on the 31st March 1896 and 1897 may be compared as follows:—

	1896.	1897.
	Rs.	Rs.
Government paper, market value	4,30,456	4,98,839
Cash	3,50,048	3,36,542
	7,80,504	8,35,381
Net amount received from construction	14,000	...
Do. advanced to construction	...	77,805
Total ...	7,66,504	9,13,186

The above shows a net improvement of Rs. 1,46,682, or in round figures of about half a lakh of rupees excluding the special cash contribution from Port funds, and capital adjustments.

Net increase, Rs. 50,000.

17. On pages 17 and 18 is printed a statement comparing in detail receipts and charges for the two periods 1895-96 and 1896-97, from which it will be observed that there is a satisfactory increase under nearly all heads of receipt which so far as they relate to Harbour dues proper, including porterage, are dealt with by the Traffic Manager in his report.

Comparative statement.

18. Under the various items of charges it is to be observed that interest upon outstanding balance of advances for Harbour construction was less by Rs. 16,135, amounting to Rs. 2,11,472 against

Interest upon capital advances.

Rs. 2,27,607 in the previous year. This interest, and the usual refund of one lakh of rupees in reduction of capital debt, was paid to the credit of Government with the Bank of Madras on the first working day in April 1896.

The smaller variations in charges have been alluded to in the quarterly reports during the year, and need not be again referred to now.

Haulage charges for the year have not been paid, no account having been received from the Engineer, they have been met by him from advances to construction account, and will have to be adjusted hereafter.

Haulage of Railway vehicles.

Traffic Department salaries, including Preventive service, have been reduced by Rs. 10,020 by transfer to Porterage of Rs. 9,462, wages of individuals employed exclusively in that branch of the department, and to Rs. 1,278 being excluded for traffic charges, while the Traffic Manager was, for two-and-a-half months, acting for the Secretary when absent on leave.

Traffic Department salaries.

Engineer's establishment—Rs. 23,101.—The Harbour having been completed according to the sanctioned design in May 1896, and there being no estimate for works to which the Engineer's establishment could be charged, the salaries paid from 1st June have been debited to "Revenue".

Engineer's establishment.

The Trustees were informed by the Examiner, Public Works Accounts, after the completion of the Harbour, that the services of the staff employed in its reconstruction should have been at once dispensed with. The Board was however placed in a difficult position; it was advised that certain works were absolutely necessary, and must be carried out with as little delay as possible. It was therefore obvious that it would have been unwise to dispense with the services of trained men who would be required for those works; they were therefore kept on, pending the result of a reference to Sir Alexander Rendel.

Proposals were, before this result was known, made to Government with a view to economy, but no orders have yet been received.

As however it became clear that, in any case, large reductions could and must be made, it was decided to get rid of the whole of the Engineer's staff, which was done in January 1897, by giving one month's notice to all monthly-paid men, and three months' notice to the foremen, in the terms of their agreements.

The Engineer's staff has been reduced to what is considered the minimum required for up-keep, by the re-engagement of such men only as the Board is advised are necessary for that purpose.

Exchange Compensation Allowance has risen by Rs. 1,254 having been charged with the payments under this head to the Engineer's Department from 1st June 1896.

Exchange compensation.

Fees for audit of the construction accounts have also been debited to "Revenue," and have increased that charge by Rs. 9,867.

Miscellaneous charges have increased by Rs. 5,198, of which the principal items are Fire insurance Rs. 1,376, Travelling allowance to the Board's Engineer Rupees 1,942, and type-writing machines Rupees 891.

Miscellaneous charges.

New works show an expenditure of only Rs. 1,880 under the head "Petty Construction," chiefly for an extension of the coal yard.

New works—Petty construction.

Coolies' wages have exceeded payments made last year by Rs. 13,042, mainly due to the larger quantities of coal and railway material handled.

Coolies' wages.

Steam crane charges are less by Rs. 576, which is also due to arrears of account.

Steam cranes.

Refunds of Harbour Dues have increased to Rs. 335, on account of over-payments for coal short landed; and refunds of porterage dues paid in advance have increased from Rs. 5,947 to Rs. 6,228 = + Rs. 281. These large refunds are due to charges being paid on arrival of full cargoes, and refund being given upon all coal loaded direct into railway vehicles, instead of being first stacked and then handled a second time when loaded.

Refund of Harbour Dues.

Overtime Fees show a net increase of Rs. 1,449 due to the necessity of working after hours, to cope with the enhanced work done in the porterage branch of the Traffic Department, in which no actual increase of establishment was made throughout the year.

Overtime work.

19. The Capital account opened with a balance due to Government on the 1st April 1896 of Rs. 50,79,227. The usual refund of one lakh was made as reported above, and no further advance was received from Government during the year under review.

Capital account.

20. Under G.O., No. 850, Marine, dated 9th December 1896, the following items have been charged to the major heads of Capital expenditure noted, viz.:—

Charges under Major heads.

	Rs.	A.	P.
Moorings	23,567	7	2
Other new works	13,963	0	0
Acquisition of land	18,568	5	0
Protective works	10 301	0	0
Tools and plant	1,00,400	0	0
Total ...	1,66,799	12	2

These amounts to the extent of Rs. 66,399–12–2 have, in the Revenue account for the year, been deducted from advances made to the Board's Engineer aggregating Rs. 1,05,978–12–5, and when he accounts for the expenditure of that amount, the above items, should they have been charged to Harbour reconstruction, will be written off that account. In the meantime though a charge to Capital, they have been paid for from Revenue.

Advances to Construction account.

The outstanding balance of advances due to Government on the 1st April 1896 amounted to Rs. 50,79,227; this has been reduced by the usual repayment of Rs. 1,00,000, and the balance due on the 31st March 1897 was Rs. 49,79,227.

Outstanding balance of capital liabilities.

21. On the 9th May 1896 the Board's Engineer reported that the artificial Harbour had been completed according to the sanctioned design and within the sanctioned estimate, which however has been of a somewhat elastic character, through circumstances beyond the Board's control.

Harbour completed, 9th May 1896.

	Rs.	
The cost of reconstructing the Harbour after the eastern walls were wrecked was estimated at	45,90,051	
In the month of March 1891 an additional estimate was sanctioned amounting to	12,38,845	
A completion estimate was subsequently found to be necessary, and sanction was accorded to the expenditure of an additional sum of	3,69,122	
The total estimated cost of reconstructing the Harbour was therefore	61,98,018	Total cost of reconstruction.

22. The above amount, as reported by the Engineer, has not been overdrawn; but the actual cost of reconstruction is not yet known, as the Engineer's accounts are not yet finally closed, and adjustments as indicated in paragraph 20 *supra* have still to be made.

Revised estimate not exceeded.

23. At the time the Harbour was reported as completed the Board had under consideration, in connection with the issue of the debenture loan, the following proposals for improvements to facilitate trade, and to protect and maintain the works:—

Proposals for Harbour improvements since abandoned.

		Rs.
	A boat basin within the water area ...	6,63,558
	Additions to south pier to render it sand right	54,369
	Deepening the Harbour	2,19,069
Sanctioned in G.O., No. 119, Marine, dated 26th February 1896.		9,36,996

Other proposals not sanctioned.

Two other works were estimated for, sanction to which was withheld, viz.:—

Canal entrance	7,52,300
Protective groyne	3,91,355
Total ...	20,80,651

24. The Trustees had approved the first three of the above items, after consideration of a report by a Committee appointed by Government to report upon Harbour improvements, which was presided over by the Hon'ble Colonel Pennycuick, R.E., one main feature being a canal entrance from the north-west corner of the Harbour. The Committee recommended a boat-basin across the western side of the Harbour, with a canal entrance in the above position, beyond which were to be provided quays, and ample space for dealing with the large coal traffic of the Port, in a locality convenient for despatch by railway; but in considering these proposals, the Harbour Board adopted a modified form of basin confined to the south-west corner of the Harbour, as being sufficient for general cargo, while coal was left to be dealt with in the north-west, beyond the canal entrance as proposed by the committee, in and near the present block-making ground, and with the additional facility of a deep-water berth, alongside of which a steamer could lie to discharge coal and horses, or to embark troops or passengers.

Harbour Improvement Committee.

25. It was understood that Government would pay for the construction of the canal entrance; but when it was found that the idea of making a canal from the north-west corner of the Harbour had been abandoned, it became obvious that to provide the necessary accommodation for the coal trade at that spot, the Board would have to incur the whole of the expense necessary to form the entrance; and the Trustees were of opinion that they would not be justified in spending so large a sum—over seven-and-a-half lakhs of rupees—to provide an entrance only to a coal basin, the cost of which would still have to be added, and had not even been estimated for, as it was intended simply to widen out the canal, and to use the canal itself for landing coal from lighters.

Canal entrance from north-west corner abandoned.

The Trustees, therefore, had to reconsider the whole question, and decide whether other satisfactory arrangements could not be made, which would not involve so large an expenditure.

Reconsideration of proposal necessary.

26. The nautical authorities had throughout the discussion of the question of Harbour improvements consistently and unanimously objected to any curtailment of the water area of the Harbour; but their objections, and the disadvantages pointed out, were over-ruled, as being of less importance than the advantages to be gained.

Nautical objections to curtailing water space.

Without the canal section the boat-basin, as sanctioned in the south-west corner of the Harbour, was however found to be totally inadequate to meet the requirements of the Port, and therefore, apart from nautical objections to it, had to be abandoned.

Proposals found inadequate.

It was part of Mr. Parkes' original proposals to provide a boat-basin in the sand to the south of the Harbour, and the Board, in reluctantly abandoning proposals previously approved, were compelled to seek a solution of the difficulty in that direction.

Mr. Parkes' original proposals for a boat-basin.

27. The necessity for providing better facilities for landing coal is daily increasing in importance; the trade has assumed large dimensions, and additional facilities tending to reduce charges will, it is hoped, lead to still further increased imports.

Better facilities for coal necessary.

The present arrangements for landing cargo on the iron screw pile pier and upon the beach inside the Harbour, and of storing all general cargo inside the sheds attached to the Custom House, is most inconvenient; the trade of the port having completely outgrown the available accommodation, while the actual custody of goods being with a Collector, the Board cannot undertake the charge of goods as landed, as is the case at Bombay and other large Indian ports, which system the Chamber of Commerce is anxious to see introduced at Madras, and it has formed the subject of correspondence with Government, whose orders are awaited.

Custody of goods landed.

Orders of Government awaited.

28. In dealing with the question of Harbour improvements, the Board has not lost sight of the evidence given by Mr. Parkes before the Committee appointed by the Secretary of State for India in April 1887, when Mr. Parkes stated that a north-east entrance to the Harbour could be constructed for *thirteen lakhs of rupees*, and a ship dock in the sand to the south of the Harbour for *fourteen lakhs*; but the agents of steamers assert that vessels in the Madras Harbour can do a better day's work overside into lighters than alongside any dock wall, and the Trustees do not consider, therefore, that the time has yet arrived to provide a ship dock in connection with the Harbour, but agree with Mr. Parkes that, when that time does come, the sand which has accreted to the south of the Harbour is the best place for it, and owing to its rapid accumulation will afford more space and better facilities for the construction of a dock, at an earlier date, than Mr. Parkes anticipated.

North-east entrance.

Docks.

Accretion of sand.

Docks for coal.

The question of providing a dock for coal only has not been urged upon the Board by those merchants interested in that trade.

29. Under all the circumstances of the case, the Trustees adopted a suggestion for a boat-basin to be constructed in the sand to the south of the Harbour, and these proposals were submitted to Government on the 6th November 1896.

Boat-basin approved as originally proposed by Mr. Parkes.

The Board's Engineer was then absent from Madras, so that the Trustees were unable to submit at the same time an estimate of the probable cost; but as Mr. Parkes had stated that a ship dock could be constructed for Rs. 14,00,000, it is presumed that a shallow boat-basin should not be a very expensive undertaking, and, as there are no features in the scheme requiring special knowledge of engineering problems connected with Harbour construction, a request was then made that an estimate might be prepared in the Public Works Department.

Estimate for boat-basin awaited.

In its order thereon, No. 834, Marine, dated 1st December 1896, Government directed that the Engineer in charge of the Buckingham Canal Division, who was estimating for a canal connection, should prepare an estimate, in consultation with the Board's Engineer, who had then returned to Madras. This estimate is awaited.

30. The question of rendering the south arm of the Harbour sand tight has also been under the consideration of the Board, and on the 15th December the Trustees remarked, in addressing Government, that it is no doubt desirable that the south arm should, if possible, be made sand tight; but as dredging plant appears to be a necessity in the near future, the question will have to be carefully considered whether the small quantity of sand which filters through the south arm in the course of a year cannot be more economically kept under control by dredging it away, than by attempting to prevent its finding an entrance through the wall. The sand which has during the past fifteen years accumulated along the south arm has not yet encroached upon Nos. 1 and 9 berths to any greatly inconvenient extent. Since this view was taken, it has been decided that the dredger *Wenlock* shall be transferred to the Trust, and it is understood that she is well adapted, even as a bucket dredger, to remove whatever of this sand bank it may be advisable to lift, and will be of still greater service if converted into a pump dredger. It would therefore appear that the expenses of rendering the south arm sand tight will not have to be incurred.

Accretion of sand.

Dredging.

Dredger "*Wenlock*" transferred to the Trust.

31. The last item referred to in paragraph 23, the protective groyne to the south of the Harbour, was a work that the Board was informed was an absolute engineering necessity, to keep the sand from blocking up the entrance to the Harbour, and its estimated cost was Rs. 3,91,355; not a very large amount considering the importance of the object for which it was to be constructed; but the question of the sand now accreting to the south ultimately blocking the entrance was a matter of so much moment that the Trustees requested that a reference might be made to Sir Alexander Rendel, and it was decided that the Board's Engineer should go to England to give all information required to enable him to come to a decision as to whether this groyne was necessary, and whether, if constructed, it would protect the entrance as anticipated.

Protective groyne unnecessary.

32. The result of this reference was communicated to His Excellency the Governor in Council in a despatch from the Right Hon'ble the Secretary of State for India, No. 6, Public Works, dated London, 29th October 1896, as follows:—

"Sir A. Rendel hopes, and expects, that the difficulties caused by the movement of the sand may be removed by dredging, and he recommends that a sand pump dredger should be purchased at a cost of about £12,500."

Sir Alexander Rendel considers dredging probably sufficient to deal with sand accretion.

This opinion of Sir Alexander Rendel is, the Board considers, most satisfactory and reassuring. Government has since sanctioned the transfer to the Trust of the dredger *Wenlock*, as noticed above, and the Board's Engineer has reported that there will be no difficulty in converting her from a bucket to a pump dredger.

33. The reported shoaling of the Roadstead is also a matter upon which there appears to be a diversity of opinion, and to settle this authoritatively, Government has sanctioned the deputation of a trained Surveyor of Her Majesty's Indian Marine Service. It would appear from ancient records in the possession of Government, that this coast line and Roadstead have, from time to time, been subject to varying conditions and influences, resulting in the temporary erosion or accretion of sand, affecting the contour of the coast, and the soundings within a limited distance from the shore.

Roadstead to be surveyed.

The construction of the Harbour has undoubtedly been the cause of the accretion of sand to the south, which is now so prominent a feature of the coast line, from the north of the river Cooum to the south arm of the Harbour, a distance of less than two miles, but the formation of this accretion was foreseen by Mr. Parkes, and the area, which he anticipated would thus be gained, was regarded by him as a valuable addition to the Harbour, available for constructing a boat-basin and docks.

Accretion of sand south of the Harbour foreseen by Mr. Parkes.

It is satisfactory to have the assurance that should this accretion form very much more rapidly than was anticipated, and ultimately threaten to shoal the entrance, that dredging will probably be all that is needed to keep it open.

Dredging.

Beyond this however, as Sir Alexander Rendel points out, there is the practicability of extending the walls of the Harbour into deeper water, and forming a new entrance, should it be necessary to do so at some future time.

Harbour extension.

34. That any threatened shoaling of the entrance can take place so suddenly as not to give ample time to devise schemes to counteract it is, the Trustees consider, unlikely. While, therefore, they fully concur in the view expressed by the Hon. Colonel McNeil Campbell, in his note, dated 30th July 1896, that the only really satisfactory solution of the difficulty is the north-east entrance, they do not think that the time has arrived to take into consideration the question of the expense involved; and in any case would prefer to await the result of a really bad cyclone, to thoroughly test the present works, before going into the question of improvements, involving any radical alteration in the design or form of the Harbour, or of its present entrance.

North-East entrance.

The importance of this decision of the Board, is at once apparent, when it is remembered that the last great storm which visited the port completely wrecked the eastern walls, very much to the surprise of their designers and builders, and it must be remembered that, although the walls as now reconstructed are very much stronger in section, and are protected by an immense wave breaker screen of random blocks, while the capping is a further source of stability, they have not yet stood the practical test of a heavy cyclonic sea.

Such moderate cyclonic depressions as have visited the port, since the Harbour walls were rebuilt, tend to prove that the structure should withstand the worst weather it is likely to encounter and remain practically undamaged, but it would be satisfactory to the Board to see the test successfully surmounted, before taking into consideration improvements necessitating any very heavy additional outlay.

35. The Traffic Manager's report gives, as usual, much useful and interesting information. During the year under review quarterly returns have been issued of goods imported and exported, and statistics have thus been kept up to date; but the Traffic Manager, and his office staff, must be complimented upon the very prompt manner in which these returns have been issued so soon after the close of the official year.

Traffic Manager's report.

36. *Import dues* show the substantial increase of Rs. 41,172, which is due chiefly to the increased imports of coal and railway material.

Increase in import dues.

The coal trade has been steadily increasing for several years past, but during the period under review the imports from foreign ports have decreased, while those from Bengal have increased; as follows:—

Increase in coal trade.

	1895-96.	1896-97.	+ or −
	TONS.	TONS.	TONS.
Foreign ports	101,025	69,246	− 31,779
Bengal	30,596	79,361	+ 48,765
Total ...	131,621	148,607	16,986

It will thus be seen that, although the total has increased by 16,986 tons, foreign coal has decreased by 31,779 tons, while Bengal coal has increased by 48,765 tons.

The great bulk of the coal imported was for the Gold Mines of Mysore; and during the year, to meet the requirements of this trade, new sidings have been laid, and the coal hard has been extended sufficiently to accommodate six additional cargoes of 4,000 tons each.

The space at the disposal of the Board, between the north arm of the Harbour and the iron screw pile pier, does not admit of any further extension, and so long as coal is stored there, little if any economy can be effected in the charges for landing. It is becoming more than ever necessary to transfer the storage ground for coal to the space formed by the accretion of sand to the south of the Harbour; but this cannot be done until the proposed boat-basin has been constructed, or other means adopted for economically depositing it there. The boat-basin would at once effect a considerable saving in the cost of landing, as coal could then be discharged in bulk into lighters, instead of being bagged, as at present, and landed through the surf in Masulah boats. The importance of economy in this direction is increasing, owing to the greater use now being made of country coal, more of which is required to do the same work as less English coal; and as the price per ton is less, the charges are proportionately higher upon the value. The increase in the import of railway material is due to the construction of the Bezwada-Madras line.

Coal must shortly be stored on the accretion of sand south of the Harbour.

Reduction in boathire charges necessary.

37. *Exports* show only a small increase caused chiefly by larger shipments of jaggery. The importance of reducing shipment charges upon bulky goods of small value is obvious, and a considerable economy can be effected when the boat-basin is constructed. The charges on salt especially would be so lowered as to materially assist that trade, if it should be practicable to take canal boats loaded with salt alongside steamers in the Harbour.

Exports.

38. *Porterage.*—The Traffic Manager gives some interesting particulars of the economy effected by the Board since it undertook the departmental porterage of import cargo, and it will be observed that, compared with year 1890-91, the savings to the trade of the port effected by the reduced charges, which he enumerates, have amounted to no less than Rs. 73,000 during the year 1896-97. This, as pointed out by the Traffic Manager, is not a profit made by the Board out of the work, which has gone to swell the cash balance of the Trust, but a direct saving to importers; that is, the charges levied upon goods for the work has now done by the Traffic Department has, by a series of small reductions, been reduced by that amount, and importers have paid so much less than they would have done, had the Board not undertaken the work, and reduced the charges from time to time as found practicable.

Porterage.

Satisfactory saving to the Trade of the Port.

These reductions are satisfactory so far as they go; but now that the Harbour has been completed, further economies may reasonably be expected by merchants, by means of improved facilities being given, which will enable them to reduce the present high rates of conveying goods between ship and shore, and *vice versâ*, with which transport by water the Board has nothing to do.

Further economies desirable.

A boat-basin with ample shed accommodation, warehouses, and large space for the storage and handling in the open of such cargo as coal, would by also providing security for floating craft in a cyclone, enable merchants to procure larger and more suitable lighters, and thus at once reduce the present high rates of boat-hire.

Improved landing and shipping facilities.

39. *Provident Fund.*—This account opened with invested funds in Government 3½ per cent. paper *par* value Rs. 73,500, taken at the then market rate of 104 per cent. at Rs. 76,440. These securities have not been touched, but the closing market value is taken at 101 per cent. Rs. 74,235 showing a depreciation of Rs. 2,205 on the twelve months.

Provident fund.

The opening cash balance was Rs. 9,400–9–9, and the year closes with a cash balance of Rs. 9,754–7–10.

Subscriptions and contributions have amounted to Rs. 13,855–6–8 interest on Government Securities Rs. 2,565–11–6. Total Rs. 16,421–2–2.

The charges during the year have been heavy owing to Rs. 12,937–13–8 having been paid to employés in the Harbour Works Department who have left the Board's service on reduction of establishment. Total charges during the year Rs. 16,067–4–1.

An attempt has been made during the period to utilise the Provident fund for the benefit of subordinate employés, by granting them advances from their own subscriptions, not as a rule exceeding one month's pay, for the same purposes as those for which outright payments are made from the coolies Provident fund, viz., domestic occurrences.

Upon an advance being granted, the Chairman becomes the nominee of the borrower, until the loan is liquidated by payment of fixed monthly instalments deducted from salary.

The object is to keep subordinates, drawing from Rs. 5 to Rs. 20 per mensem, out of the hands of the Sowcars, from whom they would otherwise obtain loans at exorbitant rates of interest on the occasion of marriages and other domestic occurrences in their families.

This system of advance is tentative and on trial. Should it keep the lowest paid grades out of the Sowcars clutches it will prove useful; but it remains to be seen whether an advance made from the Provident fund will not be open to the abuse of being simply made the means of increasing the indebtedness to Sowcars.

The Coolies' Provident Fund has again proved itself a most useful institution. The receipts have been Rs. 1,275 deducted from the coolies' wages, and a similar amount contributed from Porterages funds by the Trust, unclaimed coolies' wages, Rs. 29, and interest on investments, Rs. 51. Total Rs. 2,630.

Coolies' Provident Fund.

Coolies' Provident Fund pensions and allowances.

The charges have been as follows:—

	Rs.
Pensions to widows of coolies killed	77
Pensions to coolies permanently injured	101
Allowances to wounded coolies, while in hospital under medical treatment	331
Allowances for 68 marriages	507
Do. „ 77 births	158
Do. „ 91 deaths in coolies' families	314
Total ...	1,488

Rupees 1,500 3% Government pro-notes par value have been purchased, at a net cost of Rs. 1,484–15–0, and the invested funds now amount to Rs. 3,000 par value, or Rs. 2,955, the market value at upon the 31st March, against Rs. 1,500 at 104 = Rs. 1,560 last year. The balance of cash in the Bank of Madras amounts to Rs. 551–3–3 against Rs. 894–9–6 in 1895–96.

Coolies' Provident Fund.

Increases of resources.

That the invested funds should have doubled is very satisfactory, especially when it is remembered that all pensions and allowances are controlled by the coolies themselves, who assemble and investigate all claims in a sort of punchayet, consisting of maistries and coolies, and make their recommendations for the Chairman's approval and sanction.

The allowance of 4 annas *per diem* to coolies injured while at work is not subject to any such recommendation. When an accident occurs, the Traffic Manager reports the circumstances, and the money is paid on production of a medical certificate.

40. The Deputy Conservator's report shows that the efficiency of his department has been considerably enhanced. A mooring boat has been provided, which has proved useful and satisfactory, also economical, inasmuch as it has saved the undue wear and tear upon the Harbour Masters' boats, previously unavoidable, when they were used for a purpose for which they were not constructed, in shackling on to and unshackling steamers' heavy cable chains from the head mooring buoys, which have been provided to all the berths inside the harbour. For this service a strongly-built boat, more like a small lighter, is required. The steam launch has been made more use of than formerly, which expedites the berthing of steamers entering the harbour.

Deputy Ports Conservator's report.

Enhanced efficiency.

41. The entrance lights have given every satisfaction, and have been in charge of the Deputy Conservator since the 4th June 1896.

Entrance lights.

42. Only one accident of any moment occurred inside the harbour. On the 27th November the S.S. *Secundra* parted her chain cable at No. 9 mooring, and stranded on the sandy bottom alongside the south arm, during the prevalence of a moderate cyclone; but, after being lightened, was towed off uninjured by two other steamers, also belonging to the British India Company.

Accidents.

S.S. *Secundra* stranded.

The opportunity was taken by the Deputy Conservator to make the wreck signals prescribed by the Cyclone Code, which worked satisfactorily; all departments concerned promptly responded to the signals.

Cyclone Code.

43. The other vessels inside the harbour on the 27th November remained at their moorings; landing and shipping operations were obstructed to a considerable extent by the swell inside, but the rain and wind interfered with the handling of cargo even more than did the sea.

Cyclone, 27th November 1896.

With this exception cargo has been landed and shipped inside the Harbour without interruption throughout the year.

44. On June 15th, the *Dunera* parted her stern lines in a squall; but all vessels are provided when moored inside the harbour with sufficient space to swing clear of the next berth, and no damage was done.

S.S. *Dunera*.

45. On May 1st, the sailing barque *David* from Negapatam for Cocanada in ballast, put into Madras roadstead, leaking badly; and as pumps could not be obtained to keep her free, the water gained, and she had eventually to be beached at Cassimode, north of the extended revetment, where she became a total wreck, and was broken up.

Sailing barque *David*.

46. A few minor casualties to small boats and lighters occurred during the year, which are reported in detail by the Deputy Conservator, but which are of no moment.

Minor casualties.

47. The work in the Shipping Office has considerably increased. It is satisfactory to note that out of the large number of seamen visiting the port only one, a native, was sent to gaol. The usual periodical statements and returns have been furnished to the Board of Trade, and submitted to Government.

Shipping Office.

48. Accompanying this report are nine photographs, the negatives of which were kindly taken for the Trustees by Mr. F. Dunsterville, the President of the Amateur Photographic Society.

These pictures illustrate the mercantile aspect of the harbour.

MADRAS,
23rd April 1897.

(Signed) W. AUSTIN,
Chairman.
(„) C. PINSENT,
Secretary.

ENCLOSURE.

EXTRACT of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the Offices of the Board on Friday, the 23rd day of April 1897.

* * * * *

10. Draft Administration Report for 1896–97, having been printed and circulated to each Trustee, was laid upon the Board's table and discussed.

The Chairman remarked, with reference to the paragraph in the Deputy Conservator's report regarding the Time Signal, that he had discussed the matter with the Government Astronomer, who agreed with the Deputy Conservator that the present semaphore was preferable to a time ball; that he concurred in this opinion, and desired it to be placed on record; that he saw no advantage to be gained by substituting a time ball.

The Chairman also brought to notice, with reference to the Provident Fund, that there did not appear to be any rule specifically empowering him to pay provident fund monies to the nominees of employés whose services had been dispensed with on reduction of establishment, or who had been permitted to resign.

Resolved that the action of the Chairman in paying such sums is approved and confirmed.

Various alterations and amendments in the text of the report were made after discussion.

As the accounts accompanying the report had not been audited, the Secretary submitted certificates from the Bank of Madras of the cash balance at credit of each account on the 31st March; these were compared with the balances shown in the accounts, were found correct, and ordered to be printed at the foot of each statement.

Invested funds, as shown in the various accounts, were compared with Bank of Madras safe custody receipts, and found correct.

The Trustees directed to be placed on record their appreciation of the prompt manner in which departmental reports and the accounts for 1896-97 had been submitted and closed. The Chief Accountant's department has also given satisfaction.

The Administration Report was then approved and passed.

* * * * *

(True Extract.)

(Signed) C. PINSENT,
Secretary, Harbour Trust Board.

The following statement gives in detail the receipts and charges of the Revenue Account from 1st April 1896 to 31st March 1897 :—

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening Balance.			
Government securities (Par value 4,13,900) ..	....	....	4,30,456 0 0 (at 104 per cent.).
1. Cash in the Bank of Madras	3,48,523 0 6		
2. General Cash in office	1,025 1 2		
3. Advance for Contingencies	500 0 0		
		3,50,048 1 8	
Receipts.			
I. Contributions from Port Funds	....	2,44,688 5 0	
II. Beach Imports: Dues under section 45 (*a*) I (i) (ii) (iii)	2,03,205 8 11		
Pier imports „ „ ..	85,988 11 8		
Beach exports „ „ ..	27,491 13 9		
Pear „ „ „ II ..	49,714 2 10		
Wharfage „ III ..	6,095 0 0		
Cranage „ IV ..	56,997 15 11		
Storage „ V ..	841 5 2		
Demurrage „ VI	285 14 1		
Dues for entry of vehicles under section 45 (*c*)	12,617 6 9		
Provisions: Dues on—under section 45 (*a*) I (i) ..	679 15 0		
Rent of properties	822 14 8		
Water: charge for—delivered at pier head ..	5,532 0 0		
Penalties under section 84	33 0 0		
Sundries	151 1 9		
		4,50,456 14 6	
III. Porterage under section 45 (*a*) I (iv)—			
Beach	74,970 4 7		
Pier	43,333 15 9		
Miscellaneous	13 1 0		
		1,18,317 5 4	
IV. Interest on Government of India, 3½ per cent. promissory notes	....	16,259 3 2	
Cost of Government securities purchased ..	....	..	2,87,420 0 0
Proceeds of Government securities sold ..	....	2,02,243 0 0	
Total ..	....	13,82,012 13 8	7,17,876 0 0
Charges.			
I. Interest (under section 30)	....	2,11,472 6 4	
II. Repayment of loan for construction of harbour under section 31	....	1,00,000 0 0	
III. Refunds	2,232 15 8		
IV. Engine Haulage	..		
V. Fees to Trustees	7,410 0 0		
VI. Chairman's allowance	4,800 0 0	14,442 15 8	
VII. Establishment—	10,877 15 4		
1. Secretary's salary	3,747 15 8		
2. Correspondence Department	6,600 0 0		
3. Accounts Department	5,148 3 1		
4. Cash Department	23,497 2 7		
5. Traffic Department (Shore Staff)	8,924 3 1		
6. Preventive service	1,226 9 4		
7. Do. Boatmen	415 0 0		
8. Tidal Observatory	4,567 7 3		
9. Exchange Compensation Allowance	766 12 1		
10. Contribution to Government for pensions ..	4,101 12 9		
11. Do. to Provident Fund	23,100 13 4		
12. Engineer's Department		92,973 14 6	
VIII. Contingencies—			
(*a*) Subject to regular audit—			
Postage	48 5 10		
Receipt Stamps	236 2 0		
Telegrams	18 5 7		
Furniture	141 7 0		
Fees for Audit	11,866 10 8		
Law Charges	50 0 0		
Stationery and Printing	3,637 8 1		
Advertisement Charges	85 0 0		
Uniform for preventive service, &c.	1,349 8 0		
		17,432 14 7	
(*b*) Admissible without detailed audit—			
Overtime fees to Establishment	4,056 9 11		
„ to Preventive Service and Boatmen .	2,853 5 5		
Miscellaneous	8,733 1 5		
		15,643 0 9	
IX. Petty construction and repairs—			
New Works	1,879 12 3		
Repairs	8,083 13 2		
Tools and Plant	220 0 0		
		10,183 9 5	

Charges—cont.	Rs. A. P.	Rs. A. P.	Rs. A. P.
X. Porterage—			
1. Establishment	9,461 12 1		
2. Coolies, Beach	49,750 9 7		
3. „ Pier	21,151 13 9		
4. „ Custom House	13,473 14 11		
5. Coasting Cargo	1,483 3 9		
6. Cart-hire	739 8 3		
7. Steam Crane charges	1,931 15 0		
8. Refunds	6,227 13 9		
9. Claims for losses and damage of cargo	1,659 11 5		
10. Contribution to Government for pensions ..	17 1 6		
11. „ to Provident Fund	536 12 2		
12. Provident Fund deductions from Coolies' wages ..	1,275 0 2		
13. „ contributions by the Trust ..	1,275 0 2		
		1,08,984 4 6	
(*a*) Contingencies—Subject to regular audit—			
Postage	....		
Receipt stamps	....		
Furniture	13 13 0		
Tarpaulins	1,473 12 8		
Law charges	....		
Stationery and printing	685 3 9		
Lighting pier and yards	1,323 4 7		
		3,496 2 0	
(*b*) Contingencies—Admissible without detailed audit.			
Overtime fees for establishment	2,089 12 10		
Miscellaneous	3,127 4 0		
		5,217 0 10	
XI. Capital Account—			
Major Works.			
(*a*) Harbour Improvements	....		
(*b*) Moorings	23,567 7 2		
(*c*) Other new works	13,963 0 0		
(*d*) Establishment	....		
(*e*) Other debit transactions—			
(i) Acquisition of land	18,568 5 0		
(ii) Protective works	10,301 0 0		
(*f*) Tools and Plant	1,00,400 0 0		
(*g*) Contingencies	....		
		1,66,799 12 2	
XI. Advances to Construction Account	....	11,404 15 6	
Government securities purchased (2,80,000) ..	....	2,87,420 0 0	
„ „ sold (2,00,000)	....	....	2,02,243 0 0
Total, Expenditure ..	....	10,45,471 0 3	2,02,243 0 0
Closing balance on the 31st March 1897—			
Government securities (Par value 4,93,900) ..	....	....	4,98,839 0 0
Cash in the Bank of Madras	3,35,794 2 0		(at 101 per cent.).
General Cash in Office	247 11 5		
Advance for contingencies	500 0 0		
Net depreciation in Government Paper	....	....	16,794 0 0
Total ..	....	13,82,012 13 8	7,17,876 0 0

N.B.—These balances exclude Rs. 500 with the Traffic Manager for meeting daily porterage charges and Rs. 15 with the Cashier for meeting charges on account of postage and receipt stamps.

MADRAS,
9th April 1897.

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

(„) C. PINSENT,
Secretary.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Revenue Account, amounted to Rs. 3,36,266-14-8 (Rupees three lakhs thirty-six thousand two hundred and sixty-six, annas fourteen and pies eight).

BANK OF MADRAS,
13th April 1897.

(Signed) J. A. MACKENZIE,
Accountant.

Memorandum.

	Rs. A. P.
In the Bank of Madras	3,36,266 14 8
Deduct—	
Check uncashed No. 1003	472 12 8
Balance as per General Cash Book ..	3,35,794 2 0

The following statement compares in detail the receipts and charges of the past year with 1895–96 :—

Items.	Actuals of 1895-96.	Actuals of 1896-97.	Plus or minus.
REVENUE ACCOUNT.	Rs.	Rs.	Rs.
Opening Balance	7,53,318	7,80,504	
Receipts.			
I. Contributions from Port Funds	33,900	2,44,688	+ 2,10,788
II. Beach imports: dues under section 45 (*a*) I (i) (ii) (iii)	1,80,042	2,03,206	+ 23,164
Pier imports: dues under section 45 (*a*) I (i) (ii) (iii)	67,981	85,989	+ 18,008
Beach exports: dues under section 45 (*a*) I (i) (ii) (iii)	30,583	27,492	— 3,091
Pier exports: dues under section 45 (*a*) I (i) (ii) (iii)	43,723	49,714	+ 5,991
Wharfage: dues under section 45 (*a*) II ..	6,957	6,095	+ 862
Cranage: dues under section 45 (*a*) III ..	43,991	56,998	+ 13,007
Storage: dues under section 45 (*a*) IV ..	1,291	841	— 450
Demurrage: under section 45 (*a*) V	473	286	— 187
Dues for entry of vehicles under section 45 (*c*) VI	12,235	12,618	+ 383
Provisions: dues on — under section 45 (*a*) I (i)	590	686	+ 90
Rent of properties	686	823	+ 137
Water: charge for — delivered at pier-head ..	4,885	5,532	+ 647
Penalties under section 84	..	33	+ 33
Sundries	17	151	+ 134
III. Porterage under section 45 (*a*) I (iv)—			
Beach	64,653	74,970	+ 10,317
Pier	36,206	43,334	+ 7,128
Miscellaneous	34	13	— 21
IV. Interest on Government of India 3½ per cent. promissory notes	14,074	16,259	+ 2,185
V. Refunds from construction account	4,28,047	..	— 4,28,047
VI. Cost of Government securities sold ..	..	2,87,420	..
VII. Proceeds of Government securities sold ..	..	2,02,243	..
Total, Receipts ..	9,70,368	13,19,385	..
Total ..	17,23,686	20,99,889	..
Charges.			
I. Interest (under section 30)	2,27,607	2,11,472	— 16,135
II. Repayment of loan for construction of harbour under section 31	1,00,000	1,10,000	..
III. Refunds	1,898	2,233	+ 335
IV. Engine haulage	2,852	..	— 2,852
V. Fees to trustees	6,870	7,410	+ 540
VI. Chairman's allowance	4,800	4,800	..
VII. Establishment—			
1. Secretary's salary	9,600	10,878	+ 1,278
2. Correspondence department	3,628	3,748	+ 120
3. Accounts department	6,585	6,600	+ 15
4. Cash department	4,887	5,148	+ 261
5. Traffic department (shore staff)	31,486	23,497	— 7,989
6. Preventive service	10,955	8,924	— 2,031
7. Preventive service boatmen	1,226	1,227	+ 1
8. Tidal observatory	360	415	+ 55
9. Exchange compensation allowance ..	3,313	4,567	+ 1,254
10. Contribution to Government for pensions ..	814	767	— 47
11. Do. to Provident Fund	3,280	4,102	+ 822
12. Engineer's department	..	23,101	+ 23,101
VIII. Contingencies—			
(*a*) Subject to regular audit—			
Postage	49	48	— 1
Receipt stamps	222	236	+ 14
Telegrams	5	18	+ 13
Furniture	139	141	+ 2
Fees for audit	2,000	11,867	+ 9,867
Law charges	34	50	+ 16
Stationery and printing	3,309	3,637	+ 328
Advertisement charges	216	85	— 131
Uniform for preventive service, &c. ..	1,397	1,349	— 48
(*b*) Admissible without detailed audit—			
Overtime fees to establishment	4,455	4,057	— 398
Do. to preventive service and boatmen	3,096	2,853	— 243
Miscellaneous	3,535	8,733	+ 5,198
IX. Petty construction and repairs—			
New works	20,087	1,880	— 18,207
Repairs	9,282	8,084	— 1,198
Tools and plant	220	220	..

Items.	Actuals of 1895–96.	Actuals of 1896–97.	Plus or minus.
REVENUE ACCOUNT—*cont.*	RS.	RS.	RS.
Charges—cont.			
X. Porterage—			
1. Establishment	..	9,462	+ 9,462
2. Coolies, beach	42,374	49,751	+ 7,377
3. Do. pier	16,644	21,152	+ 4,508
4. Do. custom house	12,317	13,474	+ 1,157
5. Coasting cargo	1,385	1,483	+ 98
6. Cart-hire	807	740	— 67
7. Steam crane charges	2,508	1,932	— 576
8. Refunds	5,947	6,228	+ 281
9. Claims for losses and damage of cargo ..	2,205	1,660	— 545
10. Contribution to Government for pensions ..	..	17	+ 17
11. Contribution to Provident Fund	..	537	+ 537
12. Provident Fund deductions from coolies' wages	1,119	1,275	+ 156
13. Provident Fund contributions by the trust..	1,119	1,275	+ 156
(*a*) Contingencies subject to regular audit—			
Postage	..	..	..
Receipt stamps	..	..	..
Furniture	..	..	..
Tarpaulins	97	14	— 83
Law charges	1,471	1,474	+ 3
Stationery and printing	..	..	..
Lighting pier and yards	462	685	+ 223
(*b*) Contingencies admissible without detailed audit—	1,797	1,323	— 474
Overtime fees to establishment ..	..	2,090	+ 2,090
Miscellaneous	1,068	3,127	+ 2,059
XI. Capital account—			
Major works	..	1,66,800	+ 1,66,800
Advances to construction account	4,14,047	11,405	— 4,02,642
Government securities purchased ..	..	2,87,420	..
Do. sold	..	2,02,243	..
Total, Expenditure ..	9,73,574	12,47,714	..
Closing balance ..	7,50,112	8,52,175	..
Total ..	17,23,686	20,99,889	..

The following statement compared the budget estimate for 1896–97 and the revised estimate with actuals :—

Items.	Sanctioned budget estimate for 1896–97.	Sanctioned revised budget estimate for 1896–97.	Actuals of 1896–97.	Plus or minus.
REVENUE ACCOUNT.	RS.	RS.	RS.	RS.
Opening balance	7,53,777	7,50,112	7,80,504	..
Receipts.				
I. Contributions from Port Funds	40,000	77,331	2,44,688	+ 1,67,357
II. Beach imports: dues under section 45 (*a*) I (i) (ii) (iii) ..	1,75,000	1,80,000	2,03,206	+ 23,206
Pier ,, ,, ..	70,000	80,000	85,989	+ 5,989
Beach exports ,, ,, ..	28,000	30,000	27,492	— 2,508
Pier ,, ,, ..	45,000	50,000	49,714	— 286
Wharfage ,, II	6,000	7,000	6,095	— 905
Cranage ,, III	40,000	55,000	56,998	+ 1,998
Storage ,, IV	1,000	800	841	+ 41
Demurrage ,, V	500	300	286	— 14
Dues for entry of vehicles under section 45 (*c*) VI ..	12,000	10,000	12,618	+ 2,618
Provisions: dues on — under section 45 (*a*) I (i) ..	500	600	680	+ 80
Rent of properties	500	800	823	+ 23
Water: charge for — delivered at pier head	4,000	5,000	5,532	+ 532
Penalties under section 84	..	20	33	+ 13
Sundries	100	200	151	— 49
III. Porterage under section 45 (*a*) I (iv)—				
Beach	65,000	67,000	74,970	+ 7,970
Pier	40,000	43,000	43,334	+ 334
Miscellaneous	100	100	13	— 87

Items.	Sanctioned budget estimate for 1896–97.	Sanctioned revised budget estimate for 1896–97.	Actuals of 1896–97.	Plus or minus.
REVENUE ACCOUNT—*cont.*	RS.	RS.	RS.	RS.
Receipts—cont.				
IV. Interest on Government of India 3½ per cent. promissory notes	14,000	15,000	16,259	+ 1,259
V. Cost of Government securities purchased	..	..	2,87,420	..
VI. Proceeds of Government securities sold	..	..	2,02,243	..
Total, Receipts ..	5,41,700	6,22,151	13,19,385	..
Total ..	12,95,477	13,72,263	20,99,889	..
Charges.				
I. Interest (under section 30)	2,37,000	2,11,472	2,11,472	..
II. Repayment of loan for construction of harbour under section 31	1,00,000	1,00,000	1,00,000	..
III. Refunds	1,500	2,000	2,233	+ 233
IV. Engine haulage	2,000	2,000	..	— 2,000
V. Fees to trustees	7,000	7,500	7,410	— 90
VI. Chairman's allowance	4,800	4,800	4,800	..
VII. Establishment—				
1. Secretary's salary	9,600	10,878	10,878	..
2. Correspondence department	3,864	3,700	3,748	+ 48
3. Accounts department	8,880	6,600	6,600	..
4. Cash department	5,214	5,200	5,148	— 52
5. Traffic department (shore staff)	23,724	23,400	23,497	+ 97
6. Preventive service	8,880	8,930	8,924	— 6
7. Preventive service, boatmen	1,368	1,250	1,227	— 23
8. Tidal observatory	420	415	415	..
9. Exchange compensation allowance	3,591	5,000	4,567	— 433
10. Contribution to Government for pensions	715	775	767	— 8
11. ,, to Provident Fund	2,900	5,000	4,102	— 898
12. Engineers	..	23,000	23,101	+ 101
VIII. Contingencies—				
(*a*) Subject to regular audit—				
Postage	100	100	48	— 52
Receipt stamps	200	200	236	+ 36
Telegrams	50	50	18	— 32
Furniture	500	200	141	— 59
Fees for audit	1,000	14,267	11,867	— 2,400
Law charges	500	200	50	— 150
Stationery and printing	3,000	4,000	3,637	— 363
Advertisement charges	500	200	85	— 115
Uniform for preventive service, &c.	1,500	1,500	1,349	— 151
(*b*) Admissible without detailed audit—				
Overtime fees to establishment	3,000	4,000	4,057	+ 57
,, to preventive service and boatmen..	2,500	3,000	2,853	— 147
Miscellaneous	4,000	7,500	8,733	+ 1,233
IX. Petty construction and repairs—				
New works	5,000	8,000	1,880	— 6,120
Repairs	10,000	18,000	8,084	— 9,916
Tools and plant	1,000	10,000	220	— 9,780
X. Porterage—				
1. Establishment	11,010	9,750	9,462	— 288
2. Coolies, beach	42,000	45,000	49,751	+ 4,751
3. ,, pier	17,000	19,000	21,152	+ 2,152
4. ,, custom house	13,000	12,000	13,474	+ 1,474
5. Coasting cargo	1,500	1,500	1,483	— 17
6. Cart-hire	1,000	1,000	740	— 260
7. Steam crane charges	2,400	2,400	1,932	— 468
8. Refunds	4,000	6,000	6,228	+ 228
9. Claims for losses and damage of cargo	1,500	1,500	1,660	+ 160
10. Contribution to Government for pensions	23	18	17	— 1
11. Contribution to establishment	530	500	537	+ 37
12. Provident Fund deduction from coolies' wages ..	1,200	1,200	1,275	+ 75
13. ,, contributions by the trust ..	1,200	1,200	1,275	+ 75
(*a*) Contingencies subject to regular audit—				
Postage	10	10	..	— 10
Receipt stamps	10	10	..	— 10
Furniture	200	50	14	— 36
Tarpaulins	1,500	1,500	1,474	— 26
Law charges	50	50	..	— 50
Stationery and printing	500	700	685	— 15
Lighting pier and yards	1,500	1,500	1,323	— 177
(*b*) Contingencies admissible without detailed audit—				
Overtime fees to establishment	1,500	2,000	2,090	+ 90
Miscellaneous	1,500	3,000	3,127	+ 127
XI. Capital account—				
Major works	..	..	1,66,800	+ 1,66,800
Advance to construction account	..	..	2,87,420	..
Government securities purchased	..	..	2,02,243	..
,, sold	..	..	..	..
Total, Expenditure ..	5,57,439	6,03,025	12,47,714	..
Closing balance ..	7,38,038	7,69,238	8,52,175	..
Total ..	12,95,477	13,72,263	20,99,889	..

MADRAS,
9th April 1897.

(Signed) H. E. HOPE-ROSS,
Chief Accountant.
(,,) C. PINSENT,
Secretary.

Madras Harbour Trust Deposit Account.

Statement of Receipts and Charges from 1st April 1896 to 31st March 1897.

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening Balance.			
Government securities *par* value	..	13,600 0 0	
Cash in the Bank of Madras	..	2,621 3 5	
			16,221 3 5
Receipts.			
Deposit in Government securities *par* value	..	2,000 0 0	
Do. in cash	..	15,347 3 5	
Interest realised on Government securities	..	449 4 1	
Deposit in cash in the Post Office Savings Bank	..	500 0 0	
			18,296 7 6
Total ..	..		34,517 10 11
Charges.			
Refund of deposits in Government securities at *par*	..	4,300 0 0	
Do. in cash	..	2,757 12 11	
Interest paid to depositors	..	449 4 1	
Amount credited to revenue on account of cash deposits for harbour dues, &c.	..	14,310 9 11	
			21,817 10 1
Closing Balance.			
Government Securities deposited *par* value.			
Messrs. Arbuthnot & Co.	1,000 0 0		
,, Binny & Co.	1,000 0 0		
,, Walker & Co.	1,000 0 0		
,, Dymes & Co.	1,000 0 0		
South Indian Export Company, Limited	1,000 0 0		
Messrs. McDowell & Co.	1,000 0 0		
,, G. W. Deane & Co.	1,000 0 0		
,, Gordon, Woodroffe & Co.	500 0 0		
,, Parry & Co.	500 0 0		
,, Wilson & Co.	500 0 0		
Spencer & Co.	500 0 0		
Schonbank Engel & Co.	500 0 0		
Oakes & Co.	300 0 0		
		9,300 0 0	
Government Securities deposited by Contractor.			
V. Numalwar Chetty	500 0 0		
		500 0 0	
Government Securities deposited by Officials.			
C. Vencatachellum Chetty, Cashier	1,000 0 0		
A. Vencatakristna Pillay, Shroff (Porterage Department) ..	500 0 0		
		1,500 0 0	
			11,300 0 0
Cash deposited by Officials.			
S. Appathoray Moodelly, Assistant Cashier (in the Post Office Savings Bank)	500 0 0		
		500 0 0	
Cash deposited.			
Messrs. W. J. Eales & Co.	250 0 0		
,, P. Mooroogasam & Co.	250 0 0		
,, Volkart Brothers	200 0 0		
,, Carl Simon Soehne	200 0 0		
		900 0 0	
Total ..			1,400 0 0
			34,517 10 11

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

Madras,
9th April 1897.

(„) C. PINSENT,
Secretary.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Deposit Account, amounted to Rs. 903-9-4 (rupees nine hundred and three, annas nine and pies four).

Bank of Madras,
13th April 1897.

(Signed) J. A. MACKENZIE,
Accountant.

Memorandum.

	Rs. A. P.
In the Bank of Madras	903 9 4
Deduct.	
Cheque uncashed No. 29	3 9 4
Balance as per cash book ...	900 0 0

Provident Fund.

Statement of Receipts and Charges from 1st April 1896 to 31st March 1897.

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening Balance.			
Government securities (*par* value Rs. 73,500) at 104 per cent. ..	..	..	76,440 0 0
Cash in the Bank of Madras	8,064 13 4		
Cash in office	1,335 12 5	9,400 9 9	
Receipts.			
Revenue Department's collection	4,100 9 5		
Do. Trust contribution	4,100 9 5		
Porterage Department collection	537 15 6		
Do. Trust contribution	537 15 6		
Harbour Work's collections	620 11 5		
Do. Trust contribution	620 11 5		
Harbour Master's collections	1,094 6 10		
Do. Trust contribution	1,094 6 10		
Instalments of refund of loan granted to employés	1,113 0 0		
Miscellaneous	35 0 4	13,855 6 8	
Interest realised on Government promissory notes	..	2,565 11 6	
Total ..	..	25,821 11 11	76,440 0 0
Charges.			
Paid to employés who have left the Trust service, Subscriptions and Trust Contributions—			
Revenue Department	319 14 0		
Porterage do.	355 7 11		
Harbour Works	12,937 13 8		
Harbour Master's Department	68 11 0		
Paid to employés their own subscriptions only—			
Revenue Department	17 11 5		
Porterage do.	..		
Harbour Works	..		
Harbour Master's Department	2 7 9		
Premia on Policies of Life Assurance	1,095 2 4		
Amount of loans granted to employés	1,270 0 0	16,067 4 1	
Closing Balance.			
Government securities (*par* value Rs. 73,500) at 101 per cent. ..	..	..	74,235 0 0
Cash in the Bank of Madras	9,754 7 10		
Cash in Office	..	9,754 7 10	
Government paper: Difference in market value of	..	..	2,205 0 0
Total ..	..	25,821 11 11	76,440 0 0

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

(„) C. PINSENT,
Secretary.

Madras,
9th April 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Provident Fund Account, amounted to Rs. 9,754-7-10 (rupees nine thousand seven hundred and fifty-four, annas seven and pies ten).

(Signed) J. A. MACKENZIE,
Accountant.

Bank of Madras.
13th April 1897.

Coolies' Provident Fund.

Statement of Receipts and Charges from 1st April 1896 to 31st March 1897.

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening balance.			
Government securities (*par* value Rs. 1,500, at 104 per cent.) ..	....	....	1,560 0 0
Cash in the Bank of Madras	....	894 9 6	
Receipts.			
Deduction from coolies' wages	1,275 0 2		
Contribution by the Trust	1,275 0 2		
Amount of undisbursed wages credited under the Chairman's order, No. 2605, dated 9th January 1893	29 0 7		
Interest on Government investment	50 12 11		
		2,629 13 10	
Cost of Government securities purchased *par* value Rs. 1,500 ..	....	....	1,484 15 0
Total ..	....	3,524 7 4	3,044 15 0
Charges.			
Pensions to widows of coolies who died from effect of accidents ..	76 9 10		
Pensions to coolies permanently invalided	101 7 3		
Allowance to wounded coolies while under treatment in the hospital at 4 annas per diem	330 12 0		
Allowance for 68 marriages amongst the families of coolies ..	507 0 0		
Do. 77 births do. do. ..	158 8 0		
Do. 91 deaths do. do. ..	314 0 0		
		1,488 5 1	
Government securities purchased during the year	....	1,484 15 0	
Do. do. sold during the year			
Closing balance.			
Government securities (*par* 3½ per cent. Rs. 1,500) at 101 per cent.	....	....	1,515 0 0
Do. do. (*par* 3 per cent. Rs. 1,500) at 96 per cent. ..	....	....	1,440 0 0
Cash in the Bank of Madras	....	551 3 3	
Net depreciation in Government paper	....	....	89 15 0
Total ..	....	3,524 7 4	3,044 15 0

(Signed) H. E. HOPE-ROSS,
Chief Accountant.
(„) C. PINSENT,
Secretary.

Madras,
9th April 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Cooly Provident Fund Account, amounted to Rs. 551-3-3 (rupees five hundred and fifty-one, annas three and pies three).

Bank of Madras,
13th April 1897.

(Signed) J. A. MACKENZIE,
Accountant.

16. The following shows the Receipts and Charges of the Biden Home Account from 1st April 1896 to 31st March 1897 :—

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening balance.			
Government securities	1,000 0 0		
Cash in the Bank of Madras	1,906 9 1		
Cash with the Superintendent	50 0 0		
		2,956 9 1	
Receipts.			
Interest on investments	34 14 8		
Rent from Harbour Masters	1,140 2 0		
Profits realised on boarding seamen	35 2 0		
Miscellaneous	....		
		1,210 2 8	
			4,166 11 9
Charges.			
Establishment	492 0 0		
Exchange compensation allowance	38 11 6		
Contingencies	104 11 3		
Municipal tax	366 0 0		
Repairs	509 2 3	1,510 9 0	
Closing balance.			
Government securities	1,000 0 0		
Cash in the Bank of Madras	1,606 2 9		
Cash with the Superintendent	50 0 0		
		2,656 2 9	
			4,166 11 9

(Signed) H. E. HOPE-ROSS,
Chief Accountant.
(„) C. PINSENT,
Secretary.

Madras,
9th April 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Biden Home Account, amounted to Rs. 1,606-2-9 (rupees one thousand six hundred and six, annas two and pies nine).

Bank of Madras,
13th April 1897.

(Signed) J. A. MACKENZIE,
Accountant.

Pilotage Fund Receipts.

	Pilotage fees.	Stern-fast boat hire.	Fees for shifting berths.	Harbour Master's fees.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.
1895-96.						
April	1,465	153	..	460	..	2,078 0 0
May	2,158	225	..	820	..	3,203 0 0
June	1,604	165	..	610	..	2,379 0 0
July	1,732	177	..	540	..	2,449 0 0
August	1,678	177	..	610	..	2,465 0 0
September	1,360	141	..	440	..	1,941 0 0
October	2,072	207	..	840	..	3,119 0 0
November	1,697	165	..	590	39 4 0	2,491 4 0
December	1,161	111	..	470	..	1,742 0 0
January	2,056	192	..	670	..	2,918 0 0
February	1,996	204	..	700	..	2,900 0 0
March	1,557	150	..	470	..	2,177 0 0
Total ..	20,536	2,067	..	7,220	39 4 0	29,862 4 0
1896-97.						
April	2,104	207	..	770	..	3,081 0 0
May	1,854	183	..	590	..	2,627 0 0
June	1,651	168	..	650	..	2,469 0 0
July	2,207	213	..	800	..	3,220 0 0
August	1,435	141	..	550	80 15 0	2,206 15 0
September	2,286	234	..	830	..	3,350 0 0
October	1,719	192	..	670	..	2,581 0 0
November	1,247	114	..	490	..	1,851 0 0
December	1,471	174	..	720	..	2,365 0 0
January	2,312	246	..	960	30 0 0	3,548 0 0
February	1,899	186	..	580	..	2,665 0 0
March	1,725	183	..	600	..	2,508 0 0
Total ..	21,910	2,241	..	8,210	110 15 0	32,471 15 0

(Signed) H. E. HOPE-ROSS,
Chief Accountant.
(„) C. PINSENT,
Secretary.

Madras,
9th April 1897.

From S. HUTCHENCE, Esq., Traffic Manager, to the Secretary, Harbour Trust Board, Madras, dated 12th April 1897, No. 114 T.

I have the honour to submit the following report on the working of the Board's Traffic Department during the year 1896-97, as compared with previous years.

2. The revenue collected by the Traffic Department during the year amounted to Rupees 5,68,774-3-10 as compared with Rs. 4,94,347-4-1 during 1895-96, showing the very substantial increase of Rs. 74,246-15-9 for the year under review, which is all the more satisfactory that it has not been raised by increases of dues, but is due to the increased volume of the trade of the Port. The details of receipts are as follows :—

	1895-96. Rs. A. P.	1896-97. Rs. A. P.
Imports	2,48,020 13 9	2,89,194 4 7
Exports	74,305 8 6	77,206 0 7
Cranage	43,991 4 3	56,997 15 11
Porterage	1,00,891 15 5	1,18,317 5 4
Entry of vehicles	12,235 8 3	12,617 6 9
Wharfage	6,956 15 0	6,095 0 0
Storage	1,291 3 8	841 5 2
Demurrage	472 10 9	285 14 1
Water supplied	4,884 12 0	5,532 0 0
Rent	685 12 0	822 14 8
Sundries	607 12 1	864 0 9
Total ...	4,94,347 4 1	5,68,774 3 10

3. The estimated and actual receipts during the past nine years have been as follows :—

Years.	Estimate, revised.	Actuals.
	Rs.	Rs.
1896-97	5,30,020	5,68,774
1895-96	4,71,900	4,94,347
1894-95	4,37,200	4 51,309
1893-94	4,23,000	4,52,137
1892-93	3,83,000	4,22,938
1891-92	4,48,500	4,96,749
1890-91	*2,99,000	4,81,916
1889-90	3,06,200	3,26,747

* Porterage receipts not estimated. Porterage work not done by the Board.

4. The following statement shows in detail the sources of revenue from which the foregoing amounts have been realised, and for ready comparison with former years the sums collected as cranage has been apportioned to the two items where it was formerly shown, viz., imports and exports :—

Receipts.	Years.								
	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*a*) Harbour Dues, Imports ..	1,72,481	2,00,099	2,41,441	2,83,071	2,26,678	2,39,872	2,37,163	2,77,441	3,32,121
(*b*) Do. Exports ..	78,568	1,00,945	92,250	80,716	78,332	88,723	97,676	88,880	91,278
(*c*) Wharfage	8,574	10,225	12,470	7,971	6,466	6.775	5,105	6,957	6,095
(*d*) Storage and Demurrage ..	2,773	2,836	3,444	2,923	2,753	2,245	1,988	1,764	1,126
(*e*) Rent of Trust Properties ..	3,246	2,946	2,186	1,774	1,249	1,137	687	686	823
(*f*) Water collections	..	..	..	3,091	3,736	4,126	4,497	4,885	5,532
(*g*) Porterage	..	..	1,22,533	1,08,323	1,02,151	93,047	91,544	1,00,892	1,18,317
(*h*) Entry of vehicles	..	..	..	..	..	13,288	11,869	12,235	12,617
(*i*) Miscellaneous	1,324	2,966	7,562	6,870	1,753	2,934	780	608	864
Total ..	2,66,967	3,26,747	4,81,916	4,96,749	4,22,938	4,52,137	4,52,307	4,94,348	5,68,774

(*a*) The large increase of Rs. 54,680 under this head is due to the increased tonnage of coal and railway permanent-way materials imported. There has been but slight variations in the quantities of other goods imported during the year.

(*b*) Exports have been much the same as last year, the small increase of Rs. 2,398 being due to considerable quantities of jaggery having been shipped during the early part of the year.

It is to be regretted that the tonnage of exports does not increase ; but no increase can be expected, unless facilities can be given by which goods of relatively small value such as salt, jaggery, &c., can be cheaply and expeditiously put on board vessels at this port.

(*c*) and (*d*) These charges have, by improved facilities for removal, been reduced from Rs. 15,914 in 1890–91 to Rs. 7,221 in 1896–97, although in the former year only 288,537 tons of goods were imported as against 385,605 tons in 1896–97.

(*g*) The increase of Rs. 17,425 under the head of porterage is due to large increases in the tonnage of coal and railway materials handled.

It will be noticed that while the amounts received as Harbour dues (at a rate of As. 12 per ton which has remained unaltered) have largely increased, the sums levied as porterage (*g*) and entry of vehicles (*h*) have practically remained stationary, or at any rate have not increased in anything like the same proportion. This is due to the successive reductions, which have from time to time been made in the charges for handling goods, by which the mercantile community of Madras has been directly profited. Had the rates ruling in 1890–91 remained in force, the amount leviable on coal alone would have been equal to the whole amount of porterage charges realised during the past year. In other words, importers of coal have gained some Rs. 50,000 this year by the reductions which have been made from time to time since 1890–91. These reductions have been as follows. Loading into wagons, As. 4, reduced to As. 2. Weighing charges, As. 4, reduced to Anna 1. Entry of vehicles, As. 4, reduced to Anna 1. Had no reductions been made since 1890–91, the porterage charges, and dues under section 45 C. VI (entry of vehicles) would have amounted to at least Rs 2,00,000.

Large reductions have also been made in the porterage charges levied on all other classes of goods handled by the Traffic Department, so that on the year's porterage operations importers have gained some Rs 75,000.

The difference in the ratio of porterage receipts and "harbour dues on imports" will probably be seen more clearly by comparing the receipts under both heads during 1890–91 and during 1896–97. During each of these years, the porterage receipts were largely augmented by the importation of large quantities of railway permanent-way materials. During 1890–91 the porterage receipts were Rs. 1,22,533 to which should be added Rs. 25,000 porterage charges on 40,000 tons of coal paid direct by importers as the Board did not then porterage coal ; this gives a proportion of As. 9–10 for each rupee of harbour dues received on imports—which

alone are porteraged by the Board, and at the same ratio on the collections of 1896–97, viz., Rs. 3,32,121, the sums leviable as porterage and entry of vehicles would have been Rs. 2,04,116, whereas the total collections have been only Rs. 1,30,934, the difference of Rs. 73,182 being the amount importers have saved by successive reductions in porterage charges levied.

There has been an increase of 58,775 tons in the tonnage of goods landed at, or shipped from the port during the year, and 99,082 tons increase as against 1894–95.

5. The total tonnage landed at, or shipped from this port during the past ten years is as under :—

Years.	Pier.			Beach.			Grand Total.
	Import.	Export.	Total.	Import.	Export.	Total.	
	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1887-88	86,258	54,562	140,820	124,721	51,445	176,166	316,986
1888-89	85,133	47,262	132,395	116,464	41,741	158,205	290,600
1889-90	88,419	66,208	154,627	158,240	46,317	204,557	359,184
1890-91	100,154	58,855	159,009	188,383	44,580	232,963	391,972
1891-92	97,987	56,046	154,033	249,414	32,893	282,307	436,340
1892-93	80,339	55,514	135,853	197,504	30,424	227,928	363,781
1893-94	81,719	58,912	140,631	203,532	39,748	243,280	383,911
1894-95	89,181	62,545	151,726	196,095	41,643	237,738	389,464
1895-96	90,641	58,297	148,938	240,056	40,777	280,833	429,771
1896-97	114,665	66,285	180,950	270,940	36,656	307,596	488,546

6. *Coal, Coke and Patent Fuel.*—The quantity of these goods imported during the year again shows a large increase, amounting to tons 16,000 as shown by the following statement which covers a period of ten years. The increase from year to year has been steady and continuous, but as the railways use coal not supplied through the harbour there is no reason, except expense, why the yearly increases should not have been much greater. Landing charges, bagging and wastage add at least Rs. 1–8–0 to the cost of each ton of coal, and till these charges are done away with, no greater increase can be expected. As fully explained in my letter No. 1327 T. of the 22nd September 1896, three lakhs of rupees would be saved annually on these items, could coal steamers be placed alongside of proper quay walls for discharge.

Year.	Coal.	Coke.	Patent Fuel.	Total.
	tons.	tons.	tons.	tons.
1887-88	10,000	608	4,884	15,492
1888-89	21,645	997	6,443	29,085
1889-90	23,970	645	9,753	34,368
1890-91	41,888	1,389	5,613	48,890
1891-92	47,010	2,017	..	49,027
1892-93	63,600	1,322	2,953	67,875
1893-94	80,568	1,734	..	82,302
1894-95	97,500	1,663	..	99,166
1895-96	131,621	2,781	50	134,452
1896-97	148,607	2,052	..	150,659

Kerosine oil.—There has been a falling off in the tonnage of oil imported in bulk. This has, however, been balanced approximately by oil imported in cases.

Screw Pile Pier.—This structure has been maintained in good working order during the year. The following statement shows the amount of revenue collected on goods passed over the pier during the past ten years :—

Years.	Imports.			Exports.			Total.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1887-88	86,256	8	9	54,561	8	1	1,40,818	0	10
1888-89	85,132	14	2	47,261	11	3	1,32,394	9	5
1889-90	88,418	12	9	66,207	15	0	4,54,626	11	9
1890-91	1,00,154	7	6	58,854	10	3	1,59,009	1	9
1891-92	97,987	10	0	56,046	6	6	1,54,034	0	6
1892-93	78,550	2	1	55,514	2	7	1,34,064	4	8
1893-94	87,222	7	11	58,912	1	9	1,46,134	9	8
1894-95	90,091	10	10	66,443	14	0	1,56,525	8	10
1895-96	97,397	12	0	58,297	4	0	1,55,695	0	0
1896-97	1,19,915	11	7	63,785	2	10	1,83,700	14	5

Over-time work.—The quantity of work done on Sundays, holidays and after 6 P.M. has been much larger than during any previous year. The following statement shows briefly what work has been done out of regular working hours during the year.

Days.	Tonnage of goods landed and shipped.	No. of packages delivered to consignees.
	TONS.	
Sundays	42,957	10,230
Holidays	24,524	34,723
Nights	21,774	..
Total ..	89,252	44,953

Porterage work.—This work has been exceedingly heavy during the year owing to the very large increases in the tonnage of coal and railway materials imported; and owing to sickness among the staff at the busiest time of the year, fell unduly heavy on those who were able to attend. Financially the saving to the Trust has been less than in former years, as the tendency has been to reduce the rates on the one hand, and to give improved facilities, costing more money on the other. The staff of the Traffic Department has been divided, and the wages of those men who are exclusively engaged for porterage purposes have been, as directed by Government, debited to porterage. The result is that charges and receipts are approximately equal. All that the Board now gains by the porterage work is on two items of expenditure, which were formerly paid from Revenue, but are now included in the porterage charges, viz., pier cooly hire bills, and the charges for lighting the pier and enclosures.

In this connection I would explain that every package landed and shipped is noted, handled, and traced from the time it is hoisted out of the ships hold till it is placed in the hands of the consignee, if imported, and *vice versâ* if exported. This department has not only to assess and levy all dues, but also to provide, pay and superintend all labour employed in handling the goods. Over 488,000 tons of goods of all sorts have been so assessed, and over 400,000 tons porteraged, at a total cost of Rs. 1,54,000 for labour and supervision, of which Rs. 90,000 have been expended in labour, and Rs. 64,000 in supervision of labour and assessment of dues. The average cost therefore per ton has been—supervision and assessment of rates As. 2–1, labour As. 3–9—total As. 5–10.

In assessing dues 36,000 import and export applications have been passed, and some 40,000 receipts for rates levied have been granted by this department during the year.

The rates for labour, viz., As. 3-9 per ton will compare favourably with work done anywhere, considering the distance goods have to be conveyed—the greater part on coolies heads—and considering that all have to be stacked sorted, and again carried for delivery to consignee; and it is only by the system by which all work is done on piece-work rates that the work can be done at so little cost, and at the same time the coolies earn fair wages. The men are well treated, and cared for as much as possible; and the fact that Rs. 90,000 was paid for labour shows that this department has heavy work in supervising the work of so many men in handling such a large quantity of goods, the average daily number of coolies engaged throughout the year including Sundays and holiday being about 790.

The Cooly Provident Fund has worked admirably during the year having met all claims, and added considerably to its balance at the end of the year.

Claims for loss and damage.—These claims have amounted to Rs. 1,630 during the year as against Rs. 2,205 during the previous year. The reduction of Rs. 545 is satisfactory, but this item of expenditure is very uncertain, and may at any time, by the loss of a single package, or the breaking of a chain, amount to a large sum.

Staff.—The staff of the Traffic Department has worked hard and well during the year, although at times much reduced by sickness. Owing to your illness and consequent absence on privilege leave, I was out of the department for 2½ months during March, April, May and June last year, while acting as Secretary; and on my return to the Traffic Department I was sorry to find that the Deputy Traffic Manager, and two Assistant Traffic Managers were seriously ill who had all to take leave; thus leaving me with only one regular assistant, instead of four: and it was not till the middle of August that I had my full staff back again. During this period the work was most unusually heavy, owing to the importation of large quantities of heavy railway materials and coal and the exportation of large quantities of jaggery.

Appended are nine statements showing the quantities of goods landed at, or shipped from this port during the past four years, viz.:—

APPENDIX.

I.—Goods imported from Foreign Ports.
II.—Stores imported by the Madras Railway Company.
III.—Stores imported by the Bezwada-Madras State Railway.
IV.—Stores imported by the South Indian Railway Company.
V.—Goods imported from Coast Ports.
VI.—Stores exported to Foreign Ports.
VII.—Goods exported to Coast Ports.
VIII.—Stores, &c., imported by Government.
IX.—Stores, &c., exported by do.

I.—STATEMENT of Goods imported from Foreign Ports.

—	Packages.	1893–94.	1894–95.	1895–96.	1896–97.	Increase or decrease.
Apparel and effects	Packages	1,017	985	989	935	— 54
Alum	Barrels	910	773	1,326	827	— 499
Asphalte, tar and pitch	Casks	2,638	2,493	2,878	2,562	— 316
Acids	Cases	1,560	2,151	1,817	2,349	+ 532
Arms and guns	„	250	93	74	75	+ 1
Arrack	Casks	1,031	1,218	1,388	1,171	— 217
Blankets	Bales	28	55	47	55	+ 8
Beef and pork	Cases	..	..	..	..	..
Bricks	100	1,550	900	600	1,223	+ 623
Beer	Cases	7,013	5,408	6,944	6,442	— 502
	Barrels	1,401	1,800	1,311	988	— 323
	Hogsheads ..	4,310	6,743	8,946	9,155	+ 209
	Number	48	25	34	40	+ 6
Boilers	Bundles	50	60	57	101	+ 44
Corks	Bales	615	148	136	135	— 1
Canvas	Cases	27,463	28,458	36,399	34,994	— 1,405
Candles	„	2,998	3,999	3,170	4,542	+ 1,372
Colours	„	20,829	16,508	21,045	24,102	+ 3,057
Confectionary, provisions and oilmanstores.	Crates and casks ..	5,300	3,627	5,479	4,839	— 640
Crockery and glassware	Barrels	134	366	1,165	446	— 719
Chalk	Tons	..	30	..	..	..
Cement	Casks	8,904	10,235	10,212	15,981	+ 5,769
Cast iron pipes and tubes ..	Tons	989	1,472	5,164	2,625	— 2,539
Camphor	Tubs	5,765	5,523	4,017	4,850	+ 833
Coal	Tons	58,179	76,851	101,025	69,246	— 31,779
Coke	„	1,018	896	1,219	961	— 258
Fuel-patent	„	..	..	50	..	— 50
Crackers	Cases	327	975	1,028	1,431	+ 403
Copper plates and tiles	Number	7,260	4,096	7,960	11,524	+ 3,564
Corrugated iron	Packages	2,688	3,234	7,306	7,815	+ 509
Dynamite	Cases	10,598	9,426	14,832	11,643	— 3,189
Earthenware	Crates	2,168	1,492	3,983	1,845	— 2,138
Fire clay	Casks	312	454	133	1,413	+ 1,280
Flour	Bags and barrels ..	1,251	1,348	1,018	886	— 132
Flannel	Bales	64	23	44	8	— 36
Gunpowder	Packages	5,883	3,384	1,537	1,449	— 88
Hardware	Cases and casks ..	8,189	11,532	8,423	14,594	+ 6,171
Hops	Packages	287	287	323	219	— 104
Iron	Tons	18,627	10,863	17,384	18,607	+ 1,223
Iron safes	Number	167	56	69	16	— 53
Kerosine oil	Cases	342,671	343,365	8	97,016	+ 97,008
	Tons	5,455	7,899	13,156	9,065	— 4,091
Malt	Bags	22	56	2	14	+ 12
Millinery and haberdashery	Cases	1,370	1,881	1,855	1,891	+ 36
Matches	„	8,927	8,140	7,956	7,463	— 493
Machinery	Tons	4,817	8,603	3,941	4,616	+ 675
Nails	Kegs	14,022	11,948	15,652	20,913	+ 5,261
Oil and turpentine ..	Drums	4,581	4,021	4,677	8,411	+ 3,734
	Cases	57,676	78,435	25,406	27,168	+ 1,762
Piece-goods	Bales	24,071	29,432	18,346	23,883	+ 5,537
	„	6,038	4,435	21,594	30,636	+ 9,042
Twist	„	112	49	4,415	4,937	+ 522
Paper	Number	346	231	103	68	— 35
Piano	Cases	2,612	629	262	156	— 106
Printing type	Number	5,770	8,436	1,261	2,369	+ 1,108
Pig lead	Kegs	2,362	4,519	8,879	11,530	+ 2,651
Paint	Bundles	..	..	1,704	3,818	+ 2,114
Rattan	Number	2,172	1,050	5,243	4,070	— 1,173
Rails	Cases	153	458	1,366	1,839	+ 473
Soap	„ and casks ..	794	395	370	590	+ 220
Salt	Number	10,768	8,905	277	1,013	+ 736
Steel	Bundles	4,930	2,439	21,676	25,379	+ 3,703
Do. bundles and bars	Crates	1,570	2,155	7,137	12,268	+ 5,131
Do. hoop	Casks	1,128	10	2,125	2,410	+ 285
Sodawater bottles	Kegs	248	130	467	205	— 262
Sulphur	Packages	56,235	53,125	185	209	+ 24
Shot	Number	768	612	54,314	59,748	+ 5,434
Sundries	Bags	4,198	1,527	644	807	+ 163
Specie	Cases	1,333	2,939	1,266	2,083	+ 817
Sugar	Cakes	22,921	4,013	4,426	4,935	+ 509
Stationery	Cases	79	36	7,726	2,288	— 5,438
Spelter	Bales and coils ..	458	862	46	67	+ 21
Saws	Boxes	6,669	4,389	218	325	+ 107
Twine and rope	Number	..	2,496	5,060	6,514	+ 1,454
Tin plates	Tons	..	..	5,015	3,370	— 1,645
Tin slabs	Packages	..	5,370	3,367	30	— 3,337
Timber	Tons	..	202	2,326	144	— 2,182
Tramway material ..	Cases	36,048	36,519	37,818	1	+ 1
	Casks	514	713	1,346	41,544	+ 3,726
Wines and spirits ..	Puncheons ..	1,058	139	109	1,602	+ 256
					244	+ 135

I.—Statement of Goods imported from Foreign Ports—*cont.*

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Window glasses	Cases	10,425	8,053	5,939	14,140	+ 8,201
White and red lead	Kegs	737	715	779	1,049	+ 270
Yellow metal	Cases	2,784	3,275	2,904	3,481	+ 577
Zinc sheets	Packages	1,761	1,342	299	779	+ 480
Horses and ponies	Number	966	917	1,061	1,147	+ 86
Cows	,,	7	7	9	11	+ 2
Elephants	,,	6	4	6	1	— 5
Carriages	,,	9	9	28	9	— 19

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

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Stores	Packages	47,040	8,915	8,852	23,158	+ 14,306
Wooden sleepers	Tons	156	1,173	371	1,901	+ 1,530
Fuel	,,	..	..	3,847	..	— 3,847
Coke	,,	..	703	1,562	..	— 1,562
Coal	,,	237	2,948	3,048	..	— 3,048
Timber	,,	716	..	..	..	..
Fire Bricks	100	1,448	1,364	2,399	2,105	— 294
Boilers	No.	..	75	50	44	— 6
Rails	,,	..	6	10	..	— 10
Fish Plates	Bundles	..	..	10,441	9,000	— 1,441
		..	..	..	24,675	..

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

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Stores	Packages	28,640	13,933	6,556	4,046	— 2,510
Coke	Tons	992	113	596	178	— 418
Coal	,,	..	..	..	..	..
Timber	,,	..	..	..	..	..
Boiler	No.	..	..	..	..	..
Fire Bricks	100	..	10	..	..	..
		..	1	..	..	..
		..	190	200	100	— 100

IV.—Statement of Stores imported by the Bezwada-Madras Railway.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Stores	Packages	..	..	..	3,083	+ 3,083
Sleepers	Tons	..	..	..	1,422	+ 1,422
Fish Plates	,,	..	..	..	6,199	+ 6,199
Rails	Bundles	..	..	..	18,685	+ 18,685
Boilers	No.	..	..	..	35,413	+ 35,413
	,,	..	..	..	6	+ 6

V.—Statement of goods imported from Coast Ports.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Apparel and Effects	Packages	527	520	517	430	— 87
Alum	Barrels	7	149	12	16	+ 4
Acids	Cases	269	305	180	284	+ 104
Animals	No.	..	9	..	8	+ 8
Arms and Guns	Cases	13	10	5	8	+ 3
Boilers	No.	..	..	..	1	+ 1
Bricks and Tiles	100	837	852	1,177	731	— 446
Coffee	Bags	575	476	454	901	+ 447
Candles	Cases	11	1	13	3	— 10
Colours	,,	1,591	1,244	1,133	1,289	+ 156
Crockery and Glassware	,,	426	1,233	614	720	+ 106
Coal	Tons	22,152	17,556	27,548	79,361	+ 51,813
Coke	,,	..	..	..	1,091	+ 1,091
Carpets	Bales	99	95	62	38	— 24
Camphor and Benjamin	Tubs	432	1,060	799	460	— 339
Copra	Bags	122	68	253	..	— 253
Crackers	Cases	..	2	..	60	+ 60
Copper	,,	557	10	433	68	— 365
Do.	Tiles and ingots	2,180	3,755	1,951	305	— 1,646
Cutch and Lac	Packages	3,554	5,208	4,611	4,098	— 513
Cast iron Tubes and Pipes	Tons	..	61	224	110	— 114
	Crates	407	271	1,492	58	— 1,434
Earthenware	Pipes	950	182	5,663	1,114	— 4,549
	Tons	..	..	1,524	6,586	+ 5,062
Firewood	Bags and barrels	12,270	18,641	19,405	19,640	+ 235
Flour	Bales	9,755	11,341	10,249	13,976	+ 3,727
Gunnies	Bags	395,249	264,890	319,788	388,393	+ 68,605
Gram and Peas, &c.	,,	6,007	7,495	4,278	2,103	— 2,175
Garlic	Cases	1,507	2,920	2,151	2,919	+ 768
Hardware	Bundles	511	856	628	629	+ 1
Horns	Bales	6,013	6,896	6,732	7,154	+ 422
Hides	Tons	155	202	359	329	— 30
Iron	No.	34	18	15	9	— 6
Iron sates	Cases	500	..	2,543	57,819	+ 55,176
Kerosine oil	Bundles	5,113	4,393	5,332	5,612	+ 280
Leaves	Cases	2,198	2,071	3,136	2,733	— 403
Liquor	Tons	49	202	76	181	+ 105
Machinery	Cases	144	371	261	409	+ 148
Millinery and Haberdashery	Drums	5,941	5,829	6,265	4,004	— 2,261
Oil and Turpentine	Bags	23,737	19,988	29,776	25,095	— 4,681
Paddy	Cases	3,499	4,814	2,040	1,343	— 697
Piece-goods	Bales	..	..	1,442	1,374	— 68
	,,	5,420	7,962	8,428	10,273	+ 1,845
Paper	Kegs	247	277	592	102	— 490
Paint	Bags	110,181	111,384	95,765	74,401	— 21,364
Rice	Cases	1,357	1,594	2,367	1,649	— 718
Rose water	No.	..	..	28	1,600	+ 1,572
Rails	Bags	13,916	12,061	19,766	28,681	+ 8,915
Seeds	Bales	6,807	7,108	5,745	3,669	— 2,076
Skins	,,	290	488	729	741	+ 12
Silk	Bundles	42	265	118	86	— 32
Sandalwood	Bags	1,333	2,686	1,826	973	— 853
Sugar	No.	193	124	47	65	+ 18
Specie	Packages	48,614	52,303	51,726	54,631	+ 2,905
Sundries	Tons	..	..	1,586	6,345	+ 4,759
Sleepers	Cases	147	863	789	608	— 181
Soap	Casks	506	295	772	254	— 518
Sulphur	Packages	640	944	1,275	3,149	+ 1,874
Spice	,,	..	184	300	233	— 67
Stationery	Crates	241	1,651	8	867	+ 859
Sodawater Bottles	Bales and coils	1,063	1,309	608	1,626	+ 1,018
Twine and Rope	Boxes	858	1,248	658	466	— 192
Tin plates	Slabs	..	78	233	2	— 231
Twist	Bales	1,206	1,187	1,501	1,617	+ 116
Turmeric	Bags	5,433	5,185	3,702	3,487	— 215
Timber	Tons	15,264	14,154	18,196	18,972	+ 776
Tea	Cases	37	205	300	615	+ 315
Tamarind	Bundles	140	86	12	293	+ 281
Yellow Metal	Cases	1,078	281	191	918	+ 727
Horses and Ponies	No.	8	..	37	93	+ 56
Carriages	,,	24	14	16	13	— 3
Tramway Materials	Tons	..	13	..	..	..

VII.—Statement of goods exported to Foreign Ports.

—	Packages.	1893–94.	1894–95.	1895–96.	1896–97.	Increase or decrease.
Bone-Meal	Bags	..	5,448	11,235	22,191	+ 10,956
Beer and Ale	Cases	13	..	1	1	..
	Casks	..	..	3	..	— 3
	Hogsheads	..	..	..	1	+ 1
Cinchona Bark	Bales	411	123	..	91	+ 91
Chillies	Bags and Bundles	816	883	816	2,049	+ 1,233
Cigars	Cases	643	613	721	661	— 50
Coffee	Bags	17,737	27,864	26,283	15,934	— 10,349
Cotton	Bales	56,768	39,607	44,245	46,276	+ 2,031
Cotton-Twist	,,	1,946	1,664	463	287	— 176
Coriander and Omum Seeds	Bags	7,377	10,473	6,662	6,485	— 177
Carpets	Bales	391	239	410	428	+ 10
Coal, ship's use	Tons	599	152	330	865	+ 535
Deer Horns	Packages	767	1,477	943	1,057	+ 114
Explosive	Cases	..	2	..	..	..
Firewood	Tons	..	..	..	..	..
Carriages	No.	6	7	16	10	— 6
Groundnuts	Bags	138,211	110,328	67,776	4,9336	— 18,440
Gram, Peas, &c.	,,	1,662	489	253	30	— 223
Horns, Cow and Buffalo	Tons	23	71	154	290	+ 136
Hides, Tanned	Bales and Bundles	11,149	18,519	24,922	23,929	— 993
Hardware	Cases and Casks	..	522	702	860	+ 158
Indigo	Cases and Chests	25,008	27,416	32,046	26,205	— 5,841
Iron	Tons	17	3	16	24	+ 8
Jaggery	Bags	52,668	17,809	42,378	1,90,557	+ 148,179
Myrabolams	,,	563	237	2	32	+ 30
Miscellaneous	Packages	36,531	17,763	24,825	25,401	+ 576
	Tons	..	..	50	..	— 50
Onions	Bags and Baskets	17,517	16,094	19,367	17,657	— 1,710
Oil	Casks	208	451	257	376	+ 119
Provisions	Packages	..	4,417	5,360	5,445	+ 85
Piece-goods	Bales	7,305	7,788	10,035	7,018	— 3,017
	Cases	1,716	1,648	2,202	3,962	+ 1,760
Potatoes	Bags and Baskets	31,311	47,253	65,892	60,464	— 5,428
Poonac	Bags	15	5	10	4	— 6
Paddy	No.	22	..	..	..	..
Rice	Bags	16,915	44,694	3,023	26,053	+ 23,030
Redwood	,,	733	1,113	1,194	802	— 392
Salt	Tons	..	7	13	..	— 13
Seeds, Gingelly and Castor	,,	14,777	90,571	12,877	9,758	— 3,119
Skins, Sheep and Goat, Tanned	Bags	31,535	38,649	37,344	35,038	— 2,306
Sandalwood	Bales	699	288	664	1,439	+ 775
	Bundles	67	22	276	108	— 168
Spirits and Wine	Cases	40	9	15	1	— 14
	Casks	..	..	..	..	..
	Puncheons	1,197	1,762	3,727	10,264	+ 6,537
Sugar	Bags	29	104	76	70	— 6
Specie	Boxes	3,676	4,737	3,562	3,547	— 15
Tamarind	Bundles	1,562	3,651	6,744	1,300	— 5,444
Turmeric	Bags	1,649	2,156	1,658	1,104	— 554
Tea	Cases	..	..	9	8	— 1
Timber	Tons	1,532	2,049	24,26	2,119	— 307
Wool	Bales	417	7	5	..	— 5
Yellow Metal	Tons	..	24	28	103	+ 75
Horses	No.	..	9	21	3	— 18
Ponies	,,	..	2	1	..	— 1
Elephant	,,	..	1	..	..	..
Lion	,,	..	1	..	..	..
Tiger	,,	..	6	..	..	..
Leopards	,,	..	1	..	..	..
Bear	,,	..	79	20	20	..
Sheep	,,	..	..	9	3	— 6
Animals	,,	..				

VIII.—Statement of goods exported to Coast Ports.

—	Packages.	1893–94.	1894–95.	1895–96.	1896–97.	Increase or decrease.
Beer and Ale	Cases	305	354	300	171	— 129
	Casks	91	166	76	15	— 61
	Hogsheads	161	107	195	238	— 43
Boiler	No.	1	..	..	..	..
Bricks	100	..	..	5	..	— 5
Cinchona Bark	Bales	80	..	376	296	— 80

VIII.—Statement of goods exported to Coast Ports—*cont.*

—	Packages.	1893–94.	1894–95.	1895–96.	1896–97.	Increase or decrease.
	Bags and Bundles	9,207	2,444	684	3,310	+ 2,626
Chillies	Cases	789	732	810	735	— 75
Cigars	Bags	541	449	672	400	— 272
Coffee	Bales	7,080	5,295	7,393	6,244	— 1,149
Cotton	,,	3,220	3,084	4,355	2,844	— 1,511
Cotton-Twist	Bags	6,894	2,067	2,531	1,897	— 634
Coriander and Omum Seeds	Casks	132	195	324	1,433	+ 1,109
Cement	Bales	41	27	41	49	+ 8
Carpets	Tons	157	480	632	1,126	+ 494
Coal, Ship's use	Packages	52	..	1	..	— 1
Deer Horns	Cases	1,067	46	17	5	— 12
Explosives	Pots	11,98	1,263	1,006	1,624	+ 628
Eggs	Tons	..	..	..	..	..
Firewood	No.	39	35	42	49	+ 7
Carriages	Bags	16,116	63,700	31,918	17,041	— 14,877
Groundnuts	,,	233	372	544	33,724	+ 33,180
Gram, Peas, &c.	Tons	166	106	387	701	+ 314
Horns, Cow and Buffalo	Bales and Bundles	535	252	285	245	— 40
Hides	Cases and Casks	..	860	2,828	1,928	— 900
Hardware	Cases and Chests	1,162	254	164	104	— 60
Indigo	Tons	755	695	534	614	+ 80
Iron	,,	..	165	1,693	401	— 1,292
Old iron	Bags	336	488	2,099	353	— 1,746
Jaggery	Cases	1,117	11,005	9,993	5,979	— 4,014
Kerosine oil	Bags	1,112	131	78	..	— 78
Myrabolams	Packages	61,706	18,312	31,686	37,358	+ 5,667
Miscellaneous	Bags and Baskets	47,062	94,737	57,420	43,039	— 14,381
Onions	Casks	346	641	357	305	— 52
Oil	Cases	6,368	8,852	1,160	2,403	+ 1,243
Piece-goods	Bales			7,709	8,714	— 1,005
Potatoes	Bags and Baskets	30,592	20,068	18,238	10,775	— 7,463
Poonac	Bags	9,853	396	2,666	3,848	+ 1,182
Paddy	No.	17	11	32	11	— 21
Piano	Bags	8,400	4,123	3,031	0	— 3,031
Paddy	Packages	..	1,565	2,260	2,943	+ 683
Rice	Bags	11,083	8,196	3,389	18,789	+ 5,200
Redwood	Tons	4	134	88	106	+ 18
Seeds, Gingelly and Castor	Bags	36,799	68,201	77,404	35,458	— 41,946
Skins, Sheep and Goat, Tanned	Bales	871	1,706	531	618	+ 87
Sandalwood	Bundles	2,786	373	39	10	— 29
	Cases	3,045	2,534	2,434	2,416	— 18
Sprits and Wines	Casks	992	409	253	241	— 12
	Puncheons	214	..	..	1	+ 1
	Bags	473	1,725	3,708	3,919	+ 211
Sugar	Boxes	47	75	28	17	— 11
Specie	Bags	..	4,001	1,040	9,605	+ 8,565
Salt	Bundles	5,090	3,028	2,982	3,623	+ 641
Tamarind	Bags	38,147	53,374	41,679	12,583	— 29,096
Turmeric	Cases	50	114	109	29	— 80
Tea	Tons	..	..	18	49	+ 31
Timber	Bales	463	478	1,361	1,806	+ 445
Wool	Tons	256	31	69	18	— 51
Yellow Metal	No.	..	..	33	130	+ 97
Horses	,,	..	..	39	20	— 19
Ponies	,,	..	..	..	450	+ 450
Old Rails	Tons	..	..	..	300	+ 300
Old Fishplates	,,	..	..	..		

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

Department.	Description.	Class.	1893–94.	1894–95.	1895–96.	1896–97.	Increase or decrease.
Accountant-General.	Specie, Silver	Boxes.	533	489	167	20	— 147
	,, Copper	,,	780	480	150	300	+ 150
	Notes	,,	30	..	..	27	+ 27
	Packages	No.	..	..	13	2	— 11
Public Works Department.	Boilers	,,	..	1	..	1	+ 1
	Coal	Tons.	..	..	..	..	..
	Coke	,,	..	64	18	..	— 18
	Iron	,,	19	151	3	120	+ 117
	Bricks	100	..	1,875	..	..	..
	Stores	Pkgs.	10,812	..	491	3,294	+ 2,80

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

Department.	Description.	Class.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Ordnance	Coal	Tons.	1,450	145	.. 7	.. 62	+ 55
	Iron	,,	..	..	10,570	6,043	— 4,527
	Ammunition ..	Boxes.	109	13,465	2	..	— 2
	Boilers	No.	..	..	9,901	7,426	— 2,475
	Stores	Pkgs.	21,057	13,390	77	1,176	+ 1,099
	Timber	Tons.	..	.. 50	34	60	+ 26
	Bricks	100	..	..	53	421	+ 368
	Gunpowder ..	Pkgs.	..	14,000	15,600	3,580	— 12,020
	Cement	Casks.	..	40	8	..	— 8
Madras Harbour Works.	Stores	Pcks.	..	..	..	..	..
	Coal	Tons.	..	..	2,048	1,975	— 73
Clothing	Packages	No.	2,176	1,900	166	143	— 23
Police	,, ...	,,	196	131	33	61	+ 28
Salt Revenue	,, ...	,,	109	79	2,021	2,596	+ 575
Post Office	,, ...	,,	742	2,886	350	655	+ 305
Medical	,, ...	,,	1,920	1,012	11,552	6,191	— 5,361
Telegraphs	,, ...	,,	9,129	10,770	707	925	+ 218
Stationery	,, ...	,,	1,156	1,115	2,497	1,757	— 740
Stamps	,, ...	,,	1,861	1,611	2,814	1,452	— 1,362
Commissariat	,, ...	,,	2,562	3,611	344	74	— 270
Gazette Press	,, ...	,,	97	249	157	380	+ 223
Marine	,, ...	,,	806	317	43	20	— 23
Revenue Survey ..	,, ...	,,	25	37	3	6	+ 3
Agriculture	,, ...	,,	140	6			
Government Central Museum	,, ...	,,	9	6	4	10	+ 6
Under Secretary to Government	,, ...	,,	85	68	53	44	— 9
Superintendent of Prisons.	,, ...	,,	7	16	..	10	+ 10
Revenue Board ..	,, ...	,,	9	13	13	40	+ 27
Forests	,, ...	,,	3	1	..	2	+ 2
Presidency College ..	,, ...	,,	2	4	17	8	— 9
Chemical Examiner ..	,, ...	,,	36	35	23	13	— 10
Medical College ..	,, ...	,,	41	31	16	41	+ 25
Deputy Collectors ..	,, ...	,,	12	.. 7	15	9	— 15
Astronomer	,, ...	,,	20	..	.. 5	..	— 1
Presidency Paymaster ..	,, ...	,,	4	..	..	..	.. 5
Registration	,, ...	,,	1	..	5	..	— 8
Registrar of High Court.	,, ...	,,	4	2	12	4	— 8
Civil Engineering College.	,, ...	,,	44	21	10	8	— 2
Examiner of Accounts, Bezwada-Madras Railway	,, ...	,,	..	..	11	9	— 2
Revenue Settlement ..	,, ...	,,	..	.. 1	4	1	— 3
Executive Engineer, Military Works	,, ...	,,	..	2,003	879	260	— 619
Collectors	Bricks	100	..	45	..	..	..
Deputy Port Conservator.	Packages	,,	..	4	4	14	+ 10
Controller, Military Accounts	,, ...	No.	..	..	60	47	— 13
Agent for Government Consignments ..	,, ...	,,	..	2	3	13	+ 10
Government Botanical Gardens	,, ...	,,	..	501	303	257	— 46
Commissioner of Paper Currency	,, ...	,,	..	282	199	278	+ 79
Inspector of Salt ..	,, ...	,,	..	13	9	13	+ 4
Engineer-in-Chief, Bezwada-Madras Railway.	,, ...	,,	..	..	1	30	+ 29
Officer in charge, Pensioners, Madras ..	,, ...	,,	..	..	77	..	— 77
Superintendent of Central Jail	,, ...	,,	..	..	1	1	— 1
Meteorological Reporter ..	,, ...	,,	..	1	7	28	+ 21
Pay Examiner ..	,, ...	,,	..	..	3	1	— 2
Miscellaneous Department	,, ...	,,	282	24	14	15	+ 1
					319	92	— 227

X. Statement of Stores, &c., exported by Government.

Department.	Description.	Class.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Accountant-General	Specie Silver ..	Boxes.	95	17	865	9	— 856
	,, Copper ..	,,	163	180	95	55	— 40
	,, Notes ..	,,	8	6	..	1	+ 1
	,, Packages ..	No.	1	5	7	1	— 6
Bank of Madras	,, Silver ..	Boxes.	..	..	..	..	..
	,, Copper ..	,,	84	..	584	54	— 530
	Gun powder ..	,,	..	..	..	..	..
Ordnance ..	Packages and Pieces.	No.	9,257	8,819	6,871	6,491	— 380
	Ammunition ..	Boxes.	..	..	36	2,389	+ 2,353
	Packages and Pieces.	,,	3,203	1,173	1,500	2,481	+ 981
Public Works Department.	Tons	,,	..	..	7	76	+ 69
	Packages and Pieces.	,,	998	1,160	1,254	1,828	+ 574
Clothing	,, ...	,,	955	933	473	492	— 1
Police	,, ...	,,	724	960	591	499	— 92
Salt Revenue	,, ...	,,	2,166	1,027	734	983	+ 249
Medical	,, ...	,,	4,945	3,045	11,432	1,782	— 9,650
Telegraph	,, ...	,,	623	680	1,010	689	— 321
Stationery	,, ...	,,	236	221	385	262	— 123
Stamps	,, ...	,,	5,301	6,030	6,263	4,032	— 2,231
Commissariat	,, ...	,,	478	618	496	341	— 155
Gazette Press	,, ...	,,	37	98	51	67	+ 16
Marine	,, ...	,,	87	105	11	81	+ 70
Revenue Board ..	,, ...	,,	53	35	44	26	— 18
Revenue Settlement ..	,, ...	,,	223	138	54	119	+ 65
Revenue Survey ..	,, ...	,,	103	58	24	23	— 1
Superintendent of Prisons.	,, ...	,,	17	62	92	20	— 72
Registration	,, ...	,,	5	5	30	..	— 30
Conservator of Forests ..	,, ...	,,					
Government Central Museum	,, ...	,,	13	..	7	8	+ 1
Government Astronomer.	,, ...	,,	13	21	3	2	— 1
Government Botanists ..	Packages	No.	..	48	24	..	— 24
Inspector of Salt ..	,, ...	,,	..	..	102	7	— 95
Chemical Examiner ..	,, ...	,,	..	.. 1	4	..	— 4
Collectors	,, ...	,,	..	6	5	5	..
Meteorological Reporter ..	,, ...	,,	..	..	19	11	— 8
Salt Revenue	,, ...	,,	..	..	527	16	— 511
Miscellaneous Department	,, ...	,,					
Civil Engineering College.	,, ...	,,	..	57	59	40	46 + 6
Under Secretary to Government	,, ...	,,	..	..	..	3	.. — 3
Post Office	,, ...	,,	..	..	..	5	.. — 5
Medical College ..	,, ...	,,	..	2	..	295	.. — 295
Registrar of High Court.	,, ...	,,	..	..	..	18	.. 5 — 13
Examiner of Accounts, Bezwada-Madras Railway	,, ...	,,	..	..	31	38	35 — 3
Executive Engineer, Military Works ..	,, ...	,,	..	..	..	10	.. — 10
						172	33 — 139

(Signed) S. HUTCHENCE,
Traffic Manager, Harbour Trust.

ENCLOSURE.

ADMINISTRATION REPORT of the Deputy Conservator of the Port of Madras for the year 1896-97.

The number and tonnage of vessels entering and leaving the Port of Madras during the year is shown in the following statement and shows an increase over the preceding year in number and tonnage:—

Vessels entered.

	1895-96.		1896-97.	
	NO.	TONS.	NO.	TONS.
Steam ships, mercantile	656	1,184,644	662	1,180,664
Sailing ,, ,, ...	1	1,400	...	...
Do. native crafts	86	9,628	104	10,633
Men-of-war, Government ships and transports	11	15,828	10	25,225
Total ...	754	1,211,500	776	1,216,522

Vessels left.

	NO.	TONNAGE.
Steam ships, Mercantile	660	1,178,823
Sailing " "	...	...
Do. Native Crafts	102	10,517
Men-of-war, &c.	10	25,225
Total ...	772	1,214,565

Of the above vessels, 338 were foreign-going and 324 coasting.

The revenue amounted to Rs. 1,54,126 against Rs. 1,50,970.

	RS.
Port fund	1,20,932
Salvage	490
Sale of unserviceable articles	264
Diver services	400
Hire of port raft	1,017
Boat licenses	744
Shipping office fees and fines	888
Office fees for overtime	1,658
	1,26,393
Pilotage and boat charges connected	23,713
Moiety of Harbour Master's fees	4,020
Total ...	1,54,126

Including { 40 German. 24 Austro-Hungarian. 26 French. 1 Norwegian.

Total .. 91

Artificial harbour.—Shipping operations have been carried out throughout the year without intermission, except on the 27th November on account of bad weather.

The berths in the harbour have been equal to requirements, except upon four occasions, the number of vessels having to wait outside being six.

On one of these occasions a P. and O. Co.'s steamer was anchored in the centre of the harbour, where she remained a few hours only to embark passengers.

Out of six horse ships, five discharged their horses by gang-way on to the north groyne, the exception being a German vessel whose commander declined to accept the risk to his vessel.

Owing to the large amount of coal dropped overboard from coal ships at Nos. 4, 5 and 6 berths, they have become considerably shallowed.

No. 1 berth has also shallowed considerably by the accumulation of sand through the groyne.

The construction of a small jetty from the north groyne to facilitate landing of horses is under consideration by the Board.

Moorings.—Have all been thoroughly overhauled and inspected twice during the year. Three buoys sank at various times, owing to leaks in the tubes. They were replaced by spare ones.

All the head mooring buoys have been fitted with wooden fenders by the Harbour Works.

At the request of the Military Authorities a small buoy has been moored off Lighthouse Battery in 8 fathoms water, to serve as a datum point for range finding.

Mooring boat.—The mooring boat sanctioned last year was completed and began plying on August 10th. She has proved most useful and satisfactory and has been the means of greater despatch in mooring and unmooring, and has reduced to a great extent the undue wear and tear to the Harbour Master's boats.

Steam launch.—Has been utilized more than formerly, and she has been of immense service.

She was hoisted on to the pier twice for repairs, and overhaul, and has been kept in an efficient state by the Mechanical Engineer of the Harbour Work Department. No other launch being available whilst she was under repairs, considerable inconvenience was experienced.

She was found to be insufficiently buoyant when filled with water, and her fore and after ends were therefore filled with cork.

The driver not holding a certificate as such, was examined and granted one, by the Chief Engineer of the R.I.M.S. "Clive."

Harbour Master's boat.—Have been kept in a more efficient condition since the advent of the mooring boat, which has reduced the undue wear and tear caused by their being used for that duty.

These boats were also found to be of insufficient buoyancy, and the copper was therefore stripped off, and they were provided with cork bags and cushions.

A new boat was obtained from Calcutta Dockyard in February, to replace one which was worn out by age and wear and tear. Another will shortly be required.

Weather.—Has been fine enough to permit of shipping operations throughout the year, except on November 27th, when the centre of a moderate cyclonic storm passed about 50 miles to the southward, causing a heavy gale and sea over the port. No warning was received of its approach.

Warning signals were hoisted three times, viz., on November 27th, December 11th and December 16th.

Cyclone Code.—On the occasion of the stranding of the S.S. "Secundra" opportunity was taken to carry out the Cyclone Code, and it was found to work satisfactorily.

Entrance lights.—The harbour head entrance lights have given every satisfaction. They were taken over charge of by this office from the Harbour Engineer on June 4th.

Accidents and casualties.—On May 1st the barque "David" from Negapatam to Cocanada in ballast put into Madras Roads leaking very badly. No salvage pumps being obtainable, and the water gaining, she was eventually breached to the north of the port, where she became a total wreck and was broken up.

On June 15th during a heavy squall the stern lines of the S.S. "Dunera" parted, but no damage ensued.

On the June 25th one of the Harbour Master's boats was damaged by a steamer's propeller.

On November 27th during a heavy gale from the north-eastward, the S.S. "Secundra" parted her bow cable and drove ashore on to the sand bank formed in the south-west corner of the harbour.

There were four other steamers in harbour, all of which rode it out safely and easily.

Endeavours were made day and night to get her off, which were successful on the 2nd December, she being towed off on that date by two other B.I.S.N. Co.'s steamers, the vessel having been lightened considerably in the meantime. The tug boat with sand pump, ordered by the Agents from Calcutta, arrived the following day and was not therefore required. The vessel sustained little or no damage.

Six lighters drifted ashore at various times and were damaged.

One lighter was sunk and recovered by diver.

Seven Masulah boats were damaged by the surf.

One Masulah boat was sunk and recovered by diver.

One boatman fell overboard and was drowned alongside of the S.S. "Secundra" on December 2nd, and his body was not recovered.

A large heavy and valuable package containing a boiler and engine and weighing over 7 tons having been discharged from the S.S. "Mombassa" into a lighter, which was incapable of carrying, it capsized the same, and went to the bottom of the harbour. A specially constructed large raft with the heavy winch belonging to the Board had to be used to recover the package, which was done after several days' work by the diver.

Salvage Gear.—The 6-inch wire hawsers proved invaluable on the occasion of the stranding of the S.S. "Secundra," and without them towing operations would have been futile.

The smaller wire hawsers were also most useful, and by being run out smartly by the Senior Harbour Master were the means of preventing the vessel from being thrown further upon the beach. The 16-inch coir hawser parted whilst being used for towing. It was found to have perished with dry rot, this will not be replaced, wires being more suitable.

Harbour Masters establishment.—The Harbour Masters and their establishment have performed their duties very satisfactorily, notably upon the occasion of the stranding of the S.S. "Secundra," when they all behaved splendidly—a fact apparently recognised and appreciated by the owners and agents of the ship.

Owing to the great increase of late years in the number of vessels visiting the port and of the "out of hours" attendance on them, it was found necessary to ask for a third boat's crew, which has been sanctioned.

A fourth Harbour Master was also considered necessary by Acting Deputy Conservator, but the Board has sanctioned an Assistant only, subject to the approval of Government, which is awaited.

In 1885 the year previous to the entertainment of a *second boat's crew*, the number of entries and departures was 916, of which 176 were out of hours.

In 1897, when a *third Harbour Master* was found to be necessary, the numbers of were 1,054 and 230 respectively.

In 1896, the figures increased to 1,386 and 654 respectively; and in 1897 to 1,552 and 782.

The necessity for a third boat's crew and a fourth or Assistant Harbour Master will be seen from the above figures.

Sunday and Holiday work.—The Deputy Conservator's office was opened on 35 Sundays and three holidays. Before and after hours, 16 times.

Leave.—Commander W. Aves, R.I.M., having been appointed to act as Deputy Conservator, in Commander Hewett's absence on furlough, took over charge from Mr. H. D. Baddeley on the 20th April 1896. Commander Hewett having been granted an extension of leave of six months from March 23rd, 1897, Commander Aves continues to act for him.

Port Diver has been well employed as usual and has performed his duties very satisfactorily.

His Assistant, Mr. Brown, having tendered his resignation, it was accepted by the Board on March 4th, 1897, and Mr. Jefferies engaged in his place.

Port Signallers.—The Senior Port Signaller, Mr. Stuart, having obtained the post of Light-housekeeper in the Presidency, the next senior Mr. Brown, was promoted in his place, the junior to that of second, and a new man engaged to fill the vacancy.

They have performed their duties satisfactorily.

Port Flagstaff has been overhauled and painted and rigging set up. It is in good order, but will require a new yard shortly.

The flags and equipment are also in good order.

Time Signal.—The semaphore has worked very well and met all requirements satisfactorily. The Board has approved of a Saxby and Farmer's Time Ball aparatus being provided.

Life-saving Apparatus.—Half-yearly practise has been carried out. The men are efficient and the apparatus and gear in good order.

Fire Engine.—Is in good order, but of a very obsolete pattern.

Harbour Master's office.—A few minor improvements have been made to render it more suitable for night residence in case of necessity.

Cargo Boats.—The number of Lighters on the register is 84, Masulah boats 114, Jolly boats 33, Water boats 9, small catamarans 12, fishing boats 37.

Port Raft.—Is still the only method of landing heavy weights, and made 57 trips during the year and earned Rs. 1,017.

Shipping office.—The number of European Seamen engaged and discharged at this port shows a considerable increase on last year's figures.

European seamen	engaged	22
Do.	discharged	14
Do.	sent to jail	*Nil.*
Do.	hospital	11
Native seamen	engaged	27
Do.	discharged	777
Do.	sent to jail	1
Do.	sent to hospital	5
Distressed seamen sent home	... ...	8

Periodical statements and returns were sent to the Board of Trade, London, and the Government of Madras.

Owing to steady increase in the Shipping office work and in the Board of Trade Forms under the new Act, the clerical establishment will require increasing.

MADRAS,
8th April 1897.

(Signed) W. AVES, Commander, R.I.M.,
Ag. Deputy Port Conservator.

A2

Harbour Trust Board
Administration Report 1896-97

Marine ~~PUBLIC WORKS~~ DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

From the Chairman, Harbour Trust Board, Madras, No. 464 dated 23rd April 1897.

~~The Hon'ble Mr. Bliss C.I.E~~ — 4 June 97

No 520 Marine dg 9th June 1897

The following observations are recorded on the Administration Report of the Harbour Trust Board for the year 1896-97.

2. The Board consisted of ten members and held 28 meetings, of which one was a special meeting to consider the budget. In the previous year there were 29 meetings. The average attendance of members was 7.6 as against 8 in 1895-96; the Chairman being present at all the meetings of the Board.

3. Revenue Account.

Receipts. The following statement shows the receipts as compared with those of the previous year:-

Particulars	1895-96	1896-97	Difference
(1) Contribution from Port Funds.	33,900	2,44,688	+ 2,10,788
(2) Harbour dues.	3,95,455	4,50,457	+ 57,002
(3) Porterage.	1,00,892	1,18,317	+ 17,425
(4) Interest on Government paper.	14,074	16,259	+ 2,185
Total.	5,42,321	3,29,721	2,87,400

There

(10—4,000—14-3-95.)

There was a satisfactory advance both under Harbour dues and porterage, and a total increase of Rs.2,87,400 of which a large proportion is due to the contribution from Port Funds; Rs.1,00,000 being repayment of the debt due by coast ports, and Rs.1,00,400 on account of the dredger "Wenlock" which the Harbour Trust Board has agreed to take over from Government at that valuation. The increase under dues and porterage is the result of greater activity in trade. The dues on imports rose from Rs.2,48,020 in 1895-96 to Rs.2,89,194 in the year under review, and those on exports from Rs.74,305 to Rs.77,206. There was also an increase amounting to Rs.17,425 under porterage, coal and railway material under imports, and jaggery under exports, exhibited an advance, and the proportion of indigenous, as compared with foreign, coal was largely in excess of the previous years' transactions. The following table shows that there has been a steady increase in the tonnage of coal and its allied products imported during the past 10 years:-

Year.	Coal	Coke	Patent Fuel	Total
	Tons	Tons	Tons	Tons
1887-88	10,000	608	4,884	15,492
1888-89	21,645	997	6,443	29,085
1889-90	23,970	645	9,753	34,368
1890-91	41,888	1,389	5,615	48,890
1891-92	47,010	2,017	-	49,027
1892-93	63,600	1,822	2,953	67,375
1893-94	80,568	1,734	-	82,302
1894-95	97,500	1,666	-	99,166
1895-96	131,621	2,781	50	134,452
1896-97	148,607	2,052	-	150,659

The following statement shows the total tonnage of the port during the same period:-

Years.	Pier			Beach			Grand Total
	Import	Export	Total	Import	Export	Total	
1887-88	86258	54562	140820	124721	51445	176166	316,986
1888-89	85133	47262	132395	116464	41741	158205	290,600
1889-90	88419	66208	154627	153240	46317	204557	359,184
1890-91	100154	58855	159009	188383	44580	232963	391,972
1891-92	97987	56046	154033	249414	32895	282307	436,340
1892-93	80339	55514	135853	197504	30424	227928	363,781
1893-94	81719	58912	140631	203532	37748	241280	381,911
1894-95	80181	62545	151726	196095	41643	237738	389,464
1895-96	90641	58297	148938	240056	40777	280833	429771
1896-97	114665	66285	180950	270940	36656	307596	488546

× Excludes
(a) Advances to construction account. Rs.11,405
(b) Govt. securities purchased. 2,87,420

× Excludes Rs.4,14,047 advanced to construction account.

4. Charges. The total expenditure amounted to Rs.7,46,646 as against Rs.5,59,527 in 1895-96. The following are the chief variations as compared with the previous year:-

Increases.

	Rs.
(1) Secretary's salary	1,278
(2) Exchange compensation allowance.	1,254
(3) Engineer's Dept.	23,101
(4) Fees for audit.	9,867
(5) Miscellaneous (contingencies without detailed audit).	5,198.
(6). Porterage establishment.	9,462
(7) Coolies. beach.	7,377
(8) -do- pier.	4,508
(9) -do-Custom House.	1,157
(10) Overtime fees to establishment.	2,090
(11) Miscellaneous (Porterage)	2,059.
(12) Capital Account-Expenditure on Major Works met from Revenue.	1,66,800

Decrease.

(1) Interest. 16,135

(2) Traffic Dept. (Shore staff). 7,989.

(3). Preventive service. 2,031

(4) Petty construction and Repairs. 19,405.

The causes of variation are explained in paras 18 and 20 of the report.

Capital Account.

5. It is stated in para 19 of the Trustees report that the capital account opened with a balance due to Government of Rs.50,79,227 on the 1st April 1896, but it is observed that no separate capital account has been included in the report. The account is said to close with a balance of Rs. 49,79,227 on the 31st March 1897.

6. The following table gives the number and tonnage of vessels which entered and left the port as compared with those of the previous year.

Description of vessels.	1895-96		1896-97	
Vessels entered.	Number.	Tons.	Number	Tons.
Steam ships mercantile.	656	11,84,644	662	11,80,664
Sailing - -	1	1,400	-	-
Sailing native crafts.	86	9,628	104	10,633
Men-of-War, Govt. ships and transports.	11	15,828	10	25,225
Total	754	12,11,500	776	12,16,522
Vessels left				
Steam ships mercantile	657	11,85,999	660	11,78,823
Sailing - -	1	1,400	-	-
Sailing native crafts.	85	9,219	102	10,517
Men-of-War, &c.	11	15,828	10	25,225
Total	754	12,12,446	772	12,14,565

G.O.35 Marine dated 11th January 1897

Flag S

7. The estimates for the proposed boat basin are still under preparation by the officers of the P.W.D. Considerable economy is expected to result in the shipment charges upon bulky goods when the boat basin is brought into use.

8. The question as to the custody of goods referred to in para 27 is still under consideration in the Revenue Department, and the P.W.D. is dealing with the proposals made as to the future construction and control of the works.

9. The Provident Funds have proved useful to the employes of the Board, many of whom have largely benefited by the advantages offered.

10. The Biden Home account opened with a balance of Rs. 2956-9-1 ~~2,956~~. The receipts during the year were Rs. 1,210-2-8 and the charges Rs. 1,510-9-0 The fund thus closed with a sum of Rs. 2,656-2-9 to credit.

11. The Harbour was completed during the year in accordance with the sanctioned design. The total cost of reconstruction was Rs. 61,98,018 as explained in para 21 of the report. If to this be added the outlay previously incurred, the total cost of the works will amount to Rs. 12752508. But this sum does not represent the whole

whole of the expenditure which will be necessary to render the harbour thoroughly efficient. A boat basin will probably have to be constructed, and increased facilities for landing coal and horses afforded. Dredging will also have to be provided for.

12. The question of raising a loan by means of debentures to extinguish the debt due to Government and meet the cost of additional works is at present in abeyance.

13. The appointment of a fourth Harbour Master is under the consideration of Government.

W.H. 1.6.97

14. Finally, His Excellency the Governor in Council desires to express his satisfaction at the result of the Trustees' administration of the affairs of the port. The report, which is admirably drawn up, shows good management and progress in all Departments; the credit for which must be largely shared by the late Chairman, Mr. Austin, who has now retired after a long period of office extending over six 6 years.

15. The

× from Octr. 90 to April - 97 with an interval of one year

5-P

15. The photographs which accompany the report also deserve commendation as works of great merit.

To

The Chairman, Harbour Trust Board. cte 5-6

,, Presy. Port Officer. cte 5-6

,, Financial Department. cte 6-6

,, Revenue Department. cte 20-6

,, Chirman, Chamber of Commerce. cte 2-6

,, Chairman, Madras Trade Association. cte 2-6

,, Secretary to the Port Trust, Bombay. cte 5-6 & 21/7/97

6-P

W. Austin Esqr (thro Indian Office)

H.E. No. 521 Marine, dated 9 June 1897.

Copy forwarded to the Government of India, Finance and Commerce Department.

R.S. 21/7/97

W.H. 4.6.97

No. 2937 C of 19th June 189

P. W. Secretariat,
Chepâk, June 18. 1897.

No. C.

From
The Second Asst. P. W. Secty.

To.
Messrs. Del Tufo & Co.
Mount Road.

Gentlemen,

With reference to letter from the Secretary Harbours Trust Board, Madras, No. 122 dated 5th April 1897, to your address, in which you were requested to supply addnl. copies of the photographs of the Madras Harbour if required at eight annas a set, I am directed to request you will be so good as to supply me with 6 copies of each set (each set containing 9 photographs) at the rate specified at your earliest convenience.

I have &c.,

C.C.
S.P.W.S.

Returns to me after issue. D.P.L. 19/6/97, & 19/6/97

INDEXED.
19/6/97

MEMORANDUM

From DEL TUFO & Co.,
ARTISTS AND PHOTOGRAPHERS,
MOUNT ROAD,
MADRAS.

To C. Simpson Esq
2nd Assistant
Public Works
Chepauk Mad

June 1897

Sir,

With reference to your letter of 19th Instant We have the honor to inform you that we will have the 6 Copies of each set printed for you in the course of next Owing to the Jubilee on Saturday is closed for two days —

We have the honor to be
Sir
Your most Obt Servts
Del Tufo & Co

RECEIVED
19/6/97

Paid.

C. Simpson Esq
2nd Assistant
Public Works
Chepauk
Madras

TRIPLICANE
RECEIVED
22 JU
97

MEMORANDUM.

From
DEL TUFO & CO.,
ARTISTS AND PHOTOGRAPHERS,
MOUNT ROAD,
MADRAS.

25/6/1897

C. Simpson Esq
Secnd Assistant
Public Works Secretariat, Chepauk
Madras.

Sir,

We beg to hand you the copies asked for printed to your Esteemed Order - please own receipt & account enclosed.
Awaiting your Esteemed Order.

Yours faithfully,
Del Tufo.
A.V.S.

INDEXED.

C Simpson Esq
2nd Assistant
Public Works Secretariat
Chepauk

Madras
(Monday) 21st June
1897

Memo

Telephone message
of the 19th inst. reached
me yesterday (Sunday)
I called at the Presidency
Post-Office this morning,
and rung up the telephone
to be linked on to the
Marine Deptt. No. 18, but-
conduit get anyone
to answer there, hence
I write — on page 31
of the Administration Re-
-port for 1896-97, 24,521
shown against Holidays
under the column Tonnage
of goods landed and shipped
of the figure should I think
be 24,524 for 24521 it
may

may have been the printer's mistake, kindly make the correction, so that the Total will stand as it is, viz Tons 89,255-

Secy to
Marine
Harbour Trust Board

To The Head Clerk
Public Works Dept (Marine)

V. E.

Note for the Supdt
Cust Press.

G.O. 520-21, Marine,
dated 9/6/97 now
in Press

It has been decided that only each addressee in this G.O. should have one set of photographs. There are altogether eight addressees exclusive of the H. T. B.[&] I send herewith eight sets each containing nine photographs. Please arrange to have these photographs

[&] Two sets will be found bound in the accompanying two spare copies of the Administration Report which have been removed and bound separately in the issue of G.O.

10 Jan 98

9/6/97

carefully mounted and bound into the usual style of the Proceedings in the same way as they are mounted in the Harbor Bridge Administration Report. Kindly have this work done upon Emergency.

Clerk S. W. Scott

Chapin
June 25 1897

message may be sent

DPW
25/6/97

Ch

Will be sufficient to send the copies of photos to the Govt Press, after the Govt Photos have been mounted & bound in the Press, in the same way as they are mounted in the Harbor Bridge Report. The bill can be handed to Clerk [illegible]

[illegible]

Done DPW 25/6/97

25/6/97

CS

Please send proofs
two copies each
all right -

Supplement
has received number
copies to go into the
Annual Report &c.
and will the Press
forward them?

Ragpole should
inquire about them
in Press.

CS
25/6/87

SMS

The 6 copies each containing 9 photos:
are all right.
It will be seen from the
H. Trust letter No. 122 d/5/6/87
that the Lawrence asylum
Press appears to have wanted
the copies and the Govt.
Press will doubtless be
able to do it for us.
If necessary a telephone

Tariat

Note.

Proof of Co. 520-21,
Marine, d/9/6/87.

L.O. pending reply
to telephone message
to Manager H.T. Office
regarding discrepancy
in Club on page 31
of report.

DPS
19/6/87

27/11

No. 2937 C4/19 June 189

P. W. Secretariat,
Chepâk, June 18. 1897.

No. C.

From
The Second Asst. P. W. Secty

To.
Messrs Del Tufo & Co.
Mount Road.

Gentlemen,

With reference to letter from the Secretary Harbour Trust Board, Madras, No. 122 dated 5th April 1897, to your address, in which you were requested to supply additional copies of the photographs of the Madras Harbour if required at eight annas a ~~set~~ copy, I am directed to request you will be so good as to supply me with 6 copies of each set (each set containing 9 photographs) at the rate specified at your earliest convenience.

I have &c,

Sd/-
Secty

Return time after issue. 19/6/97, & 19/6/97

INDEXED.
19/6/97

No.

Madras Harbour Trust.
SECRETARY'S OFFICE.

14/6/97 14th June 1897.

Dear Sir

Your letter of 12th inst. to hand at 5-50 P.M. I herein enclose a copy of the Secretary's letter No. 122 dated 5th April 1897 to Messrs. Del. Info & Co. from which you will observe that any number of the Photographs embodied in the Administration Report for 1896-97, you may require, can be obtained at annas 8/- eight-per copy on your applying to the above shop, as we have none on —

No. 122

Madras Harbour Trust
Secretary's Office
5th April 1897.

From

The Secretary
Harbour Trust Board
Madras.

To

Messrs. Del. Info & Co.
Mount Road.

Gentlemen

Referring to your letter dated 26th March addressed to Mr. F. Dunsterville, then President of the Madras Amateur Photographic Society, I send you herewith nine negatives, kindly taken by him for the Trustees of the Harbour, and am directed to request that you will supply fifty Copies of each, quarter sheets, for embodiment in the Administration report for 1896-97 at eight annas each.

2. The prints are to be submitted to and approved by Mr. Dunsterville, and then sent to the Lawrence Asylum Press.

3. If further copies are required the same rate will be paid and it must be understood that any firm interested, can obtain ¼ sheet prints at 8 annas per copy and 10×12 at 12 annas.

I have &c

Sigd. C. Pinto

Secretary
Harbour Trust Board

HARBOUR TRUST
MADRAS 14 JUN 97
SECRETARY'S OFFICE

(True copy)

Geo. A. Pinto

Harbour Trust Board

our hand.

Yours faithfully

Manager
Harbour Trust Board

To

The Head Clerk
Public Works Dept
Cheduk

C/

You will see that only the issue copies four Co's (excepting one to A.J.B.D.) are to contain photos.

3 sets are to be taken and the copies of the report sent to us and the A.J.B.D.

One of these sets is to be bound with the Limited Work Co. which will be attached to the Co.

6 sets more are to be obtained from Mr. Del Tufo when you write letter to the firm for my signature

S.A.W.
Draft letter submitted for approval. Off

Cr
19/4/07

If my proposal made above is adopted, the expense will not be large - There is really no reason why each of our copy of the report should be graced with a set of photos: They are not necessary to the elucidation of the text.

A.B

16 June 97

The photos are 8/ as each or 8/4 the set. For 84 sets the cost would be £378. Is there no objection to such expenditure? I would not sanction be required.

W.H.

"J"

What I proposed was that each adoresser should have one set of photos - There are altogether 8 adoressers Exclusive of the Harbour Board - and as there are 3 sets already in office we should only require to purchase 5 more - No sanction would be required for this - The figure £4 above includes "Spare" copies.

16 June 97

V. E

S.W.

D/o from Manager H.B. office submitted gratuities. The file is with you

D.P.B.
16/6/97

C.A.W.

The point for order is whether the marine Prom: receiving the address Report of the Madras Harbour Trust Bd should be issued with or without the photographs.

The Sp. & address Report are going to Press at present.

We should strike off 150 copies in all - Of these 84 copies will be issued copies, & the remainder will be office copies.

Are we to obtain from Del Tufo & Co. copies of the photographs (8 annas per copy)

(1) for the 84 issue copies, or

(2) for the full number of 150 copies or

(3) Issue the Pros. without photos.

C.A.W.
14/6/97
P.T.O

"J"

For favour of orders.
Perhaps one set of photographs may be issued to Each addressee (not including the Harbour Trust Board). This would come to 5 or 6 sets. I should think

C.S.
15 June 97.

For an administration report would not photo prints (such as those in the Irrigation Administration Report for 1895-6 (p 86 et seq) be (and empha 16.6.97 WH

+ heavitts

"J"

They would ordinarily - but in the present case the photos are especially commended as artistic productions, & the para in the order referring to them would be meaningless if the photos were reprinted in the Irrigation report. If

Madras Harbour Trust
Secretary's Office
5th April 1897.

No. 122

From

The Secretary
Harbour Trust Board
Madras.

To

Messrs. Dd. Tufo & Co.
Mount Road.

Gentlemen

Referring to your letter dated 26th March addressed to Mr. F. Dunsterville, then President of the Madras Amateur Photographic Society, I send you herewith nine negatives, kindly taken by him for the Trustees of the Harbour, and am directed to request that you will supply fifty Copies of each, quarter sheets, for embodiment in the Administration report for 1896-97 at eight annas each.

2. The prints are to be submitted to and approved by Mr. Dunsterville, and then sent to the Lawrence Asylum Press.

3. If further copies are required the same rate will be paid, and it must be understood that any firm interested, can obtain 1/4 sheet prints at 8 annas per copy and 10×12 at 12 annas.

I have &c

Sd/- C. Swaine
Secretary
Harbour Trust Board

HARBOUR TRUST.
MADRAS 14 JUN 97
SECRETARY'S OFFICE

(True copy)

Asst. Secretary
Harbour Trust Board

Marine (1897) Department.

CURRENT No. 648

Order

From

The Chairman,
Harbour Trust Board,
Madras.

No. 464.

Dated 23rd April 1897.

Despatched 30th April 1897.

Received 4th May 1897

Enclosures Photographs.

Spare copies three. (two)

SUBJECT.

ADMINISTRATION REPORT.

Submitting the———of the Harbour Trust Board for the year 1896-97.

LAWRENCE ASYLUM PRESS, MADRAS.

BACK PAPERS.

G. O.	No.	Department.	Date.
[illegible]	316	Mar.	31-3-97
-- --	310	-- -- --	30-3-97
-- --	275	-- -- --	20-3-97
-- --	273	-- -- --	20-3-97
-- --	261-2	-- -- --	4-3-97
-- --	251	-- -- --	16-3-97
-- --	288	-- -- --	4-3-97
157 E.	Mem.	-- -- --	5-3-97
9-0 191	Coby	-- -- --	3-3-97
190	--	-- -- --	3-3-97
137	Off	-- -- --	18-2-97
166	Coby.O	-- -- --	26-2-97
69	Coby	-- -- --	25-1-97
111 E	Mem.	-- -- --	17-2-97
91 E.O	Off	-- -- --	2-2-97
35	Coby	-- -- --	11-1-97
17	Mar. E.O.	-- -- --	6-1-97
15	Mar	-- -- --	5-1-97
803	Mar.	-- -- --	15-12-96
850	Mar.	-- -- --	9-12-96
834	Mar.	-- -- --	1-12-96
813	Mar.	-- -- --	23-11-96
745	Mar.	-- -- --	2-11-96
708	Mar.	-- -- --	15-10-96
446 E	Mem.	-- -- --	9-9-96
442 E	--	-- -- --	9-9-96
602-3	Coby	-- -- --	9-9-96
581	Off	-- -- --	4-9-96
410 E	--	-- -- --	26-8-96
536	Coby	-- -- --	20-8-96
Ded Cs. 5.0.5. P. 11. of		-- -- --	4-8-96
507	Mar.	-- -- --	17-7-96
484	Coby	-- -- --	7-7-96

FURTHER PAPERS.

G. O.	No.	Department.	Date.
473 Mar.			4-2-96
450 Mar.			20-6-96 Coby
Coby Mar.			20-6-96 Coby
396 Mar.			5-6-96 Coby
Ded Cs. 5.0.5. P. 7 of			5-6-96
386 of			29-5-96
Ded Cs. 5.0.5. P. 9 of			29-4-96
373 of			22-5-96
368 of			22-5-96
2652 of			16-5-96
4151 of			13-5-96
4071 of			11-5-96
226 Mar. of			1-4-96
210 Mar. of			26-3-96
119-20 Mar. of			26-2-96
67 Mar. of			3-2-96
16 E of			15-1-96
Lo Mem. A. of			24-12-96
1552 Trial of			4-12-95
2817 W of			6-11-95
2029 W of			15-8-95
1108 W of			9-5-95
2029 W of			15-8-95
190 Mar. of			1-7-95
1103 Mar. Ass. Cs. of			3-3-
47 Mar.			9-2-95
7 Rev. of			17-1-95
866 Trial			20-10-94
1927 Mil. of			22-9-94
153 A of			14-8-93
Assistant Lo W. Mem. R of			26-4-[illegible]
1128 of			13-3-91
319 R of			6-11-89
R 253 of			2-9-89
960 of			10-6-89
360 of			10-6-89
174 R of			15-6-89
171-2 Mem. of			24-4-89

ADMINISTRATION REPORT
OF THE
TRUSTEES OF THE MADRAS HARBOUR FOR THE YEAR 1896-97.

THE Trustees have the honour to submit their report on the administration of the Madras Harbour Board for the official year 1896-97.

Constitution of the Board.

2. The Board consisted during the period of the following ten members:—

Elected by the Chamber of Commerce.

1. Hon. Mr. G. L. Chambers, resigned in April 1896, and was succeeded by Mr. W. S. Shaw.
2. Mr. H. Scott.
3. Mr. R. J. Black, resigned in November 1896, and was succeeded by Mr. C. B. Simpson.

Elected by the Trades Association.

4. Mr. J. F. Davies.

Nominated by Government—

Officials ...

5. Mr. Ware Austin, I.C.S., Chairman.
6. Commander H. A. Street, R.I.M.
7. Mr. F. J. Wilson.

Non-officials ...

8. Mr. Cowasjee Eduljee Panday.
9. Mr. Mirza Mehdy Ispahani.
10. M.R.Ry. G. Subrayalu Chetty Garu, resigned in December 1896, and was succeeded by M.R.Ry. C. Kaliyanasundaram Chetty Rai Bahadur.

Meetings held.

3. The Board held 28 meetings; and, in February, one special meeting under section 37 of Act II of 1886, to consider the budget estimate of receipts and charges for the year 1897-98. A committee was appointed under section 17 (3) and held 5 meetings, to consider and report to the Board upon the proposed issue of a debenture loan, and in reference to proposed Harbour improvements.

The average attendance, exclusive of the Chairman who has attended all meetings of the Board, has been 7·6 against 8 in 1895-96.

Debenture loan.

4. The proposal to issue a debenture loan was brought forward by the Hon. Mr. G. L. Chambers, at the meeting of the Board held on the 8th day of November 1895, when a memorandum was read proposing, with reference to the notice given by him at the immediately preceding meeting, that, subject to the consent of H. E. The Governor in Council under section 34, Act II of 1886, the Trustees should issue a debenture loan under section 36, to repay to the Secretary of State for India the sum due on account of advances made by Government for Harbour construction, and to provide funds for Harbour improvements.

Reduction in rate of inserest.

5. It was resolved to address Government, with a view to obtaining a reduction in the interest payable under section 30, from 4½ to 3½ *per cent.*, and to solicit the favour of early orders to enable the Trustees to take advantage of the then favourable position of the money market for the issue of a loan, should Government decline to reduce the rate of interest.

Refund of captal advances

6. In addressing Government upon the subject on the 18th November 1894, Mr. LeFanu pointed out that the Madras Trust was heavily handicapped with its comparatively small income, in having to pay such large sums annually by way of interest and refund of capital advances, which had amounted for the preceding five years to Rs. 19,50,860, including a voluntary extra refund of Rs. 5,00,000 in August 1894, when it was anticipated that the Harbour would then be shortly completed, without the necessity of borrowing any further advance to finish it; but unexpected delay in completing the work had occurred, the Board had been compelled to apply for an additional loan and the Trustees were advised that a protective groyne to the south of the Harbour, and other works, were absolutely necessary, which it was estimated would add a still further expenditure on capital account of Rs. 16,50,000.

Outstanding liabilities 1894-95.

7. The position of the Board at that time was as follows:—

Capital debt at the end of 1894-95 ...	Rs.	47,24,242
Completion Estimate	„	3,69,122
Total Debt...		50,93,364
Contemplated expenditure upon Harbour improvements	Rs.	16,50,000
Total to be provided for out of loan and invested funds	Rs.	67,43,364

It was, therefore, proposed to issue a loan of Rs. 60,00,000.

8. The Board had in cash and investments Rs. 9,50,000, total Rs. 69,50,000, which would it was estimatedhave left an available Surplus balance of about two lakhs of rupees, over and above the sum to be repaid to Government and the contemplated expenditure upon protective works and Harbour improvements. The issue of the proposed loan would have substituted for the outstanding balance due to Government a debt to the public of Rs. 60,00,000, upon which it was shown interest could be paid at 3½% per annum, and a sinking fund provided sufficient to extinguish the loan in thirty years.

Revised proposals.

9. In its order upon the Board's proposal, Government declined to reduce the rate of interest, and favoured the Trust with a memorandum from the Financial Department revising the forecast which had accompanied the Board's proposals.

This revised forecast calculated that the Board could reckon upon receiving only 3 *per cent.* per annum upon investments, instead of 3½ as anticipated by the Trustees, and provided for interest upon the debenture loan at the rate of 4% instead of at 3½.

The result, however, arrived at by Government satisfactorily showed that the Trust could, even under these circumstances, repay the proposed debenture loan of Rs. 60,00,000 in full at the end of a period of thirty years.

Sanction to issue Debenture loan received from Government of India.

10. The matter was in July 1896 referred to the Government of India, the sanction of H. E. The Governor-General in Council being required to the issue of the loan under section 34 Act II of 1886, and under date Simla 10th September 1896, sanction was accorded under that section to the issue of a debenture loan of Rs. 50,00,000 bearing interest at either 3½ or 3¾ *per cent.* per annum; and it was stipulated that three months' notice should be given by the Trust before repayment, during the course of the year 1896-97, of the outstanding balance due to Government.

Unfavourable condition of the money market.

11. During the interval which had elapsed between the time that the Board proposed the issue of the loan, and sanction being accorded, the money market became unfavourable, and the Trustees have, since September 1896, deemed it unwise to make the offer to the public, as in the state of the money market during the past six months there appeared little prospect of floating such a loan successfully.

The Trustees have therefore addressed Government, requesting that the matter may be allowed to remain in abeyance, for the present.

12. In criticising the Board's forecast, Government pointed out that no allowance had been made for the natural expansion of trade, which might be expected to take place at Madras within the next thirty years, and had this been done the position of the Trust would have been shown to be much stronger. The trade of this port and the financial position of the Trust have steadily improved year by year, and the year 1896-97, which has just closed, shows a very satisfactory advance upon previous years.

Revenue account.

13. The opening balance in the Revenue account on the 1st April 1896 was as follows:—

Cash and investments; opening balance

Government 3½% pro-notes *par* value Rs. 4,13,900, net cost to the Trust Rs. 4,00,064, market value at 104% Rs. 4,30,456; cash in the Bank of Madras Rs. 3,48,523, in office Rs. 1,025, contingent advance Rs. 500, total cash Rs. 3,50,048. Total cash and Securities Rs. 7,80,504, exclusive of the standing advance to the Traffic Manager of Rs. 500 for Porterage charges, and of Rs. 15 with the Cashier for postage and receipt stamps.

Revenue account.

14. The cash receipts during the year has been—

Receipts 1896-97.

Contribution from Port Funds	... Rs.	2,44,688
Landing, shipping, cranage and other dues	„	4,50,457
Porterage dues	„	1,18,317
Interest on Government Securities ...	„	16,259
Total...		8,29,721

Receipts 1895-96.

The corresponding figures last year were :—

Contribution from Port Funds ...	Rs.	33,900
Dues on goods landed and shipped ...	„	3,93,455
Porterage dues	„	1,00,892
Interest on Government paper ...	„	14,074
Total...		5,42,321

Increased receipts.

The differences between these items are—

Contribution from Port Funds ...	Rs.	2,10,788
Dues on goods landed and shipped	„	57,002
Porterage dues	„	17,425
Interest on Government paper ...	„	2,185
Increase...	Rs.	2,87,400

Contribution from Port Funds.

The usual contribution from Port Funds has been swelled by the payment of Rs. 1,00,000 cash received on the 31st March 1897, under G. O., Financial, No. 273 dated 26th March 1897 in part payment of the outstanding balance due to Madras by Coast ports, and a sum of Rs. 1,00,400 by the transfer to the Trust, at that valuation, of the dredger "*Wenlock*," which is to become the property of the Board on delivery at Madras, up to which time she remains at the risk of Government.

Net increase of Harbour Dues.

The increase in dues upon goods landed and shipped, Rs. 57,002 is the result of increased trade : and porterage dues Rs. 17,425, to the same cause, the coal trade and railway material being the chief contributing items of import.

Revenue account closing balance.

15. The closing balance on the 31st March 1897 is as follows :—

Government paper (*par* value Rs. 4,93,900) taken at 101 per cent. the current market rate upon that date, Rs. 4,98,839. This it will be observed, shows a loss of 3 per cent. as against the market rate of 104 per cent. the value at the beginning of the financial year, a difference on the closing holdings of Rs. 14,817, but the net loss on the transactions in Government paper during the year under review has amounted to Rs. 16,794, and is so shown in the balance sheet, the difference being accounted for by the variations in the rates of purchase during the period, which have ranged from Rs. 104-4-0 down to Rs. 100-6-0.

The cash in hand on the 31st March 1897 was :—

In the Bank of Madras ...	... Rs.	3,35,794
In Office	... „	748
Total Rs.		3,36,542

There is also outstanding advanced from Revenue for construction purposes the sum of Rs. 11,405 which will be brought to account when sanction is obtained to proceed with Harbour improvements.

Closing balances of 1896-97 and 1895-96 compared.

16. The closing balances on the 31st March 1896 and 1897 may be compared as follows :—

	1896	1897
Government paper, market value ...Rs.	4,30,456	4,98,839
Cash ... ... „	3,50,048	3,36,542
	7,80,504	8,35,381
Net amount received from construction.	14,000	...
Do. Do. advanced to construction... ...		77,805
Total... Rs....	7,66,504	9,13,186

Net increase Rs. 50,000.

The above shows a net improvement of Rs. 1,46,682, or in round figures of about half a lakh of rupees excluding the special cash contribution from port funds, and capital adjustments.

Comparative statement.

17. On page 20 is printed a statement comparing in detail receipts and charges for the two periods 1895-96 and 1896-97, from which it will be observed that there is a satisfactory increase under nearly all heads of receipt which so far as they relate to Harbour dues proper, including porterage, are dealt with by the Traffic Manager in his report.

Interest upon capital advances.

18. Under the various items of charges it is to be observed that interest upon outstanding balance of advances for Harbour construction was less by Rs. 16,135, amounting to Rs. 2,11,472 against Rs. 2,27,607 in the previous year. This interest, and the usual refund of one lakh of rupees in reduction of capital debt, was paid to the credit of Government with the Bank of Madras on the first working day in April 1896.

The smaller variations in charges have been alluded to in the quarterly reports during the year, and need not be again referred to now.

Haulage of Railway vehicles.

Haulage charges for the year have not been paid, no account having been received from the Engineer, they have been met by him from advances to construction account, and will have to be adjusted hereafter.

Traffic Department salaries.

Traffic Department Salaries, including Preventive service, have been reduced by Rs. 10,020 by transfer to Porterage of Rs. 9,462 wages of individuals employed exclusively in that branch of the

department, and to Rs. 1,278 being excluded for traffic charges while the Traffic Manager was, for two-and-a-half months, acting for the Secretary when absent on leave.

Engineers establishment.

Engineers Establishment—Rs. 23,101. The Harbour having been completed according to the sanctioned design in May 1896, and there being no estimate for works to which the Engineers establishment could be charged, the salaries paid from 1st June have been debited to Revenue.

The Trustees were informed by the Examiner P. W. accounts after the completion of the Harbour, that the services of the staff employed in its reconstruction should have been at once dispensed with. The Board was however placed in a difficult position; it was advised that certain works were absolutely necessary, and must be carried out with as little delay as possible. It was therefore obvious that it would have been unwise to dispense with the services of trained men, who would be required for those works; they were therefore kept on, pending the result of a reference to Sir Alexander Rendel.

Proposals were, before this result was known, made to Government with a view to economy, but no orders have yet been received.

As however it became clear that, in any case, large reductions could and must be made, it was decided to get rid of the whole of the Engineers staff, which was done in January 1897, by giving one month's notice to all monthly paid men, and three months' notice to the foremen, in the terms of their agreements.

The Engineers staff has been reduced to what is considered the minimum required for up-keep, by the re-engagement of such men only as the Board is advised are necessary for that purpose.

Exchange compensation.

Exchange compensation allowance has risen by Rs. 1,254 having been charged with the payments under this head to the Engineer's Department from 1st June 1896.

Fees for audit of the construction accounts have also been debited to Revenue, and have increased that charge by Rs. 9,867.

Miscellaneous charges.

Miscellaneous charges have increased by Rs. 5,198, of which the principal items are Fire insurance Rs. 1376, Travelling allowance to the Board's Engineer Rs. 1,942, and type writing machines Rs. 891.

New works, petty construction

New works show an expenditure of only Rs. 1,880 under the head Petty Construction, chiefly for an extension of the coal hard.

Coolies wages.

Coolies wages have exceeded payments made last year by Rs. 13,042, mainly due to the larger quantities of coal and railway material handled.

Steam cranes

Steam crane charges are less by Rs. 576, which is also due to arrears of account.

Refund of Harbour Dews.

Refunds of Harbour dues have increased to Rs. 335 on account of over-payments for coal short landed; and refunds of porterage dues paid in advance have increased from Rs. 5,947 to Rs. 6,228= + 281 These large refunds are due to charges being paid on arrival of full

cargoes, and refund being given upon all coal loaded direct into railway vehicles, instead of being first stacked and then handled a second time when loaded.

Overtime work

Overtime fees show a net increase of Rs. 1,449 due to the necessity of working after hours, to cope with the enhanced work done in the porterage branch of the Traffic Department, in which no actual increase of establishment was made throughout the year.

Capital account.

19. The Capital Account opened with a balance due to Government on the 1st April 1896 of Rs. 50,79,227. The usual refund of one lakh was made as reported above, and no further advance was received from Government during the year under review.

Charges under Major heads.

20. Under G. O., No. 850, Marine, dated 9th December 1896, the following items have been charged to the major heads of Capital expenditure noted, *viz*.—

Moorings ...	...	Rs.	23,567	7	2
Other new works	...	,,	13,963	0	0
Acquisition of land	...	,,	18,568	5	0
Protective works	...	,,	10,301	0	0
Tools and Plant	...	,,	1,00,400	0	0
Total	...	Rs.	1,66,799	12	2

Advances to construction account.

These amounts to the extent of Rs. 66,399-12-2 have, in the Revenue account for the year, been deducted from advances made to the Board's Engineer aggregating Rs. 1,05,978-12-5, and when he accounts for the expenditure of that amount the above items, should they have been charged to Harbour reconstruction, will be written off that account. In the meantime though a charge to Capital they have been paid for from Revenue.

Outstanding balance of capital liabilities.

The outstanding balance of advances due to Government on the 1st April 1896 amounted to Rs. 50,79,227; this has been reduced by the usual repayment of Rs. 1,00,000, and the balance due on the 31st March 1897 was Rs. 49,79,227.

Harbour completed 9th May 1896.

21. On the 9th May 1896 the Board's Engineer reported that the artificial Harbour had been completed according to the sanctioned design, and within the sanctioned estimate, which however has been of a somewhat elastic character, through circumstances beyond the Board's Control.

The cost of reconstructing the Harbour after the eastern walls were wrecked was estimated at...		Rs. 45,90,051
In the month of March 1891 an additional estimate was sanctioned amounting to	...	Rs. 12,38,845
A completion estimate was subsequently found to be necessary, and sanction was accorded to the expenditure of an additional sum of	...	Rs. 3,69,122
The total estimated cost of reconstructing the Harbour was therefore	...	Rs. 61,98,018

Total cost of reconstruction.

Revised estimate not exceeded.

22. The above amount, as reported by the Engineer, has not been overdrawn; but the actual cost of reconstruction is not yet known, as the Engineer's accounts are not yet finally closed, and adjustments as indicated in para. 20 *supra* have still to be made.

23. At the time the Harbour was reported as completed the Board had under consideration, in connection with the issue of the debenture loan, the following proposals for improvements to facilitate trade, and to protect and maintain the works.

Proposals for Harbour improvements since abandoned.

A boat basin within the water area	Rs.	6,63,558
Additions to south pier to render it sand right...	,,	54,369
Deepening the Harbour	,,	2,19,069
Sanctioned in G. O., Marine, No. 116, dated 26th February 1896	,,	9,36,996

Other proposals not sanctioned.

Two other works were estimated for, sanction to which was withheld, *viz*:—

Canal entrance	,,	7,52,300
Protective groyne	,,	3,91,355
Total ...	Rs.	20,80,651

Harbour Improvement Committee.

24. The Trustees had approved the first three of the above items, after consideration of a report by a Committee appointed by Government to report upon Harbour improvements, which was presided over by the Hon'ble Colonel Pennycuick, R.E., one main feature being a canal entrance from the north-west corner of the Harbour. The Committee recommended a boat-basin across the western side of the Harbour, with a canal entrance in the above position, beyond which were to be provided quays, and ample space for dealing with the large coal traffic of the Port, in a locality convenient for despatch by railway; but in considering these proposals, the Harbour Board adopted a modified form of basin confined to the south-west corner of the Harbour, as being sufficient for general cargo, while coal was left to be dealt with in the north-west, beyond the canal entrance as proposed by the Committee, in and near the present block-making ground, and with the additional facility of a deep-water berth, alongside of which a steamer could lie to discharge coal and horses, or to embark troops or passengers.

Canal entrance from N. W. corner abandoned.

25. It was understood that Government would pay for the construction of the canal entrance; but when it was found that the idea of making a canal from the north-west corner of the Harbour had been abandoned, it became obvious that to provide the necessary accommodation for the coal trade at that spot, the Board would have to incur the whole of the expense necessary to form the entrance; and the Trustees were of opinion that they would not be justified in spending so large a sum—over seven-and-a-half lakhs of rupees—to

provide an entrance only to a coal basin, the cost of which would still have to be added, and had not even been estimated for, as it was intended simply to widen out the canal, and to use the canal itself for landing coal from lighters.

Reconsideration of proposal necessary.

The Trustees, therefore, had to reconsider the whole question, and decide whether other satisfactory arrangements could not be made, which would not involve so large an expenditure.

Nautical objections to curtailing water space

26. The nautical authorities had throughout the discussion of the question of Harbour improvements, consistently and unanimously objected to any curtailment of the water area of the Harbour; but their objections, and the disadvantages pointed out, were over-ruled, as being of less importance than the advantages to be gained.

Proposals found inadequate.

Without the canal section the boat-basin, as sanctioned in the south-west corner of the Harbour, was however found to be totally inadequate to meet the requirements of the Port, and therefore, apart from nautical objections to it, had to be abandoned.

Mr. Parkes' original proposals for a Boat Basin.

It was part of Mr. Parkes' original proposals to provide a boat-basin in the sand to the south of the Harbour, and the Board, in reluctantly abandoning proposals previously approved, were compelled to seek a solution of the difficulty in that direction.

Better facilities for coal necessary.

27. The necessity for providing better facilities for landing coal is daily increasing in importance; the trade has assumed large dimensions, and additional facilities tending to reduce charges will, it is hoped, lead to still further increased imports.

Custody of Goods landed.

The present arrangements for landing cargo on the iron screw pile pier and upon the beach inside the Harbour, and of storing all general cargo inside the sheds attached to the Custom House, is most inconvenient; the trade of the port having completely outgrown the available accommodation, while the actual custody of goods being with the Collector, the Board cannot undertake the charge of goods as landed, as is the case at Bombay and other large Indian ports, which system the Chamber of Commerce is anxious to see introduced at Madras, and it has formed the subject of correspondence with Government, whose orders are awaited.

Orders of Government awaited.

North East entrance.

28. In dealing with the question of Harbour improvements, the Board has not lost sight of the evidence given by Mr. Parkes before the Committee appointed by the Secretary of State for India in April 1887, when Mr. Parkes stated that a north-east entrance to the Harbour could be constructed for *thirteen lakhs of rupees*, and a ship dock in the sand to the south of the Harbour for *fourteen lakhs*; but the Agents of Steamers assert that vessels in the Madras Harbour can do a better day's work overside into lighters than alongside any dock wall, and the Trustees do not consider, therefore, that the time has yet arrived to provide a ship dock in connection with the Harbour, but agree with Mr. Parkes that, when that time does come,

Docks.

Accretion of sand.

the sand which has accreted to the south of the Harbour is the best place for it, and owing to its rapid accumulation will afford more space and better facilities for the construction of a dock, at an earlier date, than Mr. Parkes anticipated.

Docks for Coal.

The question of providing a dock for coal only has not been urged upon the Board by those merchants interested in that trade.

Boat-basin approved as originally proposed by Mr. Parkes.

29. Under all the circumstances of the case, the Trustees adopted a suggestion for a boat-basin to be constructed in the sand to the south of the Harbour, and these proposals were submitted to Government on the 6th November 1896.

Estimate for Boat-basin awaited.

The Board's Engineer was then absent from Madras, so that the Trustees were unable to submit at the same time an estimate of the probable cost; but as Mr. Parkes had stated that a ship dock could be constructed for Rs. 14,00,000, it is presumed that a shallow boat-basin should not be a very expensive undertaking, and, as there are no features in the scheme requiring special knowledge of engineering problems connected with Harbour construction, a request was then made that an estimate might be prepared in the Public Works Department.

In its order thereon, No. 834 Marine, dated 1st December 1896. Government directed that the Engineer in charge of the Buckingham Canal Division, who was estimating for a canal connection, should prepare an estimate, in consultation with the Board's Engineer, who had then returned to Madras. This estimate is awaited.

Accretion of sand.

30. The question of rendering the south arm of the Harbour sand tight has also been under the consideration of the Board, and on the 15th December the Trustees remarked, in addressing Government, that it is no doubt desirable that the south arm should, if possible, be made sand tight; but as dredging plant appears to be a necessity in the near future, the question will have to be carefully considered whether the small quantity of sand which filters through the south arm in the course of a year cannot be more economically kept under control by dredging it away, than by attempting to prevent its finding an entrance through the wall. The sand which has during the past fifteen years accumulated along the south arm has not yet encroached upon Nos. 1 and 9 berths to any greatly inconvenient extent. Since this view was taken, it has been decided that the dredger *Wenlock* shall be transferred to the Trust, and it is understood that she is well adapted, even as a bucket dredger, to remove whatever of this sand bank it may be advisable to lift, and will be of still greater service if converted into a pump dredger. It would therefore appear that the expenses of rendering the south arm sand tight will not have to be incurred.

Dredging.

Dredger "*Wenlock*" transferred to the Trust.

Protective groyne unnecessary.

31. The last item referred to in para. 23, the protective groyne to the south of the Harbour, was a work that the Board was informed was an absolute engineering necessity, to keep the sand from blocking

up the entrance to the Harbour, and its estimated cost was Rs. 3,91,355; not a very large amount considering the importance of the object for which it was to be constructed; but the question of the sand now accreting to the south ultimately blocking the entrance was a matter of so much moment that the Trustees requested that a reference might be made to Sir Alexander Rendel, and it was decided that the Board's Engineer should go to England to give all information required to enable him to come to a decision as to whether this groyne was necessary, and whether, if constructed, it would protect the entrance as anticipated.

32. The result of this reference was communicated to H. E. the Governor in Council in a despatch from the Right Hon'ble the Secretary of State for India, No. 6, Public Works, dated London, 29th October 1896, as follows:—

Sir Alexander Rendel considers dredging probably sufficient to deal with sand accretion.

"Sir A. Rendel hopes, and expects, that the difficulties "caused by the movement of the sand may be removed by dredging, "and he recommends that a sand pump dredger should be purchased "at a cost of about £12,500."

This opinion of Sir Alexander Rendel is, the Board considers, most satisfactory and reassuring. Government has since sanctioned the transfer to the Trust of the dredger *Wenlock*, as noticed above, and the Board's Engineer has reported that there will be no difficulty in converting her from a bucket to a pump dredger.

Roadstead to be surveyed.

33. The reported shoaling of the Roadstead is also a matter upon which there appears to be a diversity of opinion, and to settle this authoratively, Government has sanctioned the deputation of a trained Surveyor of Her Majesty's Indian Marine Service. It would appear from ancient records in the possession of Government, that this coast line and roadstead have, from time to time, been subject to varying conditions and influences, resulting in the temporary erosion or accretion of sand, affecting the contour of the coast, and the soundings within a limited distance from the shore.

Accretion of sand south of the Harbour foreseen by Mr. Parkes.

The construction of the Harbour has undoubtedly been the cause of the accretion of sand to the south, which is now so prominent a feature of the coast line, from the north of the river Cooum to the south arm of the Harbour, a distance of less than two miles, but the formation of this accretion was foreseen by Mr. Parkes, and the area, which he anticipated would thus be gained, was regarded by him as a valuable addition to the Harbour, available for constructing a boat-basin and docks.

Dredging.

It is satisfactory to have the assurance that should this accretion form very much more rapidly than was anticipated, and ultimately threaten to shoal the entrance, that dredging will probably be all that is needed to keep it open.

Harbour extension.

Beyond this however, as Sir Alexander Rendel points out, there is the practicability of extending the walls of the Harbour into

North-East entrance.

deeper water, and forming a new entrance, should it be necessary to do so at some future time.

34. That any threatened shoaling of the entrance can take place so suddenly as not to give ample time to devise schemes to counteract it is, the Trustees consider, unlikely. While, therefore, they fully concur in the view expressed by the Hon. Colonel McNeil Campbell, in his note, dated 30th July 1896, that the only really satisfactory solution of the difficulty is the north-east entrance, they do not think that the time has arrived to take into consideration the question of the expense involved; and in any case would prefer to await the result of a really bad cyclone, to thoroughly test the present works, before going into the question of improvements, involving any radical alteration in the design or form of the Harbour, or of its present entrance.

The importance of this decision of the Board, is at once apparent, when it is remembered that the last great storm which visited the port completely wrecked the eastern walls, very much to the surprise of their designers and builders, and it must be remembered that, although the walls as now reconstructed are very much stronger in section, and are protected by an immense wave-breaker screen of random blocks, while the capping is a further source of stability, they have not yet stood the practical test of a heavy cyclonic sea.

Such moderate cyclonic depressions as have visited the port, since the Harbour walls were rebuilt, tend to prove that the structure should withstand the worst weather it is likely to encounter and remain practically undamaged, but it would be satisfactory to the Board to see the test successfully surmounted, before taking into consideration improvements necessitating any very heavy additional outlay.

Traffic Manager's report.

35. The Traffic Manager's report gives, as usual, much useful and interesting information. During the year under review quarterly returns have been issued of goods imported and exported, and statistics have thus been kept up to date; but the Traffic Manager, and his office staff, must be complimented upon the very prompt manner in which these returns have been issued so soon after the close of the official year.

Increase in import dues.

36. *Import dues* show the substantial increase of Rs. 41,172, which is due chiefly to the increased imports of coal and railway material.

Increase in coal trade.

The coal trade has been steadily increasing for several years past, but during the period under review the imports from foreign ports have decreased, while those from Bengal have increased; as follows:—

	1895-96. TONS.	1896-97. TONS.	+ or − TONS.
Foreign ports ...	101,025	69,246	− 31,779
Bengal ...	30,596	79,361	+ 48,765
	131,621	148,607	16,986

It will thus be seen that, although the total has increased by 16,936 tons, foreign coal has decreased by 31,779 tons, while Bengal coal has increased by 48,765 tons.

The great bulk of the coal imported was for the Gold Mines of Mysore; and during the year, to meet the requirements of this trade, new sidings have been laid, and the coal hard has been extended sufficiently to accommodate six additional cargoes of 4,000 tons each.

Coal must shortly be stored on the accretion of sand south of the Harbour.

The space at the disposal of the Board, between the north arm of the Harbour and the iron screw pile pier, does not admit of any further extension, and so long as coal is stored there, little if any economy can be effected in the charges for landing. It is becoming more than ever necessary to transfer the storage ground for coal to the space formed by the accretion of sand to the south of the Harbour; but this cannot be done until the proposed boat-basin has been constructed, or other means adopted for economically depositing it there. The boat-basin would at once effect a considerable saving in the cost of landing, as coal could then be discharged in bulk into lighters, instead of being bagged, as at present, and landed through the surf in Masulah boats. The importance of economy in this direction is increasing, owing to the greater use now being made of country coal, more of which is required to do the same work as less English coal; and as the price per ton is less, the charges are proportionately higher upon the value. The increase in the import of railway material is due to the construction of the Bezwada-Madras line.

Reduction in boathire charges necessary.

Exports.

37. *Exports* show only a small increase caused chiefly by larger shipments of jaggery. The importance of reducing shipment charges upon bulky goods of small value is obvious, and a considerable economy can be effected when the boat-basin is constructed. The charges on salt especially would be so lowered as to materially assist that trade, if it should be practicable to take canal boats loaded with salt alongside steamers in the Harbour.

Porterage.

38. *Porterage.*—The Traffic Manager gives some interesting particulars of the economy effected by the Board since it undertook the departmental porterage of import cargo, and it will be observed that, compared with the year 1890-91, the savings to the trade of the port effected by the reduced charges, which he enumerates, have amounted to no less than Rs. 73,000 during the year 1896-97. This, as pointed out by the Traffic Manager, is not a profit made by the Board out of the work, which has gone to swell the cash balance of the Trust, but a direct saving to importers; that is, the charges levied upon goods for the work as now done by the Traffic Department has, by a series of small reductions, been reduced by that amount, and importers have paid so much less than they would have done, had the Board not undertaken the work, and reduced the charges from time to time as found practicable.

Satisfactory saving to the Trade of the Port.

Further economies desirable.

These reductions are satisfactory so far as they go; but now that the Harbour has been completed, further economies may reasonably be expected by merchants, by means of improved facilities being given, which will enable them to reduce the present high rates of conveying goods between ship and shore, and *vice versâ*, with which transport by water the Board has nothing to do.

Improved landing and shipping facilities.

A boat-basin with ample shed accommodation, warehouses, and large space for the storage and handling in the open of such cargo as coal, would by also providing security for floating craft in a cyclone, enable merchants to procure larger and more suitable lighters, and thus at once reduce the present high rates of boat-hire.

Provident fund.

39. *Provident Fund.*—This account opened with invested funds in Government 3½ per cent. paper *par* value Rs. 73,500, taken at the then market rate of 104 per cent. at Rs. 76,440. These securities have not been touched, but the closing market value is taken at 101 per cent. Rs. 74,235 showing a depreciation of Rs. 2,205 on the twelve months.

The opening cash balance was Rs. 9,400-9-9, and the year closes with a cash balance of Rs. 9,754-7-10.

Subscriptions and contributions have amounted to Rs. 13,855-6-8 interest on Government Securities Rs. 2,565-11-6. Total Rs. 16,421-2-2.

The charges during the year have been heavy owing to Rs. 12,937-13-8 having been paid to employés in the Harbour Works Department who have left the Board's service on reduction of establishment. Total charges during the year Rs. 16,067-4-1.

An attempt has been made during the period to utilise the Provident Fund for the benefit of subordinate employés, by granting them advances from their own subscriptions, not as a rule exceeding one months pay, for the same purposes as those for which outright payments are made from the coolies provident fund, viz., domestic occurrences.

Upon an advance being granted the Chairman becomes the nominee of the borrower, until the loan is liquidated by payment of fixed monthly instalments deducted from salary.

The object is to keep subordinates, drawing from Rs. 5 to Rs. 20 per mensem, out of the hands of the Sowcars, from whom they would otherwise obtain loans at exhorbitant rates of interest on the occasion of marriages and other domestic occurrences in their families.

This system of advance is tentative and on trial. Should it keep the lowest paid grades out of the Sowcars clutches it will prove useful; but it remains to be seen whether an advance made from Provident Fund will not be open to the abuse of being simply made the means of increasing the indebtedness to Sowcars.

Coolies' Provident Fund.

The Coolies' Provident Fund has again proved itself a most useful institution. The receipts have been Rs. 1,275 deducted from the coolies' wages, and a similar amount contributed from Porterage funds by the Trust, unclaimed coolies' wages, Rs. 29, and interest on investments, Rs. 51. Total Rs. 2,630.

Coolies' Provident Fund pensions and allowances.

The charges have been as follows:—	Rs.
Pensions to widows of coolies killed ...	77
Pensions to coolies permanently injured.	101
Allowances to wounded coolies, while in hospital under medical treatment ...	331
Allowances for 68 marriages	507
Do. „ 77 births	158
Do. „ 91 deaths, in coolies' families.	314
Total... Rs.	1,488

Coolies' Provident Fund.

Rs. 1,500 3 % Government pro-notes par value have been purchased, at a net cost of Rs. 1,484-15-0, and the invested funds now amount to Rs. 3,000 par value, or Rs. 2,955, the market value at upon the 31st March, against Rs. 1,500 at 104 = Rs. 1,560 last year. The balance of cash in the Bank of Madras amounts to Rs. 551-3-3 against Rs. 894-9-6 in 1895-96.

Increases of resources.

That the invested funds should have doubled is very satisfactory, especially when it is remembered that all pensions and allowances are controlled by the coolies themselves, who assemble and investigate all claims in a sort of punchayet, consisting of maistries and coolies, and make their recommendations for the Chairman's approval and sanction.

The allowance of 4 annas *per diem* to coolies injured while at work is not subject to any such recommendation. When an accident occurs, the Traffic Manager reports the circumstances, and the money is paid on production of a medical certificate.

Deputy Ports Conservator's report.

40. The Deputy Conservator's report shows that the efficiency of his department has been considerably enhanced. A mooring boat has been provided, which has proved useful and satisfactory, also economical, inasmuch as it has saved the undue wear and tear upon the Harbour Masters' boats, previously unavoidable, when they were used for a purpose for which they were not constructed, in shackling onto and unshackling steamers' heavy cable chains from the head mooring buoys, which have been provided to all the berths inside the Harbour. For this service a strongly-built boat, more like a small lighter, is required. The steam launch has been made more use of than formerly, which expedites the berthing of steamers entering the Harbour.

Enhanced efficiency.

Entrance lights.

41. The Entrance lights have given every satisfaction, and have been in charge of the Deputy Conservator since the 4th June 1896

Accidents.

42. Only one accident of any moment occurred inside the Harbour. On the 27th November the S.S. "*Secundra*" parted her chain cable at No. 9 mooring, and stranded on the sandy bottom alongside the south arm, during the pervalence of a moderate cyclone; but, after being lightened, was towed off uninjured by two other steamers, also belonging to the British India Company.

S.S. "Secundra" stranded.

Cyclone Code.

The opportunity was taken by the Deputy Conservator to make the wreck signals prescribed by the Cyclone Code, which worked satisfactorily; all departments concerned promptly responded to the signals.

Cyclone 27th November 1896.

43. The other vessels inside the Harbour on the 27th November remained at their moorings, landing and shipping operations were obstructed to a considerable extent by the swell inside, but the rain and wind interfered with the handling of cargo even more than did the sea.

With this exception cargo has been landed and shipped inside the Harbour without interruption throughout the year.

S.S. "Dunera."

44. On June 15th, the "*Dunera*" parted her stern lines in a squall; but all vessels are provided when moored inside the Harbour with sufficient space to swing clear of the next berth, and no damage was done.

Sailing barque "David."

45. On May 1st, the sailing barque "*David*" from Negapatam for Coconada in ballast, put into Madras Roadstead, leaking badly; and as pumps could not be obtained to keep her free, the water gained, and she had eventually to be beached at Cassimode, north of the extended revetment, where she became a total wreck, and was broken up.

Minor casualties.

46. A few minor casualties to small boats and lighters occurred during the year which are reported in detail by the Deputy Conservator, but which are of no moment.

Shipping Office.

47. The work in the Shipping Office has considerably increased. It is satisfactory to note that out of the large number of seamen visiting the port only one, a native, was sent to gaol. The usual periodical statements and returns have been furnished to the Board of Trade, and submitted to Government.

48. Accompanying this report are nine photographs, the negatives of which were kindly taken for the Trustees by Mr. F. Dunsterville, the President of the Amateur Photographic Society.

These pictures illustrate the mercantile aspect of the Harbour.

MADRAS,
23rd *April* 1897.

Chairman.

Secretary.

To

THE HON'BLE COL. D. McNEIL CAMPBELL, R.E.,
Secretary to Government,
Marine Department.

Extract of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the Offices of the Board on Friday, the 23rd day of April, 1897.

* * * * * *

10. Draft Administration Report for 1896-97, having been printed and circulated to each Trustee was laid upon the Board's table and discussed.

The Chairman remarked with reference to the paragraph in the Deputy Conservator's report regarding the Time Signal, that he had discussed the matter with the Government Astronomer, who agreed with the Deputy Conservator that the present semaphore was preferable to a time ball; that he concurred in this opinion, and desired it to be placed on record that he saw no advantage to be gained by substituting a time ball.

The Chairman also brought to notice, with reference to the Provident Fund, that there did not appear to be any rule specifically empowering him to pay provident fund monies to the nominees of employés whose services had been dispensed with on reduction of establishment, or who had been permitted to resign.

Resolved that the action of the Chairman in paying such sums is approved and confirmed.

Various alterations and amendments in the text of the report were made after discussion.

As the accounts accompanying the report had not been audited, the Secretary submitted certificates from the Bank of Madras of the cash balance at credit of each account on the 31st March, these were compared with the balances shown in the accounts, were found correct, and ordered to be printed at the foot of each statement.

Invested funds, as shown in the various accounts, were compared with Bank of Madras safe custody receipts, and found correct.

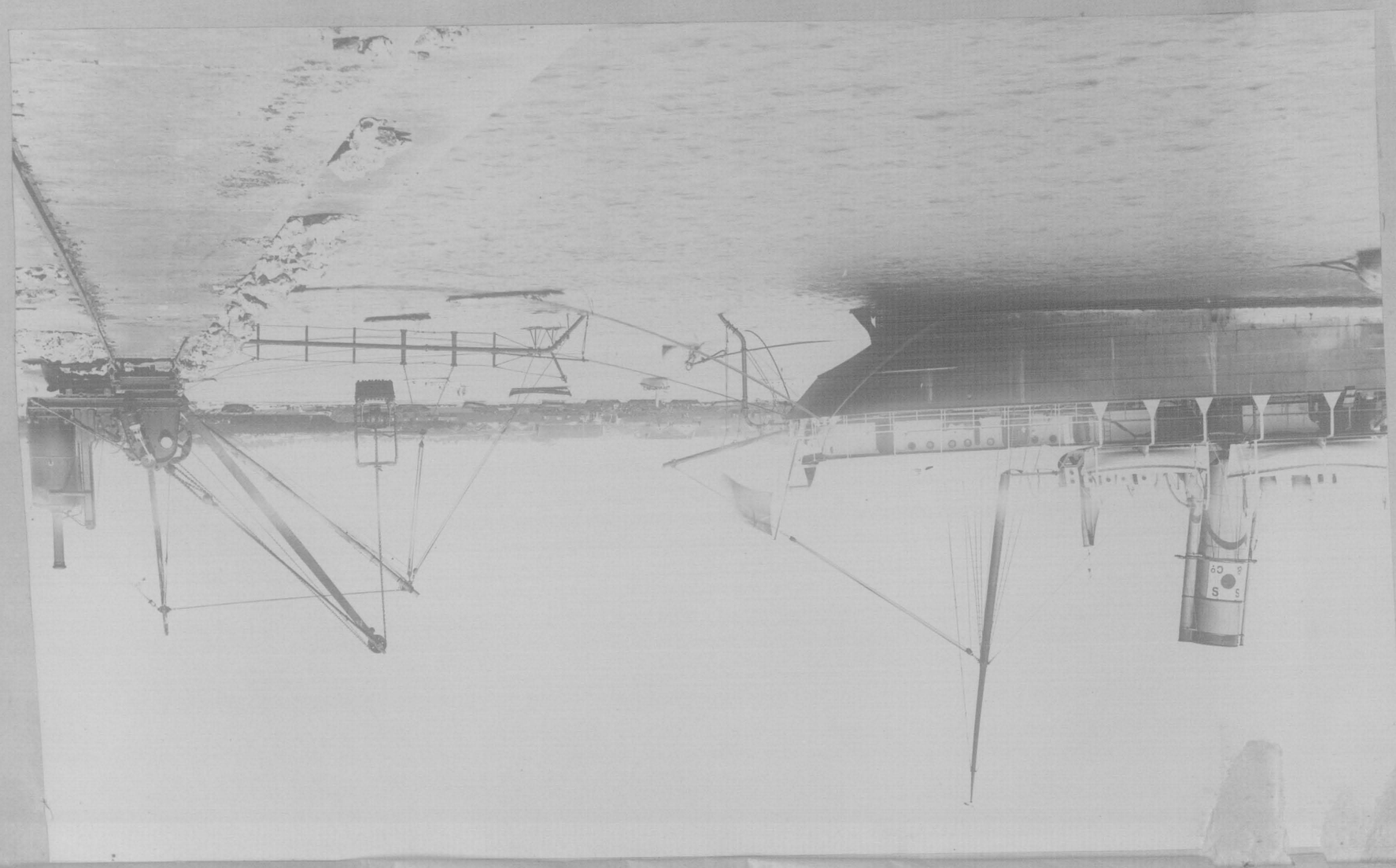
The Trustees directed to be placed on record their appreciation of the prompt manner in which departmental reports, and the accounts for 1896-97 had been submitted and closed. The Chief Accountant's department has also given satisfaction.

The Administration Report was then approved and passed.

* * * * * *

True extract.

C. PINSENT,
Secretary Harbour Trust Board.



S.S. "Trocas"
discharging kerosine oil in bulk.

Derrick supporting pipe through which oil is pumped.

Steam crane dredging on rubble base.




COAL
COAL
COAL


COAL
COAL
COAL



View of Harbour from top of Port Office looking East.



S.S. "Clan Macintosh" discharging general cargo.

S.S. "Clan Gordon" loading for London.
S.S. "Shahjehan" for Port Blair.
S.S. "Maharani" from Calcutta for coast.

The following Statement gives in detail the receipts and charges of the Revenue Account, from 1st April 1896 to 31st March 1897.

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening Balance.			
Government Securities (Par value 4,13,900)	.....	.....	4,30,456 0 0 @ 104 %
1. Cash in the Bank of Madras ...	3,48,523 0 6		
2. General Cash in Office	1,025 1 2		
3. Advance for Contingencies... ...	500 0 0		
		3,50,048 1 8	
Receipts.			
I. Contributions from Port Funds ...	.....	2,44,688 5 0	
II. Beach Imports: Dues under Section 45 (*a*) I (i) (ii) (iii)...	2,03,205 8 11		
Pier do. do. do. ...	85,988 11 8		
Beach Exports do. do. ...	27,491 13 9		
Pier do. do. do. ...	49,714 2 10		
Wharfage do. II. ...	6,095 0 0		
Cranage do. III. ...	56,997 15 11		
Storage do. IV. ...	841 5 2		
Demurrage do. V. ...	285 14 1		
Dues for entry of Vehicles under Section 45 (*c*) VI	12,617 6 9		
Provisions:—Dues on—under Section 45 (*a*) I (i)	679 15 0		
Rent of Properties	822 14 8		
Water:—charge for—delivered at pier head...	5,532 0 0		
Penalties under Section 84	33 0 0		
Sundries	151 1 9		
		4,50,456 14 6	
III. Porterage under Sec. 45 (*a*) I (iv)—			
Beach	74,970 4 7		
Pier	43,333 15 9		
Miscellaneous	13 1 0		
		1,18,317 5 4	
IV. Interest on Government of India, 3½ per cent. Promissory Notes	.....	16,259 3 2	
Cost of Government Securities purchased	.....	.....	2,87,420 0 0
Proceeds of Government Securities sold	.....	2,02,243 0 0	
Total Rupees...		13,82,012 13 8	7,17,876 0 0
Charges.			
I. Interest (under Section 30)	.....	2,11,472 6 4	
II. Repayment of Loan for Construction of Harbour under Section 31 ...	.....	1,00,000 0 0	
III. Refunds	2,232 15 8		
IV. Engine Haulage	.....		
V. Fees to Trustees	7,410 0 0		
VI. Chairman's Allowance	4,800 0 0		
		14,442 15 8	
VII. *Establishment*—			
1. Secretary's Salary	10,877 15 4		
2. Correspondence Department ...	3,747 15 8		
3. Accounts Department	6,600 0 0		
4. Cash Department	5,148 3 4		
5. Traffic Department (Shore Staff) ...	23,497 2 7		
6. Preventive Service	8,924 3 1		
7. Do. do. Boatmen ...	1,226 9 4		
8. Tidal Observatory	415 0 0		
9. Exchange Compensation Allowance..	4,567 7 3		
10. Contribution to Govt. for Pensions...	766 12 1		
11. Do. to Provident Fund ...	4,101 12 9		
12. Engineer's Department	23,100 13 4		
		92,973 14 6	
VIII. Contingencies—			
(*a*) *Subject to Regular Audit*—			
Postage	48 5 10		
Receipt Stamps	236 2 0		
Telegrams	18 5 0		
Furniture	141 7 0		
Fees for Audit	11,866 10 8		
Law Charges	50 0 0		
Stationery and Printing	3,637 8 1		
Advertisement Charges	85 0 0		
Uniform for Preventive Service, &c...	1,349 8 0		
		17,432 14 7	
Carried over ...			

ondon.

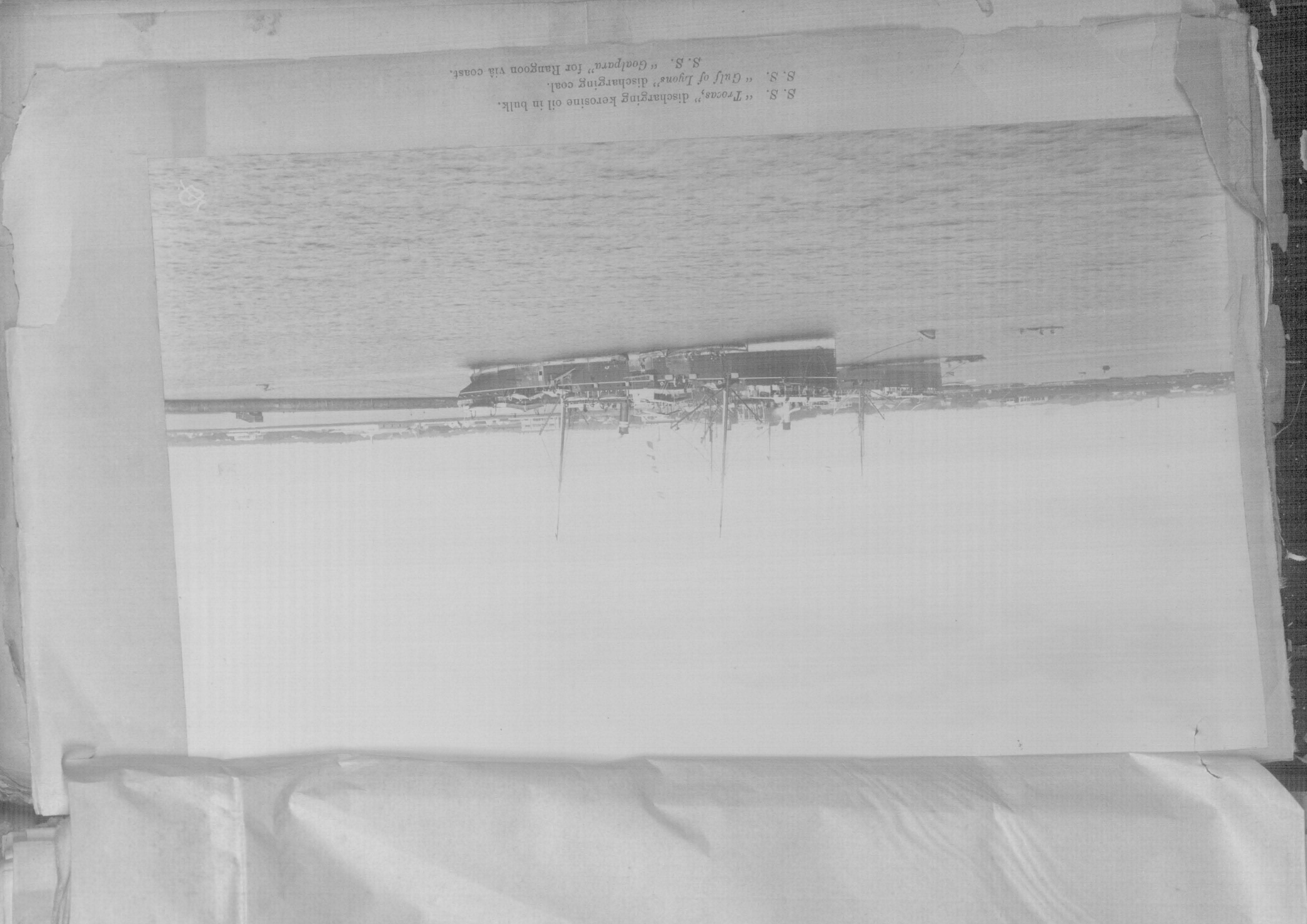
S. S. "*Shahjehan*" for Port Blair.

S. S. *Maharani* from Calcutta for coast.

S. S. "*Clan Macintosh*"
discharging general cargo.

S. S. "*Avala*"
discharging coal.

S. S.



S. S. "*Trocas*," discharging kerosine oil in bulk.
S. S. "*Gulf of Lyons*" discharging coal.
S. S. "*Goalpara*" for Rangoon via coast.

	Rs. A. P.	Rs. A. P.	Rs. A. P.
Brought forward ...			
(*b*) *Admissible without Detailed Audit*—			
Overtime Fees to Establisment ...	4,056 9 11		
Do. Preventive Service and Boatmen ...	2,853 5 5		
Miscellaneous	8,733 1 5		
		15,643 0 9	
IX. *Petty Construction and Repairs*—			
New Works	1,879 12 3		
Repairs	8,083 13 2		
Tools and Plant	220 0 0		
		10,183 9 5	
X. *Porterage*—			
1. Establishment	9,461 12 1		
2. Coolies, Beach	49,750 9 7		
3. Do. Pier	21,151 13 9		
4. Do. Custom House	13,473 14 11		
5 Coasting Cargo	1,483 3 9		
6. Cart Hire	739 8 3		
7. Steam Crane Charges	1,931 15 0		
8. Refunds	6,227 13 9		
9. Claims for Losses and Damage of Cargo.	1,659 11 5		
10. Contribution to Government for Pensions	17 1 6		
11. Contribution to Provident Fund ...	536 12 2		
12. Provident Fund Deductions from Coolies' wages ...	1,275 0 2		
13. Do. Contributions by the Trust.	1,275 0 2		
		1,08,984 4 6	
(*a*) CONTINGENCIES—*Subject to Regular Audit*—			
Postage	.....		
Receipt Stamps	.....		
Furniture	13 13 0		
Tarpaulins	1,473 12 8		
Law Charges	.....		
Stationery and Printing	685 3 9		
Lighting Pier and Yards	1,323 4 7		
		3,496 2 0	
(*b*) CONTINGENCIES—*Admissible without Detailed Audit*—			
Overtime fees to Establisment ...	2,089 12 10		
Miscellaneous	3,127 4 0		
		5,217 0 10	
XI. CAPITAL ACCOUNT			
Major Works.			
(*a*) Harbour Improvements	.....		
(*b*) Moorings	23,567 7 2		
(*c*) Other New Works	13,963 0 0		
(*d*) Establishment	.....		
(*e*) Other debit transactions—			
(i) Acquisition of land	18,568 5 0		
(ii) Protective Works	10,301 0 0		
(*f*) Tools and Plant	1,00,400 0 0		
(*g*) Contingencies	.....		
		1,66,799 12 2	
XI. Advances to Construction Account ...	.....	11,404 15 6	
Government Securities purchased (2,80,000)	.....	2,87,420 0 0	
Government Securities sold (2,00,000)..	.....	.....	2,02,243 0 0
Total, Expenditure ...		10,45,471 0 3	2,02,243 0 0
Closing Balance on the 31st March 1897—			
Govt. Securities (Par value 4,93,900)	.....	.....	4,98,839 0 0 @ 101 %
Cash in the Bank of Madras ...	3,35,794 2 0		
General Cash in Office ...	247 11 5		
Advance for Contingencies	500 0 0		
Net depreciation in Government Paper.	.....	.....	16,794 0 0
		3,36,541 13 5	
Total Rupees ...		13,82,012 13 8	7,17,876 0 0

N.B.—These balances exclude Rs. 500 with the Traffic Manager for meeting daily Porterage charges and Rs. 15 with the Cashier for meeting charges on account of Postage and Receipt stamps.

MADRAS,
9th April 1897.

H. E. HOPE-ROSS,
Chief Accountant,
C. PINSENT,
Secretary.

BANK OF MADRAS, *13th April* 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Revenue Account, amounted to Rs 3,36,266-14-8 (Rupees three lacs thirty-six thousand two hundred and sixty-six annás fourteen and pies eight.)

(Signed) J. A. MACKENZIE,
Accountant.

MEMO.

In the Bank of Madras ...	... Rs.	3,36,266 14 8
Deduct.		
Cheque uncashed No. 1063		472 12 8
Balance as per General Cash Book		3,35,794 2 0

The following statement compared the Budget Estimate for 1896-97 and the Revised Estimate with Actuals.

ITEMS.	Sanctioned Budget Estimate for 1896-97.	Sanctioned Revised Budget Estimate for 1896-97.	Actuals of 1896-97.	Plus or Minus.	REMARKS.
	Rs.	Rs.	Rs.	Rs.	
REVENUE ACCOUNT. Opening Balance...	7,53,777	7,50,112	7,80,504		
Receipts.					
I. Contributions from Port Funds ...	40,000	77,331	2,44,988	+ 1,67,357	
II. Beach Imports: dues under Section 45 (*a*) I					
(i) (ii) (iii) ... ... do.	1,75,000	1,80,000	2,03,206	+ 23,206	
Pier do. do.	74,000	80,060	85,989	+ 5,989	
Beach Exports do. do.	28,000	30,000	27,492	— 2,508	
Pier do. do.	45,000	50,000	49,714	— 286	
Wharfage do. II ...	6,000	7,000	6,095	— 905	
Cranage do. III ...	40,000	55,000	56,998	+ 1,998	
Storage do. IV ...	1,000	800	841	+ 41	
Demurrage do. V ...	500	300	286	— 14	
Dues for entry of Vehicles under Sec. 45 (*c*) VI..	12,000	10,000	12,618	+ 2,618	
Provisions: Dues on — under Section 45(*a*) I (i)	500	600	680	+ 80	
Rent of Properties	500	800	823	+ 23	
Water: Charge for — delivered at pier head ...	4,000	5,000	5,532	+ 532	
Penalties under Section 84	...	20	33	+ 13	
Sundries	100	200	151	— 49	
III. Porterage under Section 45 (*a*) I (iv)—					
Beach	65,000	67,000	74,970	+ 7,970	
Pier	40,000	43,000	43,334	+ 334	
Miscellaneous	100	100	13	— 87	
IV. Interest on Government of India, 3½ per cent. Pro. Notes	14,000	15,000	16,259	+ 1,259	
V. Cost of Government Securities purchased ...	...	...	2,87,420	...	
VI. Proceeds of Government securities sold ...	...	...	2,02,243	...	
Total Receipts...	5,41,700	6,22,151	13,19,385		
Total...	12,95,477	13,72,263	20,99,889		
Charges.					
I. Interest (under Section 30)	2,37,000	2,11,472	2,11,472	...	
II. Repayment of Loan for construction of Harbour under Sec. 31	1,00,000	1,00,000	1,00,000	...	
III. Refunds	1,500	2,000	2,233	+ 233	
IV. Engine Haulage	2,000	2,000	...	— 2,000	
V. Fees to Trustees	7,500	7,500	7,410	— 90	
VI. Chairman's Allowance	4,800	4,800	4,800	...	
VII. *Establishment*—					
1. Secretary's Salary	9,600	10,878	10,878	...	
2. Correspondence Department ...	3,864	3,700	3,748	+ 48	
3. Accounts Department	6,880	6,600	6,600	...	
4. Cash Department	5,214	5,200	5,148	— 52	
5. Traffic Department (Shore Staff)	23,724	23,400	23,497	+ 97	
6. Preventive Service	8,880	8,930	8,924	— 6	
7. Preventive Service Boatmen ...	1,368	1,250	1,227	— 23	
8. Tidal Observatory	420	415	415	...	
9. Exchange Compensation Allowance ...	5,591	5,000	4,567	— 433	
10. Contribution to Government for Pensions	775	775	767	— 8	
11. Do. to Provident Fund ...	5,000	5,000	4,102	— 898	
12. Engineers	...	23,000	23,101	+ 101	
VIII. *Contingencies*—					
(*a*)—*Subject to Regular Audit.*—					
Postage	100	100	48	— 52	
Receipt Stamps	200	200	236	+ 36	
Telegrams	50	50	18	— 32	
Furniture	500	200	141	— 59	
Fees for Audit	1,000	14,267	11,867	— 2,400	
Law Charges	500	200	50	— 150	
Stationery and Printing ...	3,000	4,000	3,637	— 363	
Advertisement Charges	500	200	85	— 115	
Uniform for Preventive Service, &c.	1,500	1,500	1,349	— 151	
(*b*)—*Admissible without detailed Audit*—					
Overtime Fees to Establishment...	3,000	4,000	4,057	+ 57	
Do. to Preventive Service and Boatmen ...	2,500	3,000	2,853	— 147	
Miscellaneous	4,000	7,500	8,733	+ 1,233	
IX. *Petty Construction and Repairs.*—					
New Works	5,000	8,000	1,880	— 6,120	
Repairs	10,000	18,000	8,084	— 9,916	
Tools and Plant	1,000	10,000	220	— 9,780	
X. *Porterage*—					
1. Establishment	11,010	9,750	9,462	— 288	
2. Coolies, Beach	42,000	45,000	49,751	+ 4,751	
3. Do. Pier	17,000	19,000	21,152	+ 2,152	
4. Do. Custom House	13,000	12,000	13,474	+ 1,474	
5. Coasting Cargo	1,500	1,500	1,483	— 17	
6. Cart-hire	1,000	1,000	740	— 260	
7. Steam Crane Charges	2,400	2,400	1,932	— 468	
8. Refunds	4,000	6,000	6,228	+ 228	
9. Claims for Losses and Damage of Cargo ...	1,500	1,500	1,660	+ 160	
10. Contribution to Government for Pensions...	23	18	17	— 1	
11. Contribution to Establishment	530	500	537	+ 37	
12. Provident Fund Deduction from Coolies' wages	1,200	1,200	1,275	+ 75	
13. Do. Contributions by the Trust...	1,200	1,200	1,275	+ 75	
(*a*) *Contingencies Subject to Regular Audit.*—					
Postage	10	10	...	— 10	
Receipt Stamps	10	10	...	— 10	
Furniture	200	50	14	— 36	
Tarpaulins	1,500	1,500	1,474	— 26	
Law Charges	50	50	...	— 50	
Stationery and Printing	500	700	685	— 15	
Lighting Pier and Yards ...	1,500	1,500	1,323	— 177	
(*b*) *Contingencies Admissible without Detailed Audit*—					
Overtime Fees to Establishment...	1,500	2,000	2,090	+ 90	
Miscellaneous	1,500	3,000	3,127	+ 127	
XI. *Capital Account*—					
Major Works	...	...	1,66,800	+ 1,66,800	
Advance to Construction Account ...	...	...	11,405		
Government securities purchased ...	...	...	2,87,420		
Do. sold	...	...	2,02,243		
Total Expenditure...	5,57,439	6,03,025	12,47,714		
Closing Balance...	7,38,038	7,69,238	8,52,175		
Total...	12,95,477	13,72,263	20,99,889		

MADRAS,
9th April 1897.

H. E. HOPE-ROSS, *Chief Accountant.*
C. PINSENT, *Secretary.*

The following statement compares in detail the Receipts and Charges of the past year with 1895-96.

Items.	Actuals of 1895-96.	Actuals of 1896 97.	Plus or Minus.	Remarks.
REVENUE ACCOUNT.				
Opening Balance ...	Rs. 7,53,318	Rs. 7,80,404	Rs.	
Receipts.				
I. Contributions from Port Funds ...	33,990	2,44,688	+ 2,10,788	
II. Beach Imports: Dues under Section 45 (a) I (i) (ii) (iii)	1,80,642	2,03,206	+ 23,164	
Pier do. do. do...	67,981	85,989	+ 18,008	
Beach Exports do. do....	30,583	27,492	— 3,091	
Pier do. do. do....	43,723	49,714	+ 5,991	
Wharfage do. II ...	6,357	6,095	— 262	
Cramage do. III ...	43,991	56,998	+ 13,007	
Storage do. IV ...	1,291	841	— 450	
Demurrage do. V ...	473	286	— 187	
Dues for entry of vehicles under Section 45 (c) VI.	12,235	12,618	+ 383	
Provisions:—Dues on — under Sec. 45 (a) I (i)..	590	680	+ 90	
Rent of Properties	686	823	+ 137	
Water: charge for — delivered at pier-head ...	4,885	5,532	+ 647	
Penalties under Section 84	...	33	+ 33	
Sundries	17	151	+ 134	
III. Porterage under Section 45 (a) I (iv)				
Beach	64,653	74,970	+ 10,317	
Pier	36,206	43,334	+ 7,128	
Miscellaneous	34	13	— 21	
IV. Interest on Government of India 3½ per cent. Pro. Notes	14,074	16,259	+ 2,185	
V. Refunds from Construction Account ...	4,28,047	...	— 4,28,047	
VI. Cost of Government Securities purchased ...	...	2,87,420	...	
VII. Proceeds of Government Securities sold ...	...	2,02,243	...	
Total Receipts...	9,70,368	13,19,385		
Total ...	17,23,686	20,99,889		
Charges.				
I. Interest (under Section 39) ...	2,27,607	2,11,472	— 16,135	
II. Repayment of Loan for construction of Harbour under Sec. 31	1,00,000	1,00,000	...	
III. Refunds	1,898	2,233	+ 335	
IV. Engine Haulage	2,852	...	— 2,852	
V. Fees to Trustees	6,870	7,410	+ 540	
VI. Chairman's Allowance	4,800	4,800	...	
VII. *Establishment*—				
1. Secretary's Salary	9,600	10,878	+ 1,278	
2. Correspondence Department	3,628	3,748	+ 120	
3. Accounts Department	6,585	6,600	+ 15	
4. Cash Department	4,887	5,148	+ 261	
5. Traffic Department (Shore Staff) ...	31,486	23,497	— 7,989	
6. Preventive Service	10,955	8,924	— 2,031	
7. Preventive Service Boatmen	1,226	1,227	+ 1	
8. Tidal Observatory	360	415	+ 55	
9. Exchange Compensation Allowance ...	3,313	4,567	+ 1,254	
10. Contribution to Government for Pensions	814	767	— 47	
11. Do. to Provident Fund	3,280	4,102	+ 822	
12. Engineer's Department	...	23,101	+ 23,101	
VIII. *Contingencies*—				
(a)—*Subject to Regular Audit*—				
Postage	49	48	— 1	
Receipt Stamps	222	236	+ 14	
Telegrams	5	18	+ 13	
Furniture	139	141	+ 2	
Fees for Audit	2,000	11,867	+ 9,867	
Law Charges	34	50	+ 16	
Stationery and Printing	3,309	3,637	+ 328	
Advertisement Charges	216	85	— 131	
Uniform for Preventive Service, &c. ...	1,397	1,349	— 48	
(b)—*Admissible without detailed Audit*—				
Overtime Fees to Establishment ...	4,455	4,057	— 398	
Do. to Preventive Service and Boatmen	3,096	2,853	— 243	
Miscellaneous	3,535	8,733	+ 5,198	
IX. *Petty Construction and Repairs*—				
New Works	20,087	1,880	— 18,207	
Repairs	9,282	8,084	— 1,198	
Tools and Plant	220	220	...	
X. *Porterage*—				
1. Establishment...	...	9,462	+ 9,462	
2. Coolies, Beach	42,374	49,751	+ 7,377	
3. Do. Pier	16,644	21,152	+ 4,508	
4. Do. Custom House	12,317	13,474	+ 1,157	
5. Coasting Cargo	1,385	1,483	+ 98	
6. Cart Hire	807	740	— 67	
7. Steam Crane Charges	2,508	1,932	— 576	
8. Refunds	5,947	6,228	+ 281	
9. Claims for Losses and Damage of Cargo ..	2,205	1,660	— 545	
10. Contribution to Government for Pensions..	...	17	+ 17	
11. Contribution to Provident Fund ...	...	537	+ 537	
12. Provident Fund Deductions from Coolies' Wages	1,119	1,275	+ 156	
13. Do. Contributions by the Trust.	1,119	1,275	+ 156	
(a) *Contingencies Subject to Regular Audit*—				
Postage	...	...	...	
Receipt Stamps	...	...	...	
Furniture	97	14	— 83	
Tarpaulins	1,471	1,474	+ 3	
Law Charges	...	...	...	
Stationery and Printing	462	685	+ 223	
Lighting Pier and Yards ...	1,797	1,323	— 474	
(b) *Contingencies Admissible without Detailed Audit*—				
Overtime Fees to Establishment ...	...	2,090	+ 2,090	
Miscellaneous...	1,068	3,127	+ 2,059	
XI. *Capital Account*—				
Major works	...	1,66,800	+ 1,66,800	
Advances to Construction Account ...	4,14,047	11,405	— 4,02,642	
Government Securities purchased ...	...	2,87,420	...	
Do. Sold	...	2,02,243	...	
Total Expenditure ...	9,73,574	12,47,714		
Closing Balance ...	7,50,112	8,52,175		
Total ...	17,23,686	20,99,889		

MADRAS,
9th April, 1897.

H. E. HOPE-ROSS, *Chief Accountant.*
C. PINSENT, *Secretary.*

MADRAS HARBOUR TRUST DEPOSIT ACCOUNT.

Statement of Receipts and Charges from 1st April 1896 to 31st March 1897.

	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Opening Balance.									
Government Securities *par* value				13,600	0	0			
Cash in the Bank of Madras				2,621	3	5			
							16,221	3	5
Receipts.									
Deposit in Government Securities *par* value				2,000	0	0			
Do. in Cash				15,347	3	5			
Interest realised on Government Securities				449	4	1			
Deposit in cash in the Post Office Savings Bank ...				500	0	0			
							18,296	7	6
Total Rs ...							34,517	10	11
Charges.									
Refund of Deposits in Government Securities at *par* ...				4,300	0	0			
Do. do. in Cash				2,757	12	11			
Interest paid to Depositors				449	4	1			
Amount credited to Revenue on account of Cash Deposits for Harbour Dues, &c.				14,310	9	11			
							21,817	10	11
Closing Balance.									
Government Securities deposited par value.									
Messrs. Arbuthnot & Co.	1,000	0	0						
,, Binny & Co.	1,000	0	0						
,, Walker & Co.	1,000	0	0						
,, Dymes & Co.	1,000	0	0						
South Indian Export Company, Limited	1,000	0	0						
Messrs. McDowell & Co.	1,000	0	0						
,, G. W. Deane & Co.	500	0	0						
,, Gordon, Woodroffe & Co.	500	0	0						
,, Parry & Co.	500	0	0						
,, Wilson & Co.	500	0	0						
,, Spencer & Co.	500	0	0						
,, Schonlank Engel & Co.	500	0	0						
,, Oakes & Co.	300	0	0	9,300	0	0			
Government Securities deposited by Contractor.									
V. Numalwar Chetty	500	0	0	500	0	0			
Government Securities deposited by Officials.									
C. Vencatachellum Chetty, Cashier	1,000	0	0						
A. Vencatakristna Pillay, Shroff (Porterage Dept.) ...	500	0	0	1,500	0	0			
							11,300	0	0
Cash deposited by Officials.									
S. Appathoray Moodelly, Asst. Cashier (in the Post Office Savings Bank)	500	0	0	500	0	0			
Cash deposited.									
Messrs. W. J. Eales & Co.	250	0	0						
,, P. Mooroogasam & Co.	250	0	0						
,, Volkart Brothers	200	0	0						
,, Carl Simon Soehne	200	0	0	900	0	0	1,400	0	0
Total Rs...							34,517	10	11

H. E. HOPE-ROSS,
Chief Accountant.
C. PINSENT,
Secretary.

MADRAS,
9th April 1897.

BANK OF MADRAS, *13th April* 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Deposit Account, amounted to Rupees 903-9-4 (Rs. Nine hundred and three, annas nine and pies four).

(Signed) J. A. MACKENZIE.
Accountant.

MEMO.

In the Bank of Madras	Rs.	903	9 4
Deduct.			
Cheque uncashed No. 29	,,	3	9 4
Balance as per cash book	,,	900	0 0

PROVIDENT FUND.

Statement of Receipts and Charges from 1st April 1896 to 31st March 1897.

	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Opening Balance.									
Government Securities (Par value Rs. 73,500) @ 104 per cent.	...	...	...	...	...	...	76,440	0	0
Cash in the Bank of Madras	8,064	13	4						
Cash in Office	1,335	12	5						
				9,400	9	9			
Receipts.									
Revenue Department's Collection	4,100	9	5						
Do. Trust Contribution ...	4,100	9	5						
Porterage Department Collection	537	15	6						
Do. Trust Contribution ...	537	15	6						
Harbour Work's Collections	620	11	5						
Do. Trust Contribution	620	11	5						
Harbour Master's Collections	1,094	6	10						
Do. Trust Contribution	1,094	6	10						
Instalments of refund of Loan granted to employés	1,113	0	0						
Miscellaneous	35	0	4						
				13,855	6	8			
Interest realised on Government Promissory Notes	...	...	...	2,565	11	6			
Total Rs...	...	...	...	25,821	11	11	76,440	0	0
Charges.									
Paid to employés who have left the Trust Service Subscriptions and Trust Contributions—									
Revenue Department	319	14	0						
Porterage do.	355	7	11						
Harbour Works	12,937	13	8						
Harbour Master's Department	68	11	0						
Paid to employés their own Subscriptions only—									
Revenue Department	17	11	5						
Porterage do.	...	...	...						
Harbour Works	...	...	...						
Harbour Master's Department	2	7	9						
Premia on Policies of Life Assurance	1,095	2	4						
Amount of loans granted to employés	1,270	0	0						
				16,067	4	1			
Closing Balance.									
Govt. Securities (Par value Rs. 73,500) @ 101% ...	...	...	...	...	...	...	74,235	0	0
Cash in the Bank of Madras	9,754	7	10						
Cash in Office	...	...	...	9,754	7	10			
Government paper: Difference in market value of.	...	...	...	...	...	...	2,205	0	0
Total Rs...	...	...	...	25,821	11	11	76,440	0	0

MADRAS,
9th April 1897.

H. E. HOPE-ROSS,
Chief Accountant.
C. PINSENT,
Secretary.

BANK OF MADRAS, *13th April* 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Provident Fund Account, amounted to Rupees 9,754-7-10 (Rs. Nine thousand seven hundred and fifty-four, annas seven and pies ten).

(Signed) J. A. MACKENZIE,
Accountant.

COOLIES' PROVIDENT FUND.

Statement of Receipts and Charges from 1st April 1896 to 31st March 1897.

	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Opening Balance.									
Government Securities (Par value Rs. 1,500, @ 104 %	...	...	...	...	...	...	1,560	0	0
Cash in the Bank of Madras	...	...	...	894	9	6			
Receipts.									
Deduction from coolies' wages	1,275	0	2						
Contribution by the Trust	1,275	0	2						
Amount of undisbursed wages credited under Chairman's order, No. 2605, dated 9th January 1893 ...	29	0	7						
Interest on Government Investment	50	12	11						
				2,629	13	10			
Cost of Government Securities purchased Par value Rs. 1,500	...	...	...	...	...	...	1,484	15	0
Total Rs....				3,524	7	4	3,044	15	0
Charges.									
Pensions to widows of coolies who died from effect of accidents	76	9	10						
Pensions to coolies permanently invalided	101	7	3						
Allowance to wounded coolies while under treatment in the hospital @ 4 annas per diem	330	12	0						
Allowance for 68 marriages amongst the families of coolies	507	0	0						
Allowance for 77 births amongst the families of coolies.	158	8	0						
Do. 91 deaths do. do. ...	314	0	0						
				1,488	5	1			
Government Securities purchased during the year ...	...	...	...	1,484	15	0			
Government Securities sold during the year	...	...	...						
Closing Balance.									
Government Securities (Par 3½% Rs. 1,500) at 101% ...	...	...	...	...	...	...	1,515	0	0
Do. do. („ 3% „ 1,500) at 96 % ...	...	...	...	...	...	...	1,440	0	0
Cash in the Bank of Madras	...	...	...	551	3	3	...	...	...
Net depreciation in Government paper	...	...	...	...	...	...	89	15	0
Total Rs. ...	...	...	...	3,524	7	4	3,044	15	0

H. E. HOPE-ROSS,
Chief Accountant.
C. PINSENT,
Secretary.

MADRAS,
9th April 1897.

BANK OF MADRAS, *13th April* 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Cooly Provident Fund Account, amounted to Rupees 551-3-3 (Rs. five hundred and fifty-one, annas three and pies three).

(Signed) J. A. MACKENZIE,
Accountant.

16. The following shows the receipts and charges of the Biden Home account from 1st April 1896 to 31st March 1897 :—

	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Opening Balance.									
Government Securities	1,000	0	0						
Cash in the Bank of Madras	1,906	9	1						
Cash with the Superintendent	50	0	0						
				2,956	9	1			
Receipts.									
Interest on Investments	34	14	8						
Rent from Harbour Masters	1,140	2	0						
Profits realised on boarding seamen	35	2	0						
Miscellaneous	...	...	...						
				1,210	2	8			
							4,166	11	9
Charges.									
Establishment	492	0	0						
Exchange Compensation Allowance	38	11	6						
Contingencies	104	11	3						
Municipal Tax	366	0	0						
Repairs	509	2	3						
				1,510	9	0			
Closing Balance.									
Government Securities	1,000	0	0						
Cash in the Bank of Madras	1,606	2	9						
Cash with the Superintendent	50	0	0						
				2,656	2	9			
							4,166	11	9

H. E. HOPE ROSS,
Chief Accountant.
C. PINSENT,
Secretary.

MADRAS,
9th April 1897.

BANK OF MADRAS, *13th April* 1897.

Certified that the balance standing in the Bank's books on 31st March 1897 at credit of Chairman, Madras Harbour Trust Biden Home Account, amounted to Rupees 1,606-2-9, (Rs. one thousand six hundred and six, annas two and pies nine).

(Signed) J. A. MACKENZIE,
Accountant.

PILOTAGE FUND RECEIPTS.

——	Pilotage Fees.			Stern-fast Boat Hire.			Fees for shifting Berths.			Harbour Master Fees.			Miscellaneous.			Total.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
1895-96																		
April ...	1,465	0	0	153	0	0	...	...	...	460	0	0	...	...	...	2,078	0	0
May ...	2,158	0	0	225	0	0	...	...	...	820	0	0	...	...	...	3,203	0	0
June ...	1,604	0	0	165	0	0	...	...	...	610	0	0	...	...	...	2,379	0	0
July ...	1,732	0	0	177	0	0	...	...	...	540	0	0	...	...	...	2,449	0	0
August ...	1,678	0	0	177	0	0	...	...	...	610	0	0	...	...	...	2,465	0	0
September ...	1,360	0	0	141	0	0	...	...	...	440	0	0	...	...	...	1,941	0	0
October ...	2,072	0	0	207	0	0	...	...	...	840	0	0	...	...	...	3,119	0	0
November ...	1,697	0	0	165	0	0	...	...	...	590	0	0	39	4	0	2,491	4	0
December ...	1,161	0	0	111	0	0	..	...	...	470	0	0	...	...	...	1,742	0	0
January ...	2,056	0	0	192	0	0	...	...	...	670	0	0	...	...	...	2,918	0	0
February ...	1,996	0	0	204	0	0	...	...	...	700	0	0	...	...	...	2,900	0	0
March ...	1,557	0	0	150	0	0	..	...	...	470	0	0	...	...	...	2,177	0	0
Total...	20,536	0	0	2,067	0	0	...	...	...	7,220	0	0	39	4	0	29,862	4	0
1896-97.																		
April ...	2,104	0	0	207	0	0	...	...	...	770	0	0	...	...	...	3,081	0	0
May ...	1,854	0	0	183	0	0	...	...	...	590	0	0	...	...	...	2,627	0	0
June ...	1,651	0	0	168	0	0	...	...	...	650	0	0	...	..	...	2,469	0	0
July ...	2,207	0	0	213	0	0	...	...	...	800	0	0	...	...	...	3,220	0	0
August ...	1,435	0	0	141	0	0	...	...	...	550	0	0	80	15	0	2,206	15	0
September ...	2,286	0	0	234	0	0	...	...	...	830	0	0	...	...	...	3,350	0	0
October ...	1,719	0	0	192	0	0	...	...	...	670	0	0	...	..	...	2,581	0	0
November ...	1,247	0	0	111	0	0	...	...	...	490	0	0	...	...	...	1,851	0	0
December ...	1,471	0	0	174	0	0	...	..	..	720	0	0	..	..	.	2,365	0	0
January ...	2,312	0	0	246	0	0	...	..	...	960	0	0	30	0	0	3,548	0	0
February ...	1,899	0	0	186	0	0	...	...	...	580	0	0	...	...	...	2,665	0	0
March ...	1,725	0	0	183	0	0	...	...	...	600	0	0	...	...	...	2,508	0	0
Total ...	21,910	0	0	2,241	0	0	...	...	...	8,210	0	0	110	15	0	32,471	15	0

H. E. HOPE-ROSS,
Chief Accountant.
C. PINSENT,
Secretary.

MADRAS,
9th April 1897.

MADRAS HARBOUR TRUST

No. 114 T. TRAFFIC DEPARTMENT,
12th April 1897.

To

THE SECRETARY,
HARBOUR TRUST BOARD,
MADRAS.

SIR,

I have the honour to submit the following report on the working of the Board's Traffic Department during the year 1896-97, as compared with previous years.

2. The revenue collected by the Traffic Department during the year amounted to Rs. 5,68,774-3-10 as compared with Rs. 4,94,347-4-1 during 1895-96, showing the very substantial increase of Rs. 74,246-15-9 for the year under review, which is all the more satisfactory that it has not been raised by increases of dues, but is due to the increased volume of the trade of the Port. The details of receipts are as follows:—

	1895-96.			1896-97.		
	RS.	A.	P.	RS.	A.	P.
Imports	2,48,020	13	9	2,89,194	4	7
Exports	74,305	8	6	77,206	0	7
Cranage	43,991	4	3	56,997	15	11
Porterage	1,00,891	15	5	1,18,317	5	4
Entry of vehicles...	12,235	8	3	12,617	6	9
Wharfage	6,956	15	0	6,095	0	0
Storage	1,291	3	8	841	5	2
Demurrage	472	10	9	285	14	1
Water supplied	4,884	12	0	5,532	0	0
Rent	685	12	5	822	14	8
Sundries	607	12	1	864	0	9
Total Rupees ...	4,94,347	4	1	5,68,774	3	10

3. The estimated and actual receipts during the past nine years have been as follows:—

Years.	Estimate revised.	Actuals.	REMARKS.
	RS.	RS.	
1896-97	5,30,020	5,68,774	
1895-96	4,71,900	4,94,347	
1894-95	4,37,200	4,51,309	
1893-94	4,23,000	4,52,137	
1892-93	3,83,000	4,22,938	
1891-92	4,48,500	4,96,749	
1890-91	*2,99,000	4,81,916	* Porterage receipts not estimated.
1889-90	3,06,200	3,26,747	Do. work not done by the Board.

4. The following statement shows in detail the sources of revenue from which the foregoing amounts have been realised, and for ready comparison with

former years the sums collected as cranage has been apportioned to the two items where it was formerly shown, *viz.*, Imports and Exports:—

Receipts.	Years.								
	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
(*a*) Harbour Dues, Imports ...	1,72,481	2,00,099	2,41,441	2,85,071	2,26,678	2,39,872	2,37,163	2,77,441	3,32,121
(*b*) Do. Exports ...	78,568	1,00,945	92,290	80,716	78,332	88,723	97,676	88,880	91,278
(*c*) Wharfage	8,574	10,225	12,470	7,971	6,466	6,775	5,105	6,957	6,095
(*d*) Storage and Demurrage ...	2,773	2,836	3,444	2,923	2,753	2,235	1988	1,764	1,126
(*e*) Rent of Trust Properties ...	3,246	2,946	2,186	1,774	1,249	1,137	687	686	823
(*f*) Water Collections	...	...	...	3,091	3,736	4,126	4,497	4,885	5,532
(*g*) Porterage	...	...	1,22,533	1,08,323	1,02,151	93,047	91,544	1,00,892	1,18,317
(*h*) Entry of vehicles	...	...	...	...	...	13,288	11,869	12,235	12,617
(*i*) Miscellaneous	1,324	2,966	7,562	6,870	1,753	2,934	780	608	864
Total ...	2,66,967	3,26,747	4,81,916	4,96,749	4,22,938	4,52,137	4,52,307	4,94,348	5,68,774

(*a*) The large increase of Rs. 54,680 under this head is due to the increased tonnage of coal and railway permanent-way materials imported. There has been but slight variations in the quantities of other goods imported during the year.

(*b*) Exports have been much the same as last year, the small increase of Rs. 2,398 being due to considerable quantities of jaggery having been shipped during the early part of the year.

It is to be regretted that the tonnage of exports does not increase; but no increase can be expected, unless facilities can be given by which goods of relatively small value such as salt, jaggery, &c., can be cheaply and expeditiously put on board vessels at this port.

(*c*) & (*d*) These charges have by improved facilities for removal been reduced from 15,914 Rupees in 1890-91 to 7,221 Rupees in 1896-97, although in the former year only 288,537 tons of goods were imported as against 385,605 tons in 1896-97.

(*g*) The increase of Rs. 17,425 under the head of porterage is due to large increases in the tonnage of coal and railway materials handled.

It will be noticed that while the amounts received as Harbour dues (at a rate of 12 annas per ton which has remained unaltered) have largely increased, the sums levied as porterage (*g*) and entry of vehicles (*h*) have practically remained stationary, or at any rate have not increased in anything like the same proportion. This is due to the successive reductions, which have from time to time been made in the charges for handling goods; by which the mercantile community of Madras has been directly profited. Had the rates ruling in 1890-91 remained in force, the amount leviable on coal alone, would have been equal to the whole amount of porterage charges realised during the past year. In other words, importers of coal have gained some 50,000 Rupees this year, by the reductions which have been made from time to time since 1890-91. These reductions have been as follows. Loading into wagons, four annas, reduced to two annas. Weighing charges, four annas, reduced to one anna. Entry of vehicles, four annas, reduced to one anna. Had no reductions been made since 1890-91; the porterage charges, and

dues under Section 45 C. VI, (entry of vehicles) would have amounted to at least 2,00,000 Rupees.

Large reductions have also been made in the porterage charges levied on all other classes of goods handled by the Traffic Department so that on the years porterage operations importers have gained some 75,000 Rupees.

The difference in the ratio of Porterage receipts and "Harbour Dues on Imports" will probably be seen more clearly by comparing the receipts under both heads during 1890-91 and during 1896-97. During each of these years the Porterage receipts were largely augmented by the importation of large quantities of Railway permanent-way materials. During 1890-91 the Porterage receipts were Rs. 1,22,533 to which should be added Rs. 25,000 Porterage charges on 40,000 tons of coal paid direct by importers as the Board did not then porterage coal; this gives a proportion of annas 9 and pies 10 for each rupee of Harbour dues received on imports—which alone are porteraged by the Board—and at the same ratio on the collections of 1896-97, *viz.*, Rs. 3,32,121, the sums leviable as porterage and entry of vehicles would have been Rs. 2,04,116, whereas the total collections have been only Rs. 1,30,934, the difference of Rs. 73,182 being the amount importers have saved by successive reductions in Porterage charges levied.

There has been an increase of 58,775 tons in the tonnage of goods landed at, or shipped from, the port during the year, and 99,082 tons increase as against 1894-95.

5. The total tonnage landed at, or shipped from, this port during the past ten years is as under :—

Years.	Pier.			Beach.			Grand Total.
	Import.	Export.	Total.	Import.	Export.	Total.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1887-88 ...	86,258	54,562	140,820	124,721	51,445	176,166	316,986
1888-89 ...	85,133	47,262	132,395	116,464	41,741	158,205	290,600
1889-90 ...	88,419	66,208	154,627	158,240	46,317	204,557	359,184
1890-91 ...	100,154	58,855	159,009	188,383	44,580	232,963	391,972
1891-92 ...	97,957	56,046	154,033	249,414	32,893	282,307	436,340
1892-93 ...	80,339	55,514	135,853	197,504	30,424	227,928	363,781
1893-94 ...	81,719	58,912	140,631	203,532	39,748	243,280	383,911
1894-95 ...	89,181	62,545	151,726	196,095	41,643	237,738	389,464
1895-96 ...	90,641	58,297	148,938	240,056	40,777	280,833	429,771
1896-97 ...	114,665	66,285	180,950	270,940	36,656	307,596	488,546

6. *Coal, Coke and Patent Fuel.*—The quantity of these goods imported during the year again shows a large increase, amounting to tons 16,000 as shown by the following statement which covers a period of ten years. The increase from year to year has been steady and continuous but as the railways use coal not supplied through the Harbour there is no reason; except expense; why the yearly increases should not have been much greater. Landing charges, barging, and wastage add at least Rs. 1-8-0 to the cost of each ton of coal, and till these charges are done away with no greater increase can be expected. As fully explained in my letter

No. 1327 T. of the 22nd September 1896, 3 lakhs of Rupees would be saved annually on these items, could coal steamers be placed alongside of proper quay walls for discharge:—

Year.	Coal.	Coke.	Patent Fuel.	Total.
	Tons.	Tons.	Tons.	Tons.
1887-88 ...	10,000	608	4,884	15,492
1888-89 ..	21,645	997	6,443	29,085
1889-90 ...	23,970	645	9,753	34,368
1890-91 ...	41,888	1,389	5,613	48,890
1891-92 ...	47,010	2,017	...	49,027
1892-93 ...	63,600	1,322	2,953	67,875
1893-94 ...	80,568	1,734	...	82,302
1894-95 ...	97,500	1,663	...	99,166
1895-96 ...	131,621	2,781	50	134,452
1896-97 ...	148,607	2,052	...	150,659

Kerosine oil.—There has been a falling off in the tonnage of oil imported in bulk. This has however been balanced approximately by oil imported in cases.

Screw Pile Pier.—This structure has been maintained in good working order during the year. The following statement shows the amount of revenue collected on goods passed over the pier during the past ten years :—

Years.	Imports.			Exports.			Total.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1887-88 ...	86,256	8	9	54,561	8	1	1,40,818	0	10
1888-89 ..	85,132	14	2	47,261	11	3	1,32,394	9	5
1889-90 ...	88,418	12	9	66,207	15	0	4,54,626	11	9
1890-91 ...	1,00,154	7	6	58,854	10	3	1,59,009	1	9
1891-92 ...	97,987	10	0	56,046	6	6	1,54,034	0	6
1892-93 ...	78,550	2	1	55,514	2	7	1,34,064	4	8
1893-94 ...	87,222	7	11	58,912	1	9	1,46,134	9	8
1894-95 ...	90,091	10	10	66,443	14	0	1,56,535	8	10
1895-96 ...	97,397	12	0	58,297	4	0	1,55,695	0	0
1896-97 ...	1,19,915	11	7	63,785	2	10	1,83,700	14	5

Over-time work.—The quantity of work done on Sundays, holidays and after 6 P. M. has been much larger than during any previous year. The following statement shows briefly what work has been done out of regular working hours during the year.

Days.	Tonnage of goods landed and shipped.	No. of Packages delivered to Consignees.
Sundays ...	42,957	10,230
Holidays ...	24,521	34,723
Nights ...	21,774	...
Total...	Tons 89,255	44,953

Porterage Work.—This work has been exceedingly heavy during the year owing to the very large increases in the tonnage of coal and railway materials imported; and owing to sickness among the staff at the busiest time of the year: fell unduly heavy on those who were able to attend. Financially the saving to the Trust has been less than in former years; as the tendency has been to reduce the rates on the one hand, and to give improved facilities, costing more money on the other. The staff of the Traffic Department has been divided, and the wages of those men who are exclusively engaged for porterage purposes have been, as directed by Government, debited to porterage. The result is, that charges and receipts, are approximately equal. All that the Board now gains by the porterage work, is on two items of expenditure, which were formerly paid from Revenue, but are now included in the porterage charges, *viz.*:—Pier cooly hire bills, and the charges for lighting the Pier and enclosures.

In this connection I would explain that every package landed and shipped is noted, handled, and traced from the time it is hoisted out of the ships hold, till it is placed in the hands of the consignee: if imported: and *vice versâ*, if exported. This department has not only to assess and levy all dues, but also to provide, pay, and superintend all labour employed in handling the goods. Over 488,000 tons of goods of all sorts have been so assessed, and over 400,000 tons porteraged, at a total cost of Rs. 1,54,000 for labour and supervision. Of which Rs. 90,000 have been expended in labour, and Rs. 64,000 in supervision of labour and assessment of dues. The average cost therefore per ton has been—supervision and assessment of rates annas two pie one—labour annas three pies nine—total annas five pies ten.

In assessing dues 36,000 import and export applications have been passed, and some 40,000 receipts for rates levied, have been granted by this Department during the year.

The rates for labour, *viz.*, annas three pies nine per ton, will compare favourably with work done anywhere, considering the distance goods have to be conveyed—the greater part on coolies heads—and considering that all have to be stacked sorted, and again carried for delivery to consignee; and it is only by the system by which all work is done on piece work rates, that the work can be done at so little cost, and at the same time the coolies earn fair wages. The men are well treated, and cared for as much as possible; and the fact that 90,000 Rupees was paid for labour, shows that this Department has heavy work in supervising the work of so many men in handling such a large quantity of goods. The average daily number of coolies engaged throughout the year including Sundays and holiday being about 790.

The Cooly Provident Fund has worked admirably during the year having met all claims, and added considerably to its balance at the end of the year.

Claims for loss and damage.—These claims have amounted to Rs. 1,660 during the year as against Rs. 2,205 during the previous year. The reduction of Rs. 545 is satisfactory, but this item of expenditure is very uncertain, and may at any time, by the loss of a single package, or the breaking of a chain, amount to a large sum.

Staff.—The staff of the Traffic Department has worked hard and well during the year; although at times much reduced by sickness. Owing to your illness and consequent absence on privilege leave, I was out of the Department for 2½ months during March, April, May and June last year, while acting as Secretary; and on my return to the Traffic Department, I was sorry to find that the Deputy Traffic Manager, and two Assistant Traffic Managers, were seriously ill who had all to take leave; thus leaving me with only one regular assistant, instead of four: and it was not till the middle of August, that I had my full staff back again. During this period the work was most unusually heavy, owing to the importation of large quantities of heavy railway materials, and coal; and the exportation of large quantities of jaggery.

Appended are nine statements showing the quantities of goods landed at, or shipped from, this port during the past four years, *viz.*:—

Appendix I. Goods imported from Foreign Ports.
II. Stores imported by the Madras Railway Company.
III. Stores imported by the Bezwada-Madras-State Railway.
IV. Stores imported by the South Indian Railway Company.
V. Goods imported from Coast Ports.
VI. Stores exported to Foreign Ports.
VII. Goods exported to Coast Ports.
VIII. Stores, &c., imported by Government.
IX. Stores, &c., exported by Government.

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

S. HUTCHENCE,
Traffic Manager.

I. STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease
Apparel and Effects ...	Packages... ...	1,017	985	989	935	— 54
Alum	Barrels	910	773	1,326	827	— 499
Asphalte, Tar & Pitch.	Casks	2,638	2,493	2,878	2,562	— 316
Acids	Cases	1,560	2,151	1,817	2,349	+ 532
Arms and Guns ...	,, ...	250	93	74	75	+ 1
Arrack	Casks	1,031	1,218	1,388	1,171	— 217
Blankets... ...	Bales	28	55	47	55	+ 8
Beef and Pork ...	Cases	...	...	...	...	...
Bricks ...	100	1,550	900	600	1,223	+ 623
Beer ...	Cases	7,013	5,408	6,944	6,442	— 502
	Barrels	1,401	1,800	1,311	988	— 323
	Hogsheads ..	4,310	6,743	8,946	9,155	+ 209
Boilers	No.	48	25	34	40	+ 6
Corks	Bundles	50	60	57	101	+ 44
Canvas	Bales	615	148	136	135	— 1
Candles	Cases	27,463	28,458	36,399	34,994	— 1,405
Colours	,, ...	2,998	3,999	3,170	4,542	+ 1,372
Confectionery, Provisions and Oilmanstores	,, ...	20,829	16,508	21,645	24,102	+ 3,057
Crockery & Glassware.	Crates and Casks ...	5,300	3,627	5,479	4,839	— 640
Chalk ...	Barrels	134	366	1,165	446	— 719
	Tons	...	30	...	...	...
Cement	Casks	8,904	10,235	10,212	15,981	+ 5,769
Cast Iron Pipes & Tubes.	Tons	989	1,472	5,164	2,625	— 2,539
Camphor ...	Tubs	5,765	5,523	4,017	4,850	+ 833
Coal	Tons	58,179	76,851	101,025	69,246	— 31,779
Coke	,, ...	1,018	896	1,219	961	— 258
Fuel-Patent ...	,, ...	...	...	50	...	— 50
Crackers... ...	Cases	327	975	1,028	1,431	+ 403
Copper Plates and Tiles	No.	7,260	4,096	7,960	11,524	+ 3,564
Corrugated Iron ...	Packages... ...	2,638	3,234	7,306	7,815	+ 509
Dynamite ..	Cases	10,598	9,426	14,832	11,643	— 3,189
Earthenware ...	Crates	2,168	1,492	3,983	1,845	— 2,138
Fire Clay ...	Casks	312	454	133	1,413	+ 1,280
Flour	Bags & Barrels. ...	1,251	1,348	1,018	886	— 132
Flannel	Bales	64	23	44	8	— 36
Gunpowder ...	Packages... ..	5,883	3,384	1,537	1,449	— 88
Hardware ...	Cases & Casks. ...	8,189	11,532	8,423	14,594	+ 6,171
Hops	Packages ..	297	287	323	219	— 104
Iron ...	Tons	18,627	10,863	17,384	18,607	+ 1,223
Iron Safes ...	No.	167	56	69	16	— 53
Kerosine Oil	Cases	342,671	343,365	8	97,016	+ 97,008
	Tons	5,455	7,899	13,156	9,065	- 4,091
Malt	Bags	22	56	2	14	+ 12

I STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS—*contd.*

—	Packages.	1893-94.	1894-95.	1895-96	1896-97.	Increase or Decrease.
Millinery and Haberdashery	Cases ...	1,370	1,881	1,855	1,891	+ 36
Matches	,, ...	8,927	8,140	7,956	7,463	— 493
Machinery ...	Tons	4,817	3,603	3,941	4,616	+ 675
Nails	Kegs	14,022	11,948	15,652	20,913	+ 5,261
Oil and Turpentine.	Drums	4,581	4,021	4,677	8,411	+ 3,734
Piece-goods	Cases ...	57,676	78,435	25,406	27,168	+ 1,762
	Bales ...			18,846	23,883	+ 5,537
Twist ...	Bales	24,071	29,432	21,594	30,636	+ 9,042
Paper	Bales	6,038	4,435	4,415	4,937	+ 522
Piano	No.	112	49	103	68	— 35
Printing Type ...	Cases	346	231	262	156	— 106
Pig Lead ...	No.	2,612	629	1,261	2,369	+ 1,108
Paint	Kegs	5,770	8,436	8,879	11,530	+ 2,651
Rattan ...	Bundles	2,362	4,519	1,704	3,818	+ 2,114
Rails ..	No.	...	...	5,243	4,070	— 1,173
Soap ...	Cases	2,172	1,050	1,366	1,839	+ 473
Salt	,, ...	153	458	370	590	+ 220
Steel	Cases & Casks ...	794	395	277	1,013	+ 736
Steel Bundles and Bars ...	No.	10,768	8,905	21,676	25,379	+ 3,703
Steel Hoop ...	Bundles	4,930	2,439	7,137	12,268	+ 5,131
Sodawater Bottles ...	Crates	1,570	2,155	2,125	2,410	+ 285
Sulphur	Casks	1,128	10	467	205	— 262
Shot	Kegs	248	130	185	209	+ 24
Sundries	Packages	56,235	53,125	54,314	59,748	+ 5,418
Specie	No.	768	612	644	807	+ 163
Sugar	Bags	4,198	1,527	1,266	2,083	+ 817
Stationery ...	Cases	1,333	2,939	4,426	4,935	+ 509
Spelter	Cakes	22,921	4,013	7,726	2,288	— 5,438
Saws	Cases	79	36	46	67	+ 21
Twine and Rope ...	Bales & Coils ...	458	862	218	325	+ 107
Tin Plates ...	Boxes	6,669	4,389	5,060	6,514	+ 1,454
Tin Slabs ..	No.	...	2,496	5,015	3,370	— 1,645
Timber ...	Tons	...	...	3,367	30	— 3,337
Tramway Material..	Packages	...	5,370	2,326	144	— 2,182
	Tons	...	202	...	1	+ 1
Wines and Spirits	Cases	36,048	36,519	37,818	41,544	+ 3,726
	Casks	514	713	1,346	1,602	+ 256
	Puncheons	1,058	139	109	244	+ 135
Window Glasses ...	Cases	10,425	8,053	5,939	14,140	+ 8,201
White and Red Lead	Kegs	737	715	779	1,049	+ 270
Yellow Metal ...	Cases	2,784	3,275	2,904	3,481	+ 577
Zinc Sheets ...	Packages	1,761	1,342	299	779	+ 480
Horses & Ponies...	No.	966	917	1,061	1,147	+ 86
Cows	,, ...	7	7	9	11	+ 2
Elephants ...	,, ...	6	4	6	1	— 5
Carriages ...	,, ...	9	9	28	9	— 19

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

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease.
Stores	Packages	47,040	8,915	8,852	23,158	+ 14,306
	Tons	156	1,173	371	1,901	+ 1,530
Wooden Sleepers ...	,, ...	...	...	3,847	...	— 3,847
Fuel ...	,, ...	...	...	...	...	...
Coke ..	,, ...	716	703	1,562	...	— 1,562
Coal ...	,, ...	237	2,948	3,048	...	— 3,048
Timber ...	,, ...	1,448	1,364	2,399	2,105	— 294
Fire Bricks ...	100	...	75	50	44	— 6
Boilers ...	No.	...	6	10	...	— 10
Rails ...	,, ...	...	...	10,441	9,000	— 1,441
Fish Plates ...	Bundles	...	...	...	24,675	...

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

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease.
Stores	Packages	28,640	13,933	6,556	4,046	— 2,510
	Tons	992	113	596	178	— 418
Coke ...	,, ...	...	...	...	...	...
Coal ...	,, ...	...	...	...	..	...
Timber ...	,, ...	...	...	...	...	...
Boiler ...	No.	10	1	...	...	...
Fire Bricks ...	100	...	190	200	100	— 100

IV. STATEMENT OF STORES IMPORTED BY THE BEZWADA-MADRAS RAILWAY.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease
Stores ...	Packages ...	...	...	...	3,083	+ 3,083
	Tons	...	...	...	1,422	+ 1,422
Sleepers ...	,, ...	...	...	...	6,199	+ 6,199
Fish Plates ...	B'dles ...	...	...	...	18,685	+ 18,685
Rails ...	No. ...	...	...	...	35,413	+ 35,413
Boilers ...	,, ...	...	...	...	6	+ 6

V. STATEMENT OF GOODS IMPORTED FROM COAST PORTS.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease.
Apparel and Effects	Packages	527	520	517	430	— 87
Alum ..	Barrels	7	149	12	16	+ 4
Acids ...	Cases	269	305	180	284	+ 104
Animals ...	No.	...	9	...	8	+ 8
Arms and Guns ...	Cases	13	10	5	8	+ 3
Boilers ...	No.	...	...	...	1	+ 1
Bricks and Tiles ...	100	837	852	1,177	731	— 446
Coffee ...	Bags	575	476	454	901	+ 447
Candles ...	Cases	11	1	13	3	— 10
Colours ...	,, ...	1,591	1,244	1,133	1,289	+ 156
Crockery and Glassware.	,, ...	426	1,233	614	720	+ 106
Coal ...	Tons	22,152	17,556	27,548	79,361	+ 51,813
Coke ...	,, ...	...	...	...	1,091	+ 1,091
Carpets ...	Bales	99	95	62	38	— 24
Camphor and Benjamin ..	Tubs	432	1,060	799	460	— 339
Copra ...	Bags	122	68	253	...	— 253
Crackers ...	Cases	...	2	...	60	+ 60
Copper .	,, ...	557	10	433	68	— 365
Do. ...	Tiles & Ingots... ...	2,180	3,755	1,951	305	— 1,646
Cutch and Lac ...	Packages	3,554	5,208	4,611	4,098	— 513
Cast Iron Tubes and Pipes	Tons	...	61	224	110	— 114

V. STATEMENT OF GOODS IMPORTED FROM COAST PORTS—*contd.*

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97	Increase or Decrease.
Earthenware	Crates	407	271	1,492	58	— 1,434
	Pipes	950	182	5,663	1,114	— 4,549
Firewood	Tons	...	...	1,524	6,586	+ 5,062
Flour	Bags & Barrels.	12,270	18,641	19,405	19,640	+ 235
Gunnies	Bales	9,755	11,341	10,249	13,976	+ 3,727
Gram and Peas, &c.	Bags	395,249	264,890	319,788	3,88,393	+ 68,605
Garlic	,,	6,007	7,495	4,278	2,103	— 2,175
Hardware	Cases	1,507	2,920	2,151	2,919	+ 768
Horns	Bundles	511	856	628	629	+ 1
Hides	Bales	6,013	6,896	6,732	7,154	+ 422
Iron	Tons	155	202	359	329	— 30
Iron Safes	No.	34	18	15	9	— 6
Kerosine Oil	Cases	500	...	2,643	57,819	+ 55,176
Leaves	Bundles	5,113	4,393	5,332	5,612	+ 280
Liquor	Cases	2,193	2,071	3,136	2,733	— 403
Machinery	Tons	49	202	76	181	+ 105
Millinery and Haberdashery.	Cases	144	371	261	409	+ 148
Oil and Turpentine.	Drums	5,941	5,829	6,265	4,004	— 2,261
Paddy	Bags	23,737	19,988	29,776	25,095	— 4,681
Piece-goods	Cases	3,499	4,814	2,040	1,343	— 697
	Bales	...	...	1,442	1,374	— 68
Paper	,,	5,420	7,962	8,428	10,273	+ 1,845
Paint	Kegs	247	277	592	102	— 490
Rice	Bags	110,181	111,384	95,765	74,401	— 21,364
Rose Water	Cases	1,357	1,594	2,367	1,649	— 718
Rails	No.	...	...	28	1,600	+ 1,572
Seeds	Bags	13,916	12,061	19,766	28,681	+ 8,915
Skins	Bales	6,807	7,108	5,745	3,669	— 2,076
Silk	,,	290	488	729	741	+ 12
Sandalwood	Bundles	42	265	118	86	— 32
Sugar	Bags	1,333	2,686	1,826	973	— 853
Specie	No.	193	124	47	65	+ 18
Sundries	Packages	48,614	52,303	51,726	54,631	+ 2,905
Sleepers	Tons	...	...	1,586	6,345	+ 4,759
Soap	Cases	147	863	789	608	— 181
Sulphur	Casks	506	295	772	254	— 518
Spice	Packages	640	944	1,275	3,149	+ 1,874
Stationery	,,	...	184	300	233	— 67
Sodawater Bottles	Crates	241	1,651	8	867	+ 859
Twine and Rope	Bales and Coils	1,063	1,309	608	1,626	+ 1,018
Tin Plates	Boxes	858	1,248	658	466	— 192
	Slabs	...	78	233	2	— 231
Twist	Bales	1,206	1,187	1,501	1,617	+ 116
Turmeric	Bags	5,433	5,185	3,702	3,487	— 215
Timber	Tons	15,264	14,154	18,196	18,972	+ 776
Tea	Cases	37	205	300	615	+ 315
Tamarind	Bundles	140	86	12	293	+ 281
Yellow Metal	Cases	1,078	281	191	918	+ 727
Horses and Ponies	No.	8	...	37	93	+ 56
Carriages	,,	24	14	16	13	— 3
Tarmway Materials.	Tons	...	13	...	...	...

VII. STATEMENT OF GOODS EXPORTED TO FOREIGN PORTS.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Bone-Meal	Bags	...	5,448	11,235	22,191	+ 10,956
Beer and Ale	Cases	13	...	1	1	...
	Casks	...	...	3	...	— 3
	Hogsheads	...	...	...	1	+ 1
Cinchona Bark	Bales	411	123	...	91	+ 91
Chillies	Bags & Bundles	816	883	816	2,049	+ 1,233
Cigars	Cases	643	613	721	661	— 50
Coffee	Bags	17,737	27,864	26,283	15,934	— 10,349
Cotton	Bales	56,768	39,607	44,245	46,276	+ 2,031
Cotton Twist	,,	1,946	1,664	463	287	— 176
Coriander and Omum Seeds	Bags	7,377	10,473	6,662	6,485	— 177
Carpets	Bales	391	239	410	428	+ 10
Coal Ships use	Tons	599	152	330	865	+ 535
Deer Horns	Packages	767	1,477	943	1,057	+ 114
Explosive	Cases	...	2	...	...	...
Firewood	Tons	...	...	...	...	...
Carriages	No.	6	7	16	10	— 6
Ground Nuts	Bags	138,211	110,328	67,776	49,336	— 18,440
Gram, Peas, &c.	,,	1,662	489	253	30	— 223
Horns, Cow and Buffalo	Tons	23	71	154	290	+ 136
Hides, Tanned	Bales & Bundles.	11,149	18,519	24,922	23,929	— 993
Hardware	Cases & Casks.	...	522	702	860	+ 158
Indigo	Cases & Chests.	25,008	27,416	32,046	26,205	— 5,841
Iron	Tons	17	3	16	24	+ 8
Jaggery	Bags	52,668	17,809	42,378	1,90,557	+ 148,179
Myrabolams	Bags	563	237	2	32	+ 30
Miscellaneous	Packages	36,531	17,763	24,825	25,401	+ 576
	Tons	...	...	50	...	— 50
Onions	Bags & Baskets.	17,517	16,094	19,367	17,657	— 1,710
Oil	Casks	208	451	257	376	+ 119
Provisions	Packages.	...	4,417	5,360	5,445	+ 85
Piece-goods	Bales	7,305	7,788	10,035	7,018	— 3,017
	Cases			2,202	3,962	+ 1,760
Potatoes	Bags & Baskets.	1,716	1,648	1,575	917	— 658
Poonac	Bags	31,311	47,253	65,892	60,464	— 5,428
Piano	No.	15	5	10	4	— 6
Paddy	Bags	22	...	...	...	...
Rice	,,	16,915	44,694	3,023	26,053	+ 23,030
Redwood	Tons	733	1,113	1,194	802	— 392
Salt	,,	...	7	13	...	— 13
Seeds, Gingelly and Castor	Bags	14,777	90,571	12,877	9,758	— 3,119
Skins, Sheep & Goat, Tanned	Bales	31,535	38,649	37,344	35,038	— 2,306
Sandalwood	Bundles	699	288	664	1,439	+ 775

VII. STATEMENT OF GOODS EXPORTED TO FOREIGN PORTS—*contd.*

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Spirits and Wine	Cases	67	22	276	108	— 168
	Casks	40	9	15	1	— 14
	Puncheons	...	...	...	...	...
Sugar	Bags	1,197	1,762	3,727	10,264	+ 6,537
Specie	Boxes	29	104	76	70	— 6
Tamarind	Bundles	3,076	4,737	3,562	3,547	— 15
Turmeric	Bags	1,562	3,651	6,744	1,300	— 5,444
Tea	Cases	1,649	2,156	1,658	1,104	— 554
Timber	Tons	...	...	9	8	— 1
Wool	Bales	1,532	2,049	2,426	2,119	— 307
Yellow Metal	Tons	417	7	5	...	— 5
Horses	No.	...	24	28	103	+ 75
Ponies	,,	...	9	21	3	— 18
Elephant	,,	...	2	1	...	— 1
Lion	,,	...	1	...	...	...
Tiger	,,	...	1	...	...	...
Leopards	,,	...	6	...	...	...
Bear	,,	...	1	...	...	...
Sheep	,,	...	79	20	20	...
Animals	,,	...	...	9	3	— 6

VIII. STATEMENT OF GOODS EXPORTED TO COAST PORTS.

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Beer and Ale	Cases	305	354	300	171	— 129
	Casks	91	166	76	15	— 61
	Hogsheads	161	107	195	238	— 43
Boiler	No.	1	...	...	...	...
Bricks	100	...	...	5	...	— 5
Cinchona Bark	Bales	80	...	376	296	— 80
Chillies	Bags & Bundles	9,207	2,444	684	3,310	+ 2,626
Cigars	Cases	789	732	810	735	— 75
Coffee	Bags	541	449	672	400	— 272
Cotton	Bales	7,080	5,295	7,393	6,244	— 1,149
Cotton Twist	,,	3,220	3,034	4,355	2,844	— 1,511
Coriander and Omum Seeds	Bags	6,894	2,067	2,531	1,897	— 634
Cement	Casks	132	195	324	1,433	+ 1,109
Carpets	Bales	41	27	41	49	+ 8
Coal Ships use	Tons	157	480	632	1,126	+ 494
Deer Horns	Packages	52	...	1	...	— 1
Explosives	Cases	1,067	46	17	5	— 12
Eggs	Pots	1,198	1,263	1,006	1,624	+ 628
Firewood	Tons	...	...	...	...	...
Carriages	No.	39	35	42	49	+ 7
Groundnuts	Bags	16,116	63,700	31,918	17,041	— 14,877
Gram, Peas, &c.	,,	233	372	544	33,724	+ 33,180
Horns, Cow and Buffalo	Tons	166	106	387	701	+ 314

VIII. STATEMENT OF GOODS EXPORTED TO COAST PORTS—(*contd.*)

—	Packages.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Hides	Bales & Bundles	535	252	285	245	— 40
Hardware	Cases & Casks.	...	800	2,828	1,928	— 900
Indigo	Cases & Chests..	1,162	264	164	104	— 60
Iron	Tons	755	695	534	614	+ 80
Old Iron	,,	...	165	1,693	401	— 1,292
Jaggery	Bags	336	488	2,099	353	— 1,746
Kerosine Oil	Cases	1,117	11,005	9,993	5,979	— 4,014
Myrabolams	Bags	1,112	131	78	...	— 78
Miscellaneous	Packages	61,706	18,312	31,686	37,353	+ 5,667
Onions	Bags & Baskets	47,062	94,737	57,420	43,039	— 14,381
Oil	Casks	346	641	357	305	— 52
Piece-goods	Cases	6,368	8,852	1,160	2,403	+ 1,243
	Bales			7,709	8,714	+ 1,005
Potatoes	Bags & Baskets	30,592	20,068	18,238	10,775	— 7,463
Poonac	Bags	9,853	396	2,666	3,848	+ 1,182
Piano	No.	17	11	32	11	— 21
Paddy	Bags	8,400	4,123	3,031	0	— 3,031
Provisions	Packages	...	1,565	2,260	2,943	+ 683
Rice	Bags	11,083	8,196	8,369	13,569	+ 5,200
Redwood	Tons	4	134	88	106	+ 18
Seeds, Gingelly & Castor	Bags	36,799	68,201	77,404	35,458	— 41,946
Skins, Sheep and Goat, Tanned	Bales	871	1,706	531	618	+ 87
Sandalwood	Bundles	2,786	373	39	10	— 29
Spirits and Wines.	Cases	3,045	2,534	2,434	2,416	— 18
	Casks	992	409	253	241	— 12
	Puncheons	214	...	...	1	+ 1
Sugar	Bags	473	1,725	3,708	3,919	+ 211
Specie	Boxes	47	75	28	17	— 11
Salt	Bags	...	4,001	1,040	9,605	+ 8,565
Tamarind	Bundles	5,090	3,028	2,982	3,623	+ 641
Turmeric	Bags	38,147	53,374	41,679	12,583	— 29,096
Tea	Cases	50	114	109	29	— 80
Timber	Tons	...	...	18	49	+ 31
Wool	Bales	463	478	1,361	1,806	+ 445
Yellow Metal	Tons	256	31	69	18	— 51
Horses	No.	...	...	33	130	+ 97
Ponies	,,	...	...	39	20	— 19
Old Rails	Tons	...	...	...	450	+ 450
Old Fish Plates	,,	...	...	...	300	+ 300

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

Department.	Description.	Class.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or decrease.
Accountant-General.	Specie Silver.	Boxes	533	489	167	20	− 147
	„ Copper.	„	780	480	150	300	+ 150
	Notes ...	„	30	...	...	27	+ 27
	Packages ...	No.	...	...	13	2	− 11
Public Works Department.	Boilers ...	„	...	1	...	1	+ 1
	Coal ...	Tons.	...	...	...	...	...
	Coke ...	„	...	64	18	...	− 18
	Iron ...	„	19	151	3	120	+ 117
	Bricks ...	100	...	1,875	...	...	...
	Stores ...	Pkgs.	10,812	...	491	3,294	+ 2,803
	Coal ...	Tons.	1,450	145	...	...	...
	Iron ...	„	...	...	7	62	+ 55
	Ammunition..	Boxes	109	13,465	10,570	6,043	− 4,527
Ordnance ...	Boilers ...	No.	...	...	2	...	− 2
	Stores ...	Pkgs.	21,057	16,390	9,901	7,426	− 2,475
	Timber ...	Tons.	...	...	77	1,176	+ 1,099
	Bricks ...	100	...	50	34	60	+ 26
	Gunpowder...	Pkgs.	...	...	53	421	+ 368
Madras Harbour Works.	Cement ...	Casks	...	14,000	15,600	3,580	− 12,020
	Stores ...	Pcks.	...	40	8	...	− 8
	Coal ...	Tons	...	...	...	...	...
Clothing ...	Packages ...	No.	2,176	1,900	2,048	1,975	− 73
Police ...	„ ...	„	196	131	166	143	− 23
Salt Revenue ...	„ ...	„	109	79	33	61	+ 28
Post Office ...	„ ...	„	742	2,886	2,021	2,596	+ 575
Medical ...	„ ...	„	1,920	1,012	350	655	+ 305
Telegraphs ...	„ ...	„	9,129	10,770	11,552	6,191	− 5,361
Stationery ...	„ ...	„	1,156	1,115	707	925	+ 218
Stamps ...	„ ...	„	1,861	1,611	2,497	1,757	− 740
Commissariat ...	„ ...	„	2,562	3,611	2,814	1,452	− 1,362
Gazette Press ...	„ ...	„	97	249	344	74	− 270
Marine ...	„ ...	„	806	317	157	380	+ 223
Revenue Survey...	„ ...	„	25	37	43	20	− 23
Agriculture ...	„ ...	„	140	6	3	6	+ 3
Government Central Museum ...	„ ...	„	9	6	4	10	+ 6
Under-Secy. to Government ...	„ ...	„	85	68	53	44	− 9
Supt. of Prisons...	„ ...	„	7	16	...	10	+ 10
Revenue Board ...	„ ...	„	9	13	13	40	+ 27
Forests ...	„ ...	„	3	1	...	2	+ 2
Presidency College	„ ...	„	2	4	17	8	− 9
Chemical Examiner	„ ...	„	36	35	23	13	− 10
Medical College ...	„ ...	„	41	31	16	41	+ 25
Dy. Collectors ...	„ ...	„	12	...	15	...	− 15
Astronomer ...	„ ...	„	20	7	9	8	− 1
Presy. Pay Master.	„ ...	„	4	...	...	...	...
Regitsration ...	„ ...	„	1	...	5	...	− 5
Registrar of High Court ...	„ ...	„	4	2	12	4	− 8
Civil Engineering College ...	„ ...	„	44	21	10	8	− 2
Examiner of Accounts B. M. Railway ...	„ ...	„	...	...	11	9	− 2
Rev. Settlement...	„ ...	„	...	1	4	1	− 3
Ex. Engineer, Military Works..	„ ...	„	...	2,003	879	260	− 619
	Bricks ...	100	...	45	...	...	...
Collectors ...	Packages ...	„	...	4	4	14	+ 10
Dy. Port Conservator.	„ ...	„	...	...	60	47	− 13

STATEMENT OF STORES, &c., IMPORTED BY GOVERNMENT.—*contd.*

Department.	Description.	Class.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease.
Controller, Military Accounts...	Packages..	No.	...	2	3	13	+ 10
Agent for Government Consignments ...	„ ...	„	...	501	303	257	− 46
Government Botanical Gardens...	„ ...	„	...	282	199	278	+ 79
Commissioner of Paper currency.	„ ...	„	...	13	9	13	+ 4
Inspector of Salt ..	„ ...	„	...	...	1	30	+ 29
Engineer-in-Chief, B.M. Railway ...	„ ...	„	...	...	77	...	− 77
Officer in charge, Pensioners, Madras. ...	„ ...	„	...	1	1	...	− 1
Superintendent of Central Jail ...	„ ...	„	...	...	7	28	+ 21
Meteorological Reporter ...	„ ...	„	...	...	3	1	− 2
Pay Examiner ...	„ ...	„	...	1	14	15	+ 1
Miscellaneous Department. ...	„ ...	„	282	24	319	92	− 227

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

Department.	Description.	Class.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease
Accountant-General.	Specie Silver.	Boxes.	95	17	865	9	− 856
	„ Copper.	„	163	180	95	55	− 40
	„ Notes...	„	8	6	...	1	+ 1
	„ Packages	No.	1	5	7	1	− 6
Bank of Madras	„ Silver.	Boxes.	...	...	...	...	...
	„ Copper	„	84	...	...	...	...
Ordnance	Gun Powder.	„	...	...	584	54	− 530
	Packages & Pieces.	No.	9,257	8,819	6,871	6,491	− 380
	Ammunition.	Boxes.	...	...	36	2,389	+ 2,353
Public Works Department.	Packages & Pieces.	„	3,203	1,173	1,500	2,481	+ 981
	Tons ...	„	...	...	7	76	+ 69
Clothing ...	Packages & Pieces.	„	998	1,160	1,254	1,828	+ 574
Police ...	„ ...	„	955	933	493	492	− 1
alt Revenue ...	„ ...	„	724	960	591	499	− 92
Medical ...	„ ...	„	2,166	1,027	734	983	+ 249
Telegraph ...	„ ...	„	4,945	3,045	11,432	1,782	− 9,650
Stationery ...	„ ...	„	623	680	1,010	689	− 321
Stamps ...	„ ...	„	236	221	385	262	− 123
Commissariat ...	„ ...	„	5,301	6,030	6,263	4,032	− 2,231
Gazette Press ...	„ ...	„	478	618	496	341	− 155
Marine ...	„ ...	„	37	98	51	67	+ 16
Revenue Board ...	„ ...	„	87	105	11	81	+ 70
Revenue Settlement	„ ...	„	53	35	44	26	− 18
Revenue Survey...	„ ...	„	223	138	54	119	+ 65
Superintendent of Prisons ...	„ ...	„	103	58	24	23	− 1
Registration ...	„ ...	„	17	62	92	20	− 72
Conservator of Forests ...	„ ...	„	5	5	30	...	− 30

STATEMENT OF STORES, &c. EXPORTED BY GOVERNMENT.—*contd.*

Department.	Description.	Class.	1893-94.	1894-95.	1895-96.	1896-97.	Increase or Decrease
Government Central Museum ...	Packages & Pieces.	Box.	13	...	7	8	+ 1
Government Astronomer ...	" ...	"	13	21	3	2	— 1
Govt. Botanists ...	Packages ...	No.	...	48	24	...	— 24
Inspector of Salt..	" ...	"	...	...	102	7	— 95
Chemical Examiner..	" ...	"	...	1	4	...	— 4
Collectors ...	" ...	"	6	...	5	5	...
Meteorological Reporter ...	" ...	"	...	...	19	11	— 8
Salt Revenue ...	" ...	"	...	...	527	16	— 511
Miscellaneous Department ...	" ...	"	57	59	40	46	+ 6
Civil Engineering College. ...	" ...	"	...	...	3	...	— 3
Under Secretary to Government..	" ...	"	...	...	5	...	— 5
Post Office ...	" ...	"	2	...	295	...	— 295
Medical College...	" ...	"	...	...	18	5	— 13
Registrar of High Court ...	" ...	"	...	31	38	35	— 3
Examiner of Accounts, B. M. Railway ...	" ...	"	...	...	10	...	— 10
Executive Engineer, Military Works ...	" ...	"	...	...	172	33	— 139

S. HUTCHENCE,
Traffic Manager,
Harbour Trust.

ADMINISTRATION REPORT

OF THE

Deputy Conservator of the Port of Madras for the year, 1896-97.

The number and tonnage of vessels entering and leaving the Port of Madras during the year is shewn in the following statement and shows an increase over the preceding year in number and tonnage :—

VESSELS ENTERED.

	1895-96.		1896-97.	
	No.	Tons.	No.	Tons.
Steam ships, Mercantile	656	1,184,644	662	1,180,664
Sailing " "	1	1,400	...	...
Do. Native Crafts	86	9,628	104	10,633
Men-of-War, Government ships and Transports...	11	15,828	10	25,225
	754	1,211,500	776	1,216,522

VESSELS LEFT.

	No.	Tonnage.
Steam ships, Mercantile	660	1,178,823
Sailing " "	...	...
Do. Native Crafts	102	10,517
Man-of-War, &c.	10	25,225
	772	1,214,565

Of the above vessels, 338 were foreign-going and 324 coasting.

The Revenue amounted to Rs. 1,54,126 against Rs. 1,50,970.

Port Fund...	Rs.	1,20,932
Salvage	"	490
Sale of unserviceable articles	"	264
Diver Services	"	400
Hire of Port Raft	"	1,017
Boat Licenses	"	744
Shipping Office Fees and Fines...	"	888
Office Fees for Overtime...	"	1,658
	"	1,26,393
Pilotage and Boat Charges connected...	"	23,713
Moiety of Harbour Master's Fees	"	4,020
		1,54,126

Including { 40 German. / 24 Austro-Hungarian. / 26 French. / 1 Norwegian. } = 91

Artificial Harbour.—Shipping operations have been carried out throughout the year without intermission, except on the 27th November on account of bad weather.

The berths in the Harbour have been equal to requirements, except upon four occasions, the number of vessels having to wait outside being six.

On one of these occasions a P. and O. Co.'s steamer was anchored in the center of the Harbour, where she remained a few hours only to embark passengers.

Out of six horse ships, five discharged their horses by gang-way onto the north groyne, the exception being a German vessel whose commander declined to accept the risk to his vessel.

Owing to the large amount of coal dropped overboard from coal ships at Nos. 4, 5 and 6 berths, they have become considerably shallowed.

No. 1 berth has also shallowed considerably by the accumulation of sand through the groyne.

The construction of a small jetty from the north groyne to facilitate landing of horses is under consideration by the Board.

Moorings.—Have all been thoroughly overhauled and inspected twice during the year. Three buoys sank at various times, owing to leaks in the tubes. They were replaced by spare ones.

All the head mooring buoys have been fitted with wooden fenders by the Harbour Works.

At the request of the Military Authorities a small buoy has been moored off Lighthouse Battery in 8 fathoms water, to serve as a datum point for range finding.

Mooring Boat.—The mooring boat sanctioned last year was completed and began plying on August 10th. She has proved most useful and satisfactory and has been the means of greater despatch in mooring and unmooring, and has reduced to a great extent the undue wear and tear to the Harbour Master's boats.

Steam Launch.—Has been utilized more than formerly, and she has been of immense service.

She was hoisted onto the pier twice for repairs, and overhaul, and has been kept in an efficient state by the Mechanical Engineer of the Harbour Work Department. No other launch being available whilst she was under repairs. considerable inconvenience was experienced.

She was found to be insufficiently buoyant when filled with water, and her fore and after ends were therefore filled with cork.

The Driver not holding a certificate as such, was examined and granted one, by the Chief Engineer of the R. I. M. S. "Clive."

Harbour Master's Boats.—Have been kept in a more efficient condition since the advent of the mooring boat, which has reduced the undue wear and tear caused by their being used for that duty.

These boats were also found to be of insufficient buoyancy, and the copper was therefore stripped off, and they were provided with cork bags and cushions.

A new boat was obtained from Calcutta Dockyard in February, to replace one which was worn out by age and wear and tear. Another will shortly be required.

Weather.—Has been fine enough to permit of shipping operations throughout the year, except on November 27th, when the center of a moderate cyclonic storm passed about 50 miles to the southward, causing a heavy gale and sea over the port. No warning was received of its approach.

Warning signals were hoisted three times, *viz.*, on November 27th, December 11th and December 16th.

Cyclone Code.—On the occasion of the stranding of the S.S. "Secundra" opportunity was taken to carry out the Cyclone Code, and it was found to work satisfactorily.

Entrance Lights.—The Harbour head entrance lights have given every satisfaction. They were taken over charge of by this office from the Harbour Engineer on June 4th.

Accidents and Casualties.—On May 1st the barque "David" from Negapatam to Cocanada in ballast put into Madras Roads leaking very badly. No salvage pumps being obtainable, and the water gaining, she was eventually beached to the north of the port, where she became a total wreck and was broken up.

On June 15th during a heavy squall the stern lines of the S.S. "Dunera" parted, but no damage ensued.

On June 25th one of the Harbour Master's boats was damaged by a steamer's propeller.

On November 27th during a heavy gale from the north-eastward, the S.S. "Secundra" parted her bow cable and drove ashore on to the sand bank formed in the south-west corner of the Harbour.

There were four other steamers in Harbour, all of which rode it out safely and easily.

Endeavours were made day and night to get her off, which were successful on the 2nd December, she being towed off on that date by two other B. I. S. N. Co.'s steamers, the vessel having been lightened considerably in the mean time. The tug boat with sand pump, ordered by the Agents from Calcutta, arrived the following day and was not therefore required. The vessel sustained little or no damage.

Six lighters drifted ashore at various times and were damaged.
One lighter was sunk and recovered by Diver.
Seven Masulah boats were damaged by the surf.
One Masulah boat was sunk and recovered by Diver.

One boatmen fell overboard and was drowned alongside of the S. S. "Secundra" on December 2nd, and his body was not recovered.

A large heavy and valuable package containing a boiler and engine and weighing over 7 tons having been discharged from the S. S. "Mombassa" into a lighter, which was incapable of carrying, it capsized the same, and went to the bottom of the Harbour. A specially constructed large raft with the heavy winch belonging to the Board had to be used to recover the package, which was done after several days' work by the Diver.

Salvage Gear.—The six inch wire hawsers proved invaluable on the occassion of the stranding of the S. S. "Secundra", and without them towing operations would have been futile.

The smaller wire hawsers were also most useful, and by being run out smartly by the Senior Harbour Master were the means of preventing the vessel

from being thrown further upon the beach. The 16 inch coir hawser parted whilst being used for towing. It was found to have perished with dry rot, this will not be replaced, wires being more suitable.

Harbour Masters Establishment.—The Harbour Masters and their establishment have performed their duties very satisfactorily, notably upon the occasion of the stranding of the S. S. "Secundra", when they all behaved splendidly—a fact apparently recognised and appreciated by the owners and agents of the ship.

Owing to the great increase of late years in the number of vessels visiting the port and of the "out of hours" attendance on them, it was found necessary to ask for a third Boat's crew, which has been sanctioned.

A Fourth Harbour Master was also considered necessary by Acting Deputy Conservator, but the Board has sanctioned an Assistant only, subject to the approval of Government, which is awaited.

In 1885 the year previous to the entertainment of a *second boats crew*, the number of entries and departures was 916, of which 176 were out of hours.

In 1887, when a *Third Hurbour Master* was found to be necessary, the numbers were 1054 and 230 respectively.

In 1896, the figures increased to 1386 and 654 respectively: and in 1897 to 1552 and 782.

The necessity for a Third Boats crew and a fourth or Assistant Harbour Master will be seen from the above figures.

Sunday and Holiday Work.—The Deputy Conservator's office was opened on 35 Sundays and three holidays. Before and after hours, 16 times.

Leave.—Commander W. Aves, R. I. M., having been appointed to act as Deputy Conservator, in Commander Hewetts absence on furlough, took over charge from Mr. H. D. Baddeley on the 20th April 1896. Commander Hewett having been granted an extension of leave of six months from March 23rd, 1897, Commander Aves continues to act for him.

Port Diver has been well employed as usual and has performed his duties very satisfactorily.

His Assistant, Mr. Brown, having tendered his resignation, it was accepted by the Board on March 4th 1897, and Mr. Jeffries engaged in his place.

Port Signallers.—The Senior Port Signaller, Mr. Stuart having obtained the post of Light-housekeeper in the Presidency, the next senior Mr. Brown, was promoted in his place, the junior to that of second, and a new man engaged to fill the vacancy.

They have performed their duties satisfactorily.

Port Flagstaff has been overhauled and painted and rigging set up. It is in good order, but will require a new yard shortly.

The flags and equipment are also in good order.

Time Signal.—The semaphore has worked very well and met all requirements satisfactorily. The Board has approved of a Saxby and Farmer's Time Ball apparatus being provided.

Life-saving Apparatus.—Half-yearly practise has been carried out. The men are efficient and the apparatus and gear in good order.

Fire Engine Is in good order, but of a very obsolete pattern.

Harbour Master's Office.—A few minor improvements have been made to render it more suitable for night residence in case of necessity.

Cargo Boats.—The number of Lighters on the register is 84, Masulah boats 114, Jolly boats 33, Water boats 9, small catamarans 12, fishing boats 37.

Port Raft.—Is still the only method of landing heavy weights, and made 57 trips during the year and earned Rs. 1,017.

Shipping Office.—The number of European Seamen engaged and discharged at this port shows a considerable increase on last year's figures.

Europen seamen	engaged	... ...	22
Do.	discharged	... ...	14
Do.	sent to jail	... ...	*Nil*
Do.	hospital	... ...	11
Native seamen	engaged	... ...	27
Do.	discharged	... ...	777
Do.	sent to jail	... ...	1
Do.	sent to hospital	...	5
Distressed seamen sent home		... ...	8

Periodical statements and returns were sent to the Board of Trade, London, and the Government of Madras.

Owing to steady increase in the Shipping Office work and in the Board of Trade Forms under the new Act, the clerical Establishment will require increasing.

MADRAS,
8th April, 1897.

W. AVES, COMMANDER R.I.M.,
Ag. Deputy Port Conservator.