

Administration. Report
of the

Madras Port Trust



For - 1920 - 21

ADMINISTRATION REPORT

OF THE

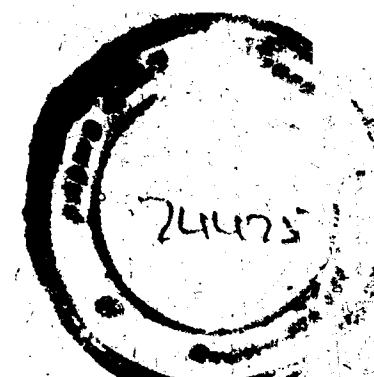
MADRAS PORT TRUST

FOR

1920-21

The Board of Trustees, under the Madras Port Trust Act, who also are the Conservators of the Port, under the Indian Ports Act—

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Mr. H. H. G. Mitchell, O.B.E., M.INST.C.E., M.I.E. (IND.), <i>Chairman</i>. 2. Mr. H. H. Hood, up to January 1921. 2a. Mr. A. M. Green, I.C.S., from January 1921. 3. Captain C. B. Henley, R.I.M., up to June 1920. 3a. Captain E. W. Huddleston, C.I.E., C.B.E., R.I.M., from June 1920. 4. Mr. M. Brown, up to middle of March 1921. 4a. M.R.Ry. Rao Bahadur S. Bhaskara Ayyar Avargal, appointed 28th March 1921. 5. Mr. B. C. Scott (went on six months' leave from 15th December 1920). 5a. Mr. Ross M. Logan, appointed Acting Trustee. 6. Lieut.-Col. C. L. Magniac, C.M.G., C.B.E. 7. Mr. Abdul Hussain Khaleeli. 8. Mr. W. Alexander, M.L.C. 9. Mr. T. M. Ross. 10. Mr. J. C. Simpson, M.L.C. 11. Mr. A. P. Symonds. 12. Mr. A. M. McDougall, M.L.C. 13. Mr. R. J. C. Robertson. 14. M.R.Ry. M. Venugopala Nayudu Garu. 15. Mr. Yakub Hassan Sait, up to June 1920. 15a. M.R.Ry. Diwan Bahadur Govindoss Chathoorbhoojadoss Garu, M.L.C., from July 1920. | <div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> <p>Appointed
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| | <div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> <p>Elected by the Chamber
of Commerce.</p> </div> </div> |
| | <div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> <p>Elected by the Madras
Trades' Association.</p> </div> </div> |
| | <div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> <p>Elected by the Southern
India Chamber of
Commerce.</p> </div> </div> |



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MADRAS PORT TRUST

ADMINISTRATION REPORT FOR 1920-21

I. GENERAL.

In the past year the tonnage of goods handled and their value has fallen very little short of what they were in 1919-20, our record year. As was anticipated, there was a very marked revival in the foreign import trade, the value of which was $21\frac{1}{2}$ crores of rupees against $10\frac{3}{4}$ crores in the previous year, but this gain was counterbalanced by a drop of nearly 10 crores in foreign exports. There was also a drop of nearly two crores in the coasting trade, chiefly due to the falling off in the imports of food-grains from Burma. The seaborne tonnage of goods handled amounted to 810,159 tons against 815,993 tons in the previous year. The value of the private trade of the port, excluding Government transactions and movements of treasure, amounted to $35\frac{1}{2}$ crores of rupees against $36\frac{1}{2}$ crores in the previous year; it represented over 50 per cent of the trade of the whole Presidency.

2. *Landing of His Royal Highness the Duke of Connaught.*—Madras Harbour was the starting point of the tour in India of His Royal Highness the Duke of Connaught and Strathearn, K.G., K.T., K.P. The draught of H.M.S. "Malaya", 34 feet, was too deep to allow of her being berthed in the harbour; so His Royal Highness transferred to H.M.S. "Caroline" which was berthed at the West Quay. His Royal Highness was received on landing by His Excellency Lord Willingdon, Governor of Madras, Her Excellency Lady Willingdon and a large gathering of notables. After the guards of honour had been inspected and presentations had taken place, the Municipal Councillors presented an address of welcome to His Royal Highness who then drove in State to Government House.

3. *Scale of rates.*—The revised scale of rates, referred to in paragraph 5 of last year's report, was sanctioned by Government and brought into force on 1st October 1920. The surcharge of 75 per cent, which had been in force for the latter years of the war was at the same time withdrawn. From the results of the first six months working under the new scale, it looks as if it would be adequate to bring in the required revenue without bearing too heavily on the trade of the port.

4. *Trust's loans.*—Early in the year it was decided that it would be to the advantage of local bodies if Government were to float one consolidated development loan and allocate it to those bodies who were in need of funds.

Forthcoming developments will be financed either by a share of the Government loans, or by issuing, with the sanction of Government, the Port Trust loan fore-shadowed in last year's report.

The outstanding amount of loans due to the Secretary of State for India in Council was Rs. 1,38,81,762 at the close of the year under review.

State of the Trust's loans at the end of 1920-21.

(Further particulars will be found in Appendix II.)

Amount of loan.	Borrowed from	Date of first equated payment in amortissement.	Rate of interest.	Amount of monthly payment.	Date of completion of all payments.	Amount of capital already repaid.	Balance yet to be repaid.
Rs. 27,38,276 76,83,950 7,00,000 50,00,000 5,00,000 5,00,000 10,00,000 4,00,000 1,85,82,328	Govt. of India. Do. Do. Do. Do. Do. Do.	Apr. 1912 Aug. 1912 Apr. 1917 Apr. 1918 Apr. 1918 Apr. 1920 ..	4 per cent .. 4 do. .. 4 do. .. 4 do. .. 5 do. .. 6 do. .. 6 do. ..	Rs. 32,000 Nil. 22,000 2,200 2,500 5,800 ..	July 1952 Mar. 1919 July 1952 Do. Do. Do. Do.	Rs. 27,38,276 8,41,210 7,00,000 2,88,645 28,864 26,640 17,820 .. 46,40,464	Rs. Nil. 88,42,740 Nil. 47,11,855 4,71,138 4,74,360 9,82,171 4,00,000 1,38,81,762
			Total per mensem .. Or per annum	64,500 7,74,000			

5. *Shipping that used the port.*—During the year 648 vessels with an aggregate tonnage of 1,662,444 tons, including 351 from foreign ports, 171 from coast ports and 103 country sailing craft, called at the port against last year's figure of 521 vessels of 1,166,352 tons. Several new lines have made Madras a port of call, notably those trading direct with America. The vessel of the greatest tonnage which entered the port was S.S. "Khyber" of Liverpool of 9,014 tons and 5,685 tons net register, and the vessel with the deepest draught was S.S. "Morvada" drawing 29' 6". Passengers to the number of 72,720 arrived at and 83,801 left the port making a total of 156,521 against 116,732 of last year. Out of 545 steamers that used the port 293 used the quays for landing cargo, passengers, horses, etc., 34 used the north and south oil berths for discharging oil, 5 used the outside berths for landing explosives and combustibles, and 9 anchored in the fair way. Full details of the shipping that used the port will be found in the Madras Port Fund report.

II. TRAFFIC.

6. *Tonnage handled.*—The total tonnage of goods which passed through the port in the year amounted to 848,756 against 940,534 last year, imports contributing 717,740 tons and exports 131,016 tons against 781,263 and 159,301 tons respectively in the previous year. Of the above total, 510,159 tons was sea-borne against 818,993 tons last year.

The difference between the total traffic and the amount seaborne consists almost entirely of rail-borne coal brought in for bunkers and coal for transshipment from broad to metre gauge, harbour dues are levied on the above traffic. Railway coal brought in for transshipment from broad to metre gauge is not included in the above figures and harbour dues are not levied thereon. In the last six months of the year the import of coal by rail has practically ceased.

7. *Import variations.*—With the passing away of the famine conditions of the previous year there was a heavy fall in grain imports, while the opening of the oil installation in coast ports, temporarily closed during the war, accounted for the drop in imports of kerosene oil. With these exceptions, practically all heads of imports show increases, notably coal, metals and timber.

8. *Rice.*—The imports have fallen by 50 per cent, the figure for the current year being 121,679 against 241,451 of the previous year. There is a fall in the imports of other food-grains from 59,627 in 1919-20 to 37,846 in 1920-21.

9. *Metals.*—The details are as under—

	1920-21.	1919-20.
Iron and steel handled by the Trust	17,667	6,518
Do. not handled by the Trust	19,036	7,684
Tin plates	6,639	4,673

10. *Motor-cars and Cycles.*—The details are as under—

	1920-21	1919-20
Motor cars	1,971	1,016
Do. cycles	641	429

11. *Kerosene oil.*—59,091 tons were imported in 1920-21 against 105,988 in 1919-20. Other mineral oil increased from 23,112 to 28,980 tons.

12. *Paper and Stationery.*—The imports have risen from 4,944 tons, in 1919-20 to 13,040 tons during the current year.

13. *Railway materials.*—The imports have risen by 4,800 tons, the figure for the current year being 21,997 tons.

14. *Timber.*—The imports of timber, chiefly teak from Burma, are the largest on record, totalling 42,303 tons against the eighteen-year average of just under 27,000 tons.

15. *Machinery.*—There were heavy imports of machinery from America, chiefly for Messrs Tata's Oil Mills on the West Coast and for the Mysore Government's blast furnaces at Benkipur.

16. *Coal.*—The major portion of the coal imported came by sea, whereas in the previous year the greater proportion had come by rail. Most of the coal was landed at the East Quay direct into railway wagons, thus ensuring quick despatch and a minimum of loss. Details of the coal transactions are as follows:—

	1920-21.	1919-20.	1918-19.	1917-18.	1916-17.	1915-16.
	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.
Imports by rail	38,259	120,687	36,886	55,917	69,034	..
Do. by sea	178,922	78,774	25,352	14,596	23,844	170,465
The quantities put into ships' bunkers were.	43,158	39,903	21,954	40,000	29,000	20,000
Railway coal transhipped from broad to metre gauge wagons in the harbour.	33,918	62,123	..	..	..	..

Coal is usually landed at the East and South Quays. At the East Quay the coal is put direct into open railway wagons by the ships' derricks. If sufficient railway wagons are not available, or if the coal is to be stacked on the harbour coal grounds the Trust's open 23-ton wagons are used for transporting the coal to the coal yards. In some cases, when extra quick despatch is required, the vessels discharge into wagons on one side and into lighters on the other, the lighters being subsequently discharged into wagons in the Boat Basin.

In the case of the South Quay coal is discharged by the ships' derricks on to the quay and carried the intervening 20 feet to the railway wagons by head load; this method, though not quite so satisfactory as direct loading, has the advantage of enabling covered wagons to be used as well as open ones.

Twenty-four steamers discharged 120,919 tons of coal at the East Quay in 169 days or an average for all vessels of 715 tons a day. The two best steamers were the S.S. "Gandara" which discharged 6,743 tons in seven working days, an average of 963 tons a day, and the S.S. "Pasha" which discharged 6,545 tons in seven days or an average of 935 tons a day. The best day's work was done by the S.S. "Gandara" which discharged 1,423 tons on the 22nd December. At the South Quay eleven steamers discharged 31,105 tons in 52 days or an average of just over 600 tons a day. The best work at this quay was done by the S.S. "Aymeric" which discharged 7,939 tons in nine days; on one day, 15th March, she discharged 1,171 tons.

The above figures are for all classes of vessels, big and small: with the larger vessels the rate of discharge can easily be maintained at over 800 tons a day from start to finish.

17. *Export variations.*—There has been a very heavy fall in exports—the total has not been so low since 1910-11. The fall occurred under all heads except ores and vegetables and provisions which, exceptionally, showed increases of 9 and 8 thousand tons respectively.

18. *Groundnuts.*—There was a fall of 15,000 tons, bringing the total considerably below the pre-war figure.

Details—

	1920-21.	1919-20.	1918-19.	1917-18.	1916-17.
	TONS.	TONS.	TONS.	TONS.	TONS.
Shipments to Europe	37,616	46,256	1,576	12,248	73,994
Do. Singapore	1,493	579	3,480	38,897	16
Do. coast ports	11,233	18,423	11,162	49,465	9,322
	50,342	65,258	16,218	100,710	83,332

19. *Hides and skins.*—Owing to large stocks in the European markets the exports of hides and skins were only 7,319 tons against an eighteen year average of over 16,000 tons. Towards the end of the year there were signs of a revival in exports under this head.

20. *Ores.*—Exports totalled 21,387 tons and were 9,000 tons better than in the previous year. They consist chiefly of chrome ore and magnesite.

21. *Railway working.*—The railway traffic of 1920-21 consisted of 341,309 tons in 25,020 broad gauge wagons, inwards and outwards and 180,408 tons in 23,590 metre gauge wagons, inwards and outwards; total 521,717 tons. The freight collected on behalf of the two contiguous railways on the above traffic amounted to Rs. 17,07,381.

	RS.
Madras and Southern Mahratta Railway	11,90,367
South Indian Railway	5,17,014
	17,07,381

The actual harbour revenue on this traffic at three and two pies per maund terminals, according to the class of goods, amounted to Rs. 1,91,720. The inwards traffic consisted chiefly of coal, groundnuts, magnesite and full pressed cotton and the outwards traffic of rice and paddy, railway materials, kerosene oil, coal and grains. This revenue does not include the earnings of local haulage, handling charges, wharfage and miscellaneous recoveries, amounting to Rs. 26,117. The expenditure for the year on the above amount was Rs. 2,96,954, inclusive of interest and depreciation amounting to Rs. 73,583. The revenue barely covered the working expenses, and left nothing over to meet interest and depreciation on tracks and plants. The question of an enhancement of the terminals to cover the cost of working the railway section is now under consideration.

22. *Work at quays.*—With the introduction, on 1st October 1920, of a consolidated rate for landing charges quay and crannage, whether a vessel discharged at a quay or at moorings, considerably greater use was made of the quays. So much so that in March the quays were being worked up to 78 per cent of their full capacity. The total tonnage landed and shipped at quays during the year was 311,613 tons (217,238 tons landed and 94,375 tons shipped) against totals of 184,189 tons and 7,770 in the two previous years.

The outer quay was, except on one occasion, not available during the year, owing to the engineering work in progress at the head of the sheltering arm.

23. *Heavy lifts.*—One of the features of the year was the increasing extent to which vessels are using the Trust's cranes to take heavy lifts direct from their holds. Thirteen vessels went to the East Quay where 720 tons of heavy lifts, ranging from 1 to 20 tons, were taken out of them by the 40-ton Titan crane and one went to the outer quay where 108 tons of heavy lifts were taken out by the 33-ton Titan crane. This latter crane is best suited to the purpose as she has considerably more head room than the 40-ton Titan crane, and has a radius of 80 ft. with 25 tons or 62 ft. with 33 tons, against the 48 ft. radius of working of the 40-ton crane. She was only used once during the year, in a case in which the East Quay was already occupied, as her time was fully employed on engineering work. As soon as the reconstruction of the head of the sheltering arm is completed she will be available for regular traffic work.

III. ENGINEERING.

24. *Cyclone damage works.*—During the year the steel caisson, weighing 240 tons, which, when sunk and filled with concrete, will form the head of the rebuilt portion of the sheltering arm, has been put together and placed in position. The first 25 ft. of steelwork, weighing 142 tons, was erected on the Port Trust slipway and launched in June. The erection of the remaining 30 feet was carried out afloat, and completed by the end of September by which time, with the addition of 530 tons of concrete, she was drawing 26 feet. The finished caisson was then flooded and kept on the bottom, in the north-east corner of the Harbour, during the November cyclone season. In January, she was refloated and towed out under lee of the sheltering arm where a further 610 tons of concrete were filled into her. This load brought her draught down to 36.5 feet.

Early in February 1921 she was placed in position in 40 feet of water. Three days later unexpected bad weather set in and she started to move and worked herself into the bottom. After all attempts to steady her had failed, she was finally floated out to save her from being lost altogether. Additional freeboard was provided by adding two extra 4-foot strakes and the sea bed at the site was hardened with broken stone and levelled off. Five weeks later, on 12th March 1921, a second attempt to place her in position was made and proved successful. The remainder of the concrete filling was then put in, and by the end of March, 4,048 tons had been deposited in her. Five slices of block work measuring 30 ft. had to be put in temporarily in advance of the semi-permanent head to enable the Titan crane to plumb the well of the caisson for grabbing. These slices will be taken out and rebbed after the caisson has been sunk to her final level.

25. *Cement.*—Eight hundred and forty-eight tons of cement were purchased during the year. Of this quantity, 500 tons were obtained from England and the balance was bought locally. 250 tons being of local manufacture. 1,136 tons were used. The stock at the end of the year was 748 tons.

26. *Stone.*—Eleven thousand and forty-six tons of stone were received from Pallavaram quarry during the year.

27. *South accretion.*—During the year the work of filling up, to the level of the surrounding yards, certain low-lying parts of the south accretion has been in progress. Up to date, 2.5 acres of additional stacking ground have been made available for coal and timber.

28. *South quay.*—After 10 years' use the decking of the south quay has become very rough. Though worn on the upper surface, the original 6" black-butt planks, which formed the deck, are still fairly sound and able to stand the load. The worst portion has been provided with a better surface by laying a skin of 2" teak planks transversely thereon. If this proves successful the whole deck will be similarly treated.

29. *West quay.*—When the west quay was completed the granite sett paving at the back of the wall was laid down temporarily, until such time as the filling behind the wall had settled. The increased traffic at the quay necessitated a better surface to work over; although further settlement is still possible it was considered advisable to put down the permanent paving. During the year, 93,877 square feet of the temporary paving was lifted and relaid on 1 foot of concrete and grouted with cement.

30. *Dredging.*—The suction dredger 'Madras' worked for 199 days during the year. Seventy-eight working days were spent in deepening and maintaining the entrance channel, and for the remaining 121 days she worked inside the harbour, chiefly in the south-east corner and in No. 5 berth. The low output per working day was due to the fine silt from the entrance channel settling badly and also the large quantity of coal met with in No. 5 berth which choked the pipes and hindered the work.

The 'Madras' was sent to Calcutta for overhaul on 11th February and returned on the 10th April. She underwent a special survey while there and maintained her previous class of A-1 at Lloyds.

The bucket dredger 'Triton' worked for 78 days inside the harbour removing shallow patches. In the last two years she has been worked with the knowledge that, as far as work in this harbour was concerned, she was not worth extensive repairs. On 24th August 1920, she sprang a leak in her hull under the thrust block which, on examination, proved to be of such an extent as would have necessitated the renewal of many of the hull plates under the engine room. She was therefore put out of commission having been in continuous work since she was built in 1892. From 1892 to 1907, she was working in Colombo. In 1907, she was purchased by us for the arduous work of opening the northern entrance, which involved very heavy dredging of rubble, individual pieces picked up by her weighing in some cases as much as one ton. Thereafter she has been employed in dredging the berths in the harbour and, since 1911, has removed a total of over 840,000 tons of material at an average cost, including interest and depreciation, of 10.8 annas per ton.

She will now be sold for breaking up.

Dredging statistics.—The table below gives the quantity dredged during the year and progressive totals. The net increase in the volume of water within the harbour arms below Indian Spring Low Water level is 1,340,000 cubic feet.

Particulars.	Unit.	Dredger 'Madras'.		Dredger 'Triton'.	
		1920-21.	1906-21.	1920-21.	1911-21.*
Quantity dredged	Tons.	128,096	3,622,926	28,280	840,413
Working days—					
(a) Dredging	No.	189	3,125	78	1,743
(b) Other work	"	1	129	..	88
Sundays and holidays	"	64	767	24	437
Days absent for overhaul	"	(a) 55	808	..	1,165
Days under repairs and weather bound	"	..	650	43	..
Dredged per working day	Tons.	644	1,159	363	482
Rate per ton	Annas.	(b) 13-78	6-42	14-38	10-12
Rate per ton including interest and depreciation	"	19-13	9-26	16-14	10-81

* The vessel has been out of commission from the 24th August 1920.

(a) Forty-three days for overhaul and 12 days for preparing for voyage and voyages.

(b) The cost of this year's overhaul has not been included as the bills were not received until the accounts for 1919-20 were closed. If this debit had been included, the cost per ton would have been about 21 annas.

31. **Merchants' warehouses.**—The erection of the last of the three warehouses was completed and it was brought into use during the year, thus adding 56,000 square feet, or $1\frac{1}{4}$ acres to the covered storage space in the harbour.

32. **Revetment north of harbour.**—During the year, 1,805 tons were deposited in the revetment north of harbour.

33. **South yard.**—Estimates totalling Rs. 2,89,000 have been sanctioned for the remodelling of the railway lines on the south accretion and for improved passenger accommodation at the south quay. The work is being carried out as the filling of the low-lying ground recently vacated by the Burma Oil Company, progresses. When completed an additional area of nearly 10 acres with a complete lay out of sidings will be available for the storage of coal, ore and other rough goods. At the close of the year $2\frac{1}{2}$ acres of the new ground was in use.

34. **Timber yard.**—Messrs. Millars Timber Trading Company kindly relinquished, temporarily, the two acres of land they hold on lease from the Port Trust, and of which they were not then making use, thus enabling the Port Trust to meet the urgent demand for storage sites for timber, pending the completion of the area south of the magazine now being filled up for timber storage purposes. Hitherto all cranes in the timber area have been worked by hand; to quicken the work an hydraulic crane has now been installed to lift floating logs out of the pond. The installation of a second hydraulic crane is contemplated.

35. **Workshops.**—Two new hollow spindle lathes, manufactured locally, were added to the plant during the year.

IV. POLICE AND MEDICAL.

36. **Police.**—There was an increase of 10 head constables and a reduction of 8 constables in the constabulary during the year under report. In addition to the permanent strength a temporary staff was maintained throughout the year to carry out plague regulations.

The number of cognizable cases reported was 138, against 69 cases in the previous year, of which 112 ended in conviction. Fifty-five persons were prosecuted under the City Police Act, for fraudulent possession of properties within the harbour limits and were convicted.

Six cases of opium smuggling were detected during the year, all of which ended in conviction. About Rs. 2,000 worth of contraband opium was seized and confiscated.

The work of the police force, under Diwan Bahadur P. Parankusam Nayudu Garu, Deputy Commissioner of Police, Northern Range, continued to be satisfactory.

37. **Medical.**—Five hundred and twenty-nine vessels arrived here from plague-infected ports against 397 vessels in the previous year. The number of outgoing vessels

inspected during the year was 243 against 265 in the previous year. There were during the year twelve cases of chicken pox (with 22 contacts), one case of measles, one case of smallpox and two cases of cholera amongst the crew and passengers on steamers that entered the harbour; all these cases were removed to the Infectious Diseases Hospitals at Rayapuram and Krishnampet.

V. PERSONAL.

38. **The Trust's staff.**—Between 26th July and 3rd September 1920 the Engineer-Chairman, Mr. H. H. G. Mitchell, O.B.E., M. INST., C.E., M.I.E. (Ind.), availed himself of 39 days' privilege leave out of the six weeks' leave granted to him by Government. During his absence Capt. C. R. White, M.O., M. INST., C.E., the Deputy Chief Engineer, officiated for him.

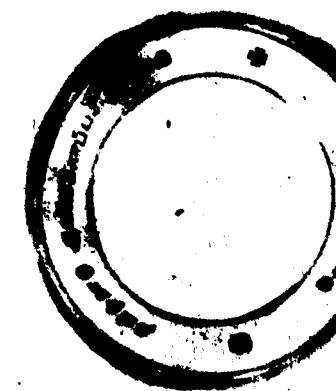
Commander G. H. Finnis, O.B.E., R.I.M., Deputy Port Conservator, returned to duty on the 12th October 1920 from six weeks' privilege leave; Mr. R. W. Cooper, acting Senior Harbour Master, acted for him during his absence; Mr. H. Garland, the late Senior Harbour Master, was granted six months' privilege leave and six months' sick leave in extension in view of his serious illness. He proceeded to England on the 29th October 1919 and died on the 15th June 1920 after 13 years' service. Lieut. S. P. Congdon, O.B.E., second Harbour Master, died of heart failure at the General Hospital on the night of the 5th November 1920.

Mr. W. W. Robinson continued to be Traffic Manager throughout the year. Mr. J. G. Lord, First Assistant Traffic Manager, resumed duty on the 27th December 1920 from the six months' combined leave. Mr. S. Narayana Ayyar, Chief Accountant, was granted three months' privilege leave from the 19th April 1920. During his absence Mr. V. Sundararamanjulu Chettiyar acted for him.

39. **The Port Trustees.**—The number of ordinary meetings held during the year was 25. The statutory meeting, under section 82 of the Madras Port Trust Act, was held in January 1921. The Chairman was present for 24 meetings. The total strength of the other Trustees was fourteen and their average attendance was 11.08 per meeting against 11.04 last year. During the year under review the Board appointed two committees of five members in each including the Chairman and the Collector of Customs. The first of them, to consider and report on the question of levy of quay dues and consolidation thereof with the landing charges, held two meetings at which all were present. The other, to consider the possibility of the Trust's taking over the entire work of the landing and shipping of goods in the alternative of transferring the whole control of the work to landing agents subject to a tariff, held two meetings with an average attendance, excluding the Chairman who presided at both the meetings, of 2.5 per meeting. The Chairman continued to represent the Trust on the Corporation of Madras throughout the year. During the year the Board consisted of the members whose names are given on the outer cover of the report.

21st July 1921.

H. H. G. MITCHELL,
Chairman, Madras Port Trust.



**APPEN
REVENUE**
COMPARISON OF REVENUE TRANSACTIONS OF

Items	Actuals of 1919-20.	Actuals of 1920-21.	Plus or minus.
1	2	3	4
<i>Opening Balance.</i>			
	RS.	RS.	RS.
Government securities in the Imperial Bank of India, Madras ..			
Cash in the Imperial Bank of India, Madras ..	1,87,715	5,55,773	+ 3,68,058
General cash in office ..	3,004	817	- 2,187
Permanent advance with the cashier ..	1,000	1,000	
Do. Railway Cashier ..		200	+ 200
Total ..	1,91,719	5,57,790	+ 3,66,071
<i>Receipts.</i>			
I. Harbour receipts—			
(i) Dues on imports ..	13,07,928	12,19,814	- 88,114
(ii) Do. exports ..	4,12,657	2,53,151	- 1,59,506
(iii) Transit dues, imports ..	1,31,338	6,59,999	+ 5,28,661
(iv) Storage, exports ..	5,525	4,467	- 1,058
(v) Rent for storage space ..	30,786	42,655	+ 11,869
(vi) Harbour terminal charges ..	1,87,851	1,73,531	- 14,320
(vii) Cranage ..	1,70,366	1,44,568	- 25,798
(viii) Porterage, special ..	51,178	36,138	- 15,040
(ix) Demurrage ..	6,488	7,550	+ 1,062
(x) Hire of harbour wagons ..	15,382	49,635	+ 34,253
(xi) Quay dues ..		75,230	+ 75,230
II. Rents, fees and penalties—			
(i) Rents of properties ..	1,26,540	1,31,020	+ 4,480
(ii) Overtime fees ..	41,511	55,221	+ 13,710
(iii) Passenger tolls ..	17,483	16,117	- 1,366
(iv) Fines and penalties ..	1,847	2,347	+ 500
III. Sales—			
(i) Water sold to boats ..	24,980	42,275	+ 17,295
(ii) Do. works ..	4,567	4,491	- 76
(iii) Sale of unclaimed goods ..	6,452	2,551	- 3,901
(iv) Other sales ..			
IV. Contributions to Revenue—			
(i) From Port funds ..			
(ii) From Government ..			
V. Interest—			
Interest on investments ..	3,114	32,305	+ 29,191
VI. Miscellaneous—			
(i) Profit on investments ..			
(ii) Commission on Corporation timber licence fees ..	3,134	4,876	+ 1,742
VII. Items awaiting adjustment ..	450	845	+ 395
Total, Receipts ..	25,49,677	29,58,786	+ 4,09,109
<i>Closing Balance.</i>			
Government securities ..	5,55,773	10,03,780	+ 4,48,007
Cash in the Imperial Bank of India, Madras ..	817	514	- 303
General cash in office ..	1,000	2,000	+ 1,000
Permanent advance with the cashier ..	200	200	
Do. Railway cashier ..			
Total ..	5,57,790	10,06,494	+ 4,48,704
Total, including Opening Balance ..	27,41,396	35,16,576	+ 7,75,180

Superdues were collected till 1st October 1920 when they were discontinued and quay dues began to be levied.

DIX I.
ACCOUNT.
1919-20 WITH THOSE OF 1920-21.

Items.	Actuals of 1919-20.	Actuals of 1920-21.	Plus or minus.
1	2	3	4
<i>Expenditure.</i>			
	RS.	RS.	RS.
1. General charges—			
(i) Direction ..	46,685	42,479	- 4,206
(ii) Accounts ..	32,781	43,840	+ 11,059
(iii) Traffic ..	36,995	47,515	+ 10,520
(iv) Engineering ..	16,320	24,277	+ 7,957
(v) Stationery and printing ..	12,586	19,556	+ 7,070
(vi) Postage and telegraphy ..	3,730	4,070	+ 340
(vii) Furniture ..	2,578	1,238	- 1,340
(viii) Liveries ..	4,743	5,130	+ 387
(ix) Electrics ..	8,186	10,340	+ 2,154
(x) Office contingencies ..	5,782	3,544	- 2,238
(xi) Rents, rates and taxes ..	38,399	1,12,066	+ 80,667
2. Porterage of cargo—			
(i) Supervision ..	72,958	92,414	+ 19,456
(ii) Tally ..	34,499	50,565	+ 16,066
(iii) Labour, daily, sheds and piers ..	98,370	1,49,236	+ 50,866
(iv) Porterage, contract ..	96,698	89,436	- 7,262
(v) Do. special ..			
(vi) Demurrage ..	5,196	5,331	+ 135
(vii) Traffic contingencies ..	46,352	45,904	- 448
3. Engineering and maintenance—			
(i) Dredging ..	1,53,208	1,95,487	+ 42,279
(ii) Sheds and buildings ..	12,867	15,511	+ 2,644
(iii) Tracks ..	23,593	22,536	- 1,057
(iv) Piers and wharves ..	16,015	8,958	- 7,057
(v) Plant and piping ..	93,975	1,10,617	+ 16,642
(vi) Roads and yards ..	15,566	15,062	- 504
(vii) New minor works ..	3,684	4,807	+ 1,123
(viii) Cranes, power ..	77,834	97,177	+ 19,343
(ix) Locomotive working ..	42,554	47,498	+ 4,944
(x) Marine surveys ..	10,635	10,194	- 441
(xi) Watch and conservancy ..	13,538	19,902	+ 6,364
(xii) Water bought from City ..	22,951	30,054	+ 7,103
(xiii) Revetment north of the harbour ..	14,301	8,296	- 6,005
4. Pensions and contributions—			
(i) Government for police ..	4,052	47,494	+ 43,442
(ii) Pensions and gratuities ..	633	4,000	+ 3,367
(iii) Board's provident fund ..	33,178	19,540	- 13,638
5. Interest—			
(i) Interest on Government loans ..	5,60,531	5,68,352	+ 7,821
6. Miscellaneous—			
(i) Claims ..	2,327	225	- 2,102
(ii) Loss on investments ..			
(iii) Insurance ..	9,716	10,807	+ 1,091
(iv) Coolies' doles ..	443	371	- 72
(v) Law charges ..	969	1,602	+ 633
7. Items awaiting adjustment ..	178	7,521	+ 7,343
Surplus revenue transferred to capital ..	5,08,000	5,10,000	+ 2,000
Total, Expenditure ..	21,81,606	25,10,082	+ 3,28,476
<i>Closing Balance.</i>			
Government securities ..	5,55,773	10,03,780	+ 4,48,007
Cash in the Imperial Bank of India, Madras ..	817	514	- 303
General cash in office ..	1,000	2,000	+ 1,000
Permanent advance with the cashier ..	200	200	
Do. Railway cashier ..			
Total ..	5,57,790	10,06,494	+ 4,48,704
Total, including Closing Balance ..	27,41,396	35,16,576	+ 7,75,180

(a) Represents the Chief Engineer's expenditure of eleven months of the year plus the expenditure of March of the previous year.

W. D. WOOLLAM,
Accountant-General,
T. RANGASWAMI MUDALIYAR,
Assistant Accounts Officer. } *Assessors.*

APPENDIX II.
STATEMENT OF CAPITAL INTEREST AND DEBT.

Year.	Capital for harbour and its extension.			Capital for improving working facilities.		Capital for cyclone damages.	Interest payments.			Capital provided by Revenue.	Sales and recoveries on capital account.	Progressive totals of sums raised for expenditure on capital account.	Year.
	Loans from Government.	Grant from Government.	Repayment of loans.	From Government.	Repayment of loans.	From Government.	On loans in column 2.	On loans in column 5.	On loans in column 7.				
Before 1883-84	Rs. 65,54,490	Rs. 21,10,280	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 74,600	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1883-84
1883-87	Rs. 4,37,000	Rs. 4,37,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1883-87
1887-88	Rs. 6,20,000	Rs. 6,20,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1887-88
1888-89	Rs. 7,40,000	Rs. 7,40,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1888-89
1889-90	Rs. 7,47,011	Rs. 7,47,011	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1889-90
1890-91	Rs. 8,00,000	Rs. 8,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1890-91
1891-92	Rs. 1,50,000	Rs. 1,50,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1891-92
1892-93	Rs. 2,70,000	Rs. 2,70,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1892-93
1893-94	Rs. 1,50,000	Rs. 1,50,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1893-94
1894-95	Rs. 4,54,985	Rs. 4,54,985	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1894-95
1895-96	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1895-96
1896-97	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1896-97
1897-98	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1897-98
1898-99	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1898-99
1899-1900	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1899-1900
1900-01	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1900-01
1901-02	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1901-02
1902-03	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1902-03
1903-04	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1903-04
1904-05	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1904-05
1905-06	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1905-06
1906-07	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1906-07
1907-08	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1907-08
1908-09	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1908-09
1909-10	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1909-10
1910-11	Rs. 4,00,000	Rs. 4,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1910-11
1911-12	Rs. 60,534	Rs. 60,534	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1911-12
1912-13	Rs. 87,197	Rs. 87,197	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1912-13
1913-14	Rs. 81,615	Rs. 81,615	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1913-14
1914-15	Rs. 84,941	Rs. 84,941	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1914-15
1915-16	Rs. 88,401	Rs. 88,401	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1915-16
1916-17	Rs. 92,003	Rs. 92,003	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1916-17
1917-18	Rs. 95,751	Rs. 95,751	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1917-18
1918-19	Rs. 99,652	Rs. 99,652	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1918-19
1919-20	Rs. 1,03,712	Rs. 1,03,712	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1919-20
1920-21	Rs. 1,07,938	Rs. 1,07,938	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	1920-21
Total	Rs. 1,60,75,716	Rs. 20,00,000	Rs. 35,78,466	Rs. 20,00,000	Rs. 10,17,509	Rs. 19,00,000	Rs. 70,85,103	Rs. 14,24,617	Rs. 247,037	Rs. 50,82,742	Rs. 7,93,598	Rs. 3,37,08,902	Total
Less grant	Rs. 6,54,490	Rs. 21,10,280	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Less grant
Balance loan	Rs. 1,04,22,226	Rs. 1,04,22,226	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Balance loan
Less repayments	Rs. 35,79,486	Rs. 35,79,486	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Less repayments
Balance due	Rs. 68,42,740	Rs. 68,42,740	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Rs. 1,00,245	Balance due

(1) These are grants, not loans.

(2) See corresponding statement in previous administration reports for temporary advances by and repayments to Revenue between the years 1881-82 and 1904-05.

(3) These recoveries on Capital account when expended again on the same account do not affect the total Capital outlay, but merely reduce the sum which, but for such recoveries, Revenue would have had to contribute to Capital directly or in the form of repayment of loans.

(4) That column is not, in every year, directly derivable from columns 2, 3 and 12, is due to the fact that, as explained in note (2), there were temporary advances and repayments. These will be found in the administration report of 1906-07 and need not go on being reproduced year after year.

(5) Since transferred to the Port Trust Board—vide G.O. No. 138, Marine, dated 27th April 1911.

(6) The new loan has now been incorporated with the old loan and is being paid off by equated monthly payments of Rs. 10,000 ending on the 15th March 1919—vide G.O. No. 240, Marine, dated 26th July 1912.

(7) The 7-lakh loan drawn in 1908-11 has been paid off by equated monthly payments of Rs. 10,000 ending on the 15th March 1913, and the 6-lakh loan sanctioned in G.O. No. 157, Marine, dated 28th May 1916, for harbour improvements and working facilities.

(8) Includes the 50-lakh loan drawn in 1913-17 for the ships quay and its equipments sanctioned in G.O. No. 127, Marine, dated 28th March 1913, and the 6-lakh loan sanctioned in G.O. No. 157, Marine, dated 28th May 1916, for harbour improvements and working facilities.

(9) Represents the portion drawn of the 5-lakh loan sanctioned in G.O. No. 54, Public (Marine), dated 5th February 1917, of the 10-lakh loan sanctioned in G.O. No. 284, Public (Marine), dated 20th June 1917, and of the 4-lakh loan sanctioned in G.O. No. 831, Revenue (Special) (Marine), dated 9th August 1919, to meet the cost of damage done by the cyclone in November 1916.

In the previous administration reports the column "Capital provided by Revenue" included loans and grants exhibited in column 5. Now they are eliminated to exhibit the contribution made by Revenue proper.

W. D. WOOLLAM,
Accountant-General,T. RANGASWAMI MUDALIYAR,
Assistant Accounts Officer,

Auditors.

APPENDIX III.

CAPITAL ACCOUNT AT THE END OF 1920-21.

Sources of Capital Receipts.	Receipts up to the end of 1919-20 as per Administration Report for 1919-20.	During 1920-21.	Total receipts at the end of 1920-21.	Particulars of expenditure.	Expended to 31st March 1919 as per Administration Report for 1919-20.	During 1920-21.		Total.
						Expenditure.	Depreciation, etc.	
I. Surplus revenue transferred to capital.	Rs. 92,13,206	Rs. 5,10,000	Rs. 97,23,206	Repayment of loans	Rs. 44,27,255	Rs. 2,13,209	Rs. ..	Rs. 46,40,464
II. Government loans ..	1,81,52,226	3,70,000	1,85,22,226	EXPENDITURE ON WORKS.				
III. Government grants—	Rs. ..			(a) Works completed and brought on to the Block Account.				
(a) Provided free of interest by Govt. .. 76,33,970				Land	13,25,138	..	..	13,25,138
(b) Grants by Imperial Govt. .. 20,00,000				Harbour groynes	95,75,565	..	..	95,75,565
(c) Grants by Provincial Govt. .. 15,00,000				Extension works proper	57,24,813	..	..	57,24,813
IV. Sales on Capital account ..	1,11,33,970	..	1,11,33,970	Moorings	1,24,840	..	..	1,24,840
V. Port Fund works transferred to Capital Account ..	47,514	1,930	49,444	Do. special (extension works)	58,803	..	..	58,803
	1,37,849	..	1,37,849	Offices, buildings and sheds	21,24,534	9,183	..	21,33,717
				Do. (extension works)	29,500	..	..	29,500
Total ..	3,86,84,765	8,81,920	3,95,66,685	Tracks	8,90,996	..	..	8,90,996
				West quay masonry	31,40,811	..	..	31,40,811
				Plant dredger, "Madras"	1,55,122	..	29,120	1,26,002
				Do. electric	44,704	..	..	44,704
				Do. hydraulic	1,61,688	..	16,168	1,45,520
				Do. ordinary miscellaneous	3,66,042	..	36,604	3,29,438
				Do. residual value from extension	59,654	..	5,965	53,689
				Piers and wharves, iron	2,59,388	..	9,217	2,50,171
				Dredging	1,56,240	6,76,568	..	8,32,808
				Total ..	2,10,57,027	38,26,562	97,074	2,47,86,515
				(b) Works in progress.				
				Permanent caisson head. (Groynes) ..	2,64,357	4,91,969	..	7,56,316
				West quay, paved road. (Land) ..	2,29,481	68,968	..	2,98,449
				Merchants' warehouses. Sheds ..	11,05,473	1,33,822	..	12,39,295
				Platforms and booking office ..	76,482	2,360	..	78,842
				Quarters for harbour police ..	25,379	- 25,379	..	..
				Extensions of permanent-way. Tracks ..	3,29,205	7,243	..	3,36,448
				West quay. Piers ..	81,34,253	-31,34,253	..	..
				Repairing cyclone damages. Groynes ..	11,79,394	- 39,324	..	11,40,070
				Hydraulic equipment. Plant ..	2,06,634	4,129	..	2,10,763
				Electric do. ..	20,869	9,145	..	30,014
				Harbour fire service. Do. ..	13,747	1,972	..	15,709
				Equipment of warehouses. Do. ..	71,103	27,430	..	98,533
				Water-supply. Do. ..	29,012	2,377	..	22,889
				Dredging for west quay. Dredging ..	6,76,568	-6,76,568	..	..
				Bulk petrol boiler house and Sheds ..	18,537	18,971	..	37,508
				piping. ..	3,181	-3,181	..	..
				Feeding accommodation for coolies ..	5	55,715	..	55,720
				Renewal of oil pipe line on Plant North Groynes. ..	..	1,743	..	1,743
				Coolie accommodation at Cassimode. Shed. ..	..	1,637	..	1,637
				Filling in with sand the lowlying ground south of the magazines. Land. ..	..	10,696	..	10,696
				Providing additional lathes for the workshop. Plant. ..	..	7,468	..	7,468
				New cradle for the slipway. Do. ..	..	22,977	..	22,977
				Filling in with sand the plot vacated by the Burma Oil Company. Land. ..	..	5,462	..	5,462
				Remodelling railway facilities on the south accretion. Tracks. ..	..	121	..	121
				Purchase of two locomotives. Plant. ..	..	..	..	..
				Total ..	78,74,670	-30,04,530	..	43,70,140
				Depreciation	53,69,925	..	97,074	54,86,999
				Engineer's suspense account ..	1,85,384	-11,185	..	1,74,199
				Total works ..	3,40,07,006	8,10,847	..	8,48,17,853
				Balance available for expenditure ..	..	..	..	* 1,08,378
				Total ..	..	..	..	3,49,26,231
Grand total ..	..	..	3,95,66,685	Grand total ..	..	..	..	3,95,66,685

APPENDIX IV.

BALANCE STATEMENT OF THE TRUST'S MINOR ACCOUNTS.

Liabilities.	Amount.	Assets.	Amount.
<i>Balance on 31st March 1921.</i>	<i>RS. A. P.</i>	<i>Government Securities.</i>	<i>RS. A. P.</i>
Provident Fund account ..	4,54,375 9 0	Provident Fund account in the Imperial Bank of India, Madras ..	4,51,900 0 0
Deposit account ..	26,918 5 2	Deposit account in the Imperial Bank of India, Madras ..	1,19,180 0 0
Biden Sailors' Home Charity account ..	58,087 13 8	Biden Sailors' Home Charity account in the Imperial Bank of India, Madras ..	57,500 0 0
Disabled Boatmen's Fund account ..	39,026 14 5	Disabled Boatmen's Fund account with Accountant-General ..	38,500 0 0
Harbour dues advance account ..	1,11,817 15 2	<i>Cash in the Imperial Bank of India, Madras, Post Office Savings Bank and Office.</i>	
Railway Freight advance account ..	33,038 14 8	Provident Fund account ..	17,837 15 0
	7,16,765 8 1	Deposit account ..	1,758 5 2
		Biden Sailors' Home Charity account ..	587 13 8
		Disabled Boatmen's Fund account ..	526 14 5
		Harbour dues advance account ..	1,11,317 15 2
		Railway Freight advance account ..	33,038 14 8
		Loans recoverable from Provident Fund subscribers ..	
			1,29,392 0 1
			20,313 8 0
			7,16,765 8 1

* Includes Rs. 700 in 4 per cent terminable loan in the Post office and Rs. 60 cash certificates in office.

† Includes As. 7-1 in the Post Office Savings Bank.

W. D. WOOLLAM,
Accountant-General.

T. RANGASWAMI MUDALIYAR,
Assistant Accounts Officer.

APPENDIX V

MADRAS PILOTAGE FUND ACCOUNT.

Head of accounts.	1919-20.	1920-21.	Difference + or -.
<i>Receipts.</i>	<i>RS.</i>	<i>RS.</i>	<i>RS.</i>
Pilotage fees ..	72,089	98,701	+ 26,612
Stern-fast boat hire ..	1,650	2,097	+ 447
Fees for shifting berth ..	1,590	2,380	+ 790
Remooring ..	50	40	- 10
Miscellaneous ..	180	100	- 80
Interest on Government securities ..	1,900	2,952	+ 1,052
Profit on investments ..	7,368	9,600	+ 2,232
Contribution from Port Fund ..			
Total, receipts ..	84,827	1,15,870	+ 31,043
Opening balance .. { Cash ..	7,668	15,475	+ 7,807
Government securities ..	56,400	76,400	+ 20,000
Grand total .. { Cash ..	92,495	1,31,345	+ 38,850
Government securities ..	56,400	76,400	+ 20,000
<i>Expenditure.</i>			
Establishment ..	(a) 45,005	(b) 52,715	+ 7,710
Contingencies ..	1,748	1,920	+ 172
Supplies and services ..	7,387	8,498	+ 1,111
Public Works charges ..			
Rent of Biden Home ..	2,880	2,880	
Contribution to Provident fund ..			
Refund of dues ..			
Loss on investments ..			
Total, expenditure ..	57,020	66,013	+ 8,993
Closing balance .. { Cash ..	15,475	15,832	+ 357
Government securities ..	76,400	1,26,400	+ 50,000

(a) This includes a sum of Rs. 1,500 paid on account of pensions and gratuities.

(b) Do. Rs. 1,960 do. do.

W. D. WOOLLAM,
Accountant-General.

T. RANGASWAMI MUDALIYAR,
Assistant Accounts Officer.

APPENDIX VI.

WORK DONE AT QUAYS.

Names of quays.	Number of vessels and tonnage of goods landed.		Best day's work in landing and shipment.						Live-stock landed and shipped.		Passengers.				
	Number of vessels.	Tonnage.		Landing.			Shipment.			Landed.	Shipped.	Dis-embarked.		Embarked.	
		Landed.	Shipped.	Date	Description of goods.	Tonnage	Date.	Description of goods.	Tonnage.			Number of vessels.	Number of passengers.	Number of vessels.	Number of passengers.
West quay No. I.	(a) 58	10,164	33,724	9th Oct. 1920.	Rice and grains.	1,000	15th Feb. 1921.	Ground-nuts.	929	5	..	9	5,286	1	1,195
West quay No. II.	(b) 43	13,273	38,636	29th June 1920.	Do.	921	26th Mar. 1921.	General.	561	2	..	10	4,456	2	1,422
West quay No. III.	(c) 42	16,961	16,723	8th Apr. 1920.	General.	365	24th Jan. 1921.	Ground-nut. kernels.	1,134	..	..	2	1,268	5	2,029
West quay No. IV.	(d) 44	15,470	4,221	4th Aug. 1920.	Do.	580	29th Nov. 1920.	Do.	631	..	..	1	14	..	..
South quay.	(e) 17	33,858	1,069	15th Mar. 1921.	Coal.	1,171	30th Mar. 1921.	Coal.	300	466	436	60	42,640	32	30,608
East quay.	(f) 37	127,401	..	22nd Dec. 1920.	Do.	1,423	..	..	..	..	..	..	..	..	..
Outer ..	(g) 1	111	..	..	..	..	..	..	..	..	..	..	..	..	..

Steamers. Sailing vessels.

(a) 42 16
(b) 39 4
(c) 39 3
(d) 15 29
(e) 15 2
(f) 37 ..
(g) 1 ..

APPENDIX VII.

STATEMENT OF TONNAGE CARRIED AND DUES PAID ON CARGO CARRIED BY THE VARIOUS LINES OF VESSELS FREQUENTING THE PORT IN 1920-21.

Name of line.	Number of vessels.	Imports.		Exports.		Total.	
		Tonnage.	Dues.	Tonnage.	Dues.	Tonnage.	Dues.
British-India ..	195	206,903	4,16,591	38,723	95,396	245,626	5,11,987
Clan ..	53	68,410	1,83,772	85,159	48,699	103,569	2,32,471
Brooklebank-Well ..	29	28,479	83,386	992	1,736	29,471	85,123
Ellerman ..	11	924	1,487	9,361	16,221	10,285	17,708
Ellerman and Bucknall ..	19	12,817	65,182	3,839	6,597	16,656	71,779
Asiatic ..	37	43,412	84,861	7,178	11,991	50,590	96,852
Natal ..	2	129	272	50	158	179	430
Soc. Veneziana de N.V. ..	8	1,535	4,199	6,205	11,048	7,740	15,247
Scandinavian-Indian ..	11	4,976	12,022	626	976	5,602	12,998
Swedish Indian ..	3	1,453	3,403			1,453	3,403
Peninsular and Oriental ..	15	5,277	17,789	1,339	2,280	6,616	20,069
United States Emergency Fleet Corporation ..	10	1,722	9,005	2,318	3,522	4,040	12,527
Nippon Yusen Kaisha ..	2	541	2,366	152	133	693	2,499
Holland and America ..	6	2,594	6,792	4,859	9,432	7,453	16,224
Do. British India ..	15	3,160	7,627	5,350	8,459	8,510	16,086
Kerr Steam Ship Company ..	1	1,232	4,812			1,232	4,812
Pacific Mail Steam Ship Co. ..	7	3,664	8,512	1,213	1,830	4,877	10,342
Java-Bengal ..	2			1,279	4,493	1,279	4,493
Hansa ..	1	56	158			56	158
American and Indian Branch Service ..	2	465	904	629	1,256	1,094	2,160
Horse Vessels ..	1	294	3,243			294	3,243
Colliers ..	31	174,434	1,00,189	204	706	174,638	1,00,895
Oil Tankers ..	36	93,241	1,75,572	1,449	1,919	94,690	1,77,491
Government ..	16		1	855	3,005	855	3,005
Miscellaneous ..	117	23,425	37,963	9,236	14,349	32,661	53,311
Total ..	630	679,143	12,30,107	131,016	2,44,206	810,159	14,74,313

APPENDIX VIII.

STATEMENT OF LANDS LEASED TO OTHERS BY THE PORT TRUST OTHER THAN THOSE LEASED UNDER PERMIT SYSTEM.

Name of lessee.	Local representatives.	Object for which leased.	Area leased.	Date of lease.	Date of cessation of lease.	Rent per mensem.	Locality.
Burma Oil Company, Limited, 175, West George street, Glasgow.	Messrs. Shaw, Wallace & Co.	Oil storage	61	7th July 1920	6th July 1921	Rs. 91 5 0	South of accretion.
Anglo-Saxon Petroleum Company, Limited, 21, Bury street, St. Mary's Axe, London.	Messrs. Best & Co.	Do.	6	1st September 1912	31st August 1922	(a) 600 0 0	Do.
Miller's Timber Trading Company, Limited, Pinner's Hall, Great Winches, Corporation of Madras	Messrs. Binny & Co.	Timber storage	2	1st April 1919	31st March 1924	100 0 0	East of accretion.
Do.	Revenue Officer, Corporation of Madras.	For widening the North Beach Road.	15	1st December 1915	To be determined at the end of any year by giving six months' previous notice.	2 0 0 (year).	North and south of the western wall of the late Clive's Battery. North Beach Road.
Do.	Engineer, Corporation of Madras.	For hackney carriage stand.	0.36	10th May 1909	Do.	1 0 0 (year).	In Casinade.
Do.	Commissioner, Corporation of Madras.	Construction of model school.	14	5th December 1919	Do.	1 0 0 (year).	South of timber pond.
Messrs. Binny & Co., Limited	Messrs. Binny & Co., Ltd.	Timber depot	73	1st August 1920	31st July 1923	73 0 0 (year).	Do.
The Bombay-Burma Trading Corporation, Limited.	The Bombay Company, Ltd.	Do.	5	1st April 1916	31st March 1921	25 0 0	Do.
Messrs. Walker & Co.	Messrs. Walker & Co., Ltd.	Do.	3	1st August 1920	31st July 1923	30 0 0	Do.
Messrs. Binny & Co.	Messrs. Binny & Co., Ltd.	Barge repair	0.45	1st November 1910	Terminable at three months' notice.	100 0 0 (year).	Boat Basin
Do.	Do.	Do.	0.183	1st May 1913	Do.	40 0 0 (year).	Do.
Messrs. Gordon, Woodroffe & Co.	Messrs. Gordon, Woodroffe & Co.	Do.	0.242	1st July 1912	Do.	52 12 0 (year).	The new ramp in the northern corner of the harbour.
Messrs. Alexander & Co.	Messrs. Alexander & Co.	Timber depot	5.83	1st June 1920	31st May 1923	58 0 0	At the light-house timber yard.
Tata Oil and Mills Co., Limited	Tata Oil and Mills Co., Limited	Storage of oil in casks.	1	1st November 1920	31st May 1921	200 0 0	Timber pond.
Gordon, Woodroffe & Co.	Gordon, Woodroffe & Co.	Erection of wooden sheds.	240 sq. ft.	1st April 1912	...	12 0 0 (year).	Boat ramp.

(a) The rent was Rs. 350 per mensem up to 1st August 1917 when it was increased to Rs. 600.

STATEMENT OF TONNAGE OF THE PRINCIPAL IMPORTS FOR EIGHTEEN YEARS, AS DERIVED FROM THE PORT TRUST TONNAGE STATISTICS FOR COLLECTION OF DUES.

Items in App. XI.	7 a and b	12 a and b	23 a, b	28	20 a to g	35 a to c	33 d	4 a to c	36	27	16	32	3 a	5	21	Total tonnage of imports.
Year.	Coal and coke.	Food grains.	Mineral oil.	Railway materials.	Metal.	Timber.	Piece goods.	Building material, cement, etc.	Government stores.	Provisions.	Beer and wines.	Sugar and jaggery.	Explosives.	Candles.	Miscellaneous.	
1903-04	176,303	37,101	38,186	38,186	38,302	21,766	20,987	7,127	6,334	8,303	4,869	187	740	1,192	18,160	435,308
1904-05	205,336	44,338	37,152	34,263	35,698	24,198	26,075	8,216	9,854	6,620	5,927	1,136	327	1,261	19,615	471,918
1905-06	99,401	64,438	26,711	37,697	33,167	17,791	20,511	16,152	18,480	7,776	7,832	93	4,130	1,200	28,454	410,355
1906-07	187,853	41,358	44,246	44,569	26,038	21,029	22,288	14,378	14,540	9,888	6,810	1,384	4,885	1,149	30,464	483,002
1907-08	278,269	28,195	51,935	45,247	36,562	27,313	19,365	17,417	12,930	9,934	8,501	1,891	5,855	1,229	35,588	604,669
1908-09	270,398	68,152	51,284	36,924	32,805	24,893	25,147	29,694	11,732	9,088	5,419	4,304	6,965	1,481	28,327	629,571
1909-10	174,392	72,882	30,401	34,970	29,750	15,229	14,467	14,467	12,728	9,031	5,148	11,380	5,112	978	35,922	528,437
1910-11	110,184	79,205	51,831	28,814	35,755	35,175	16,175	20,205	9,153	10,005	4,723	14,838	5,200	1,278	45,698	491,703
1911-12	116,128	26,020	56,936	28,102	38,710	30,900	22,082	16,976	10,296	10,272	4,818	10,226	723	1,144	55,160	447,204
1912-13	204,556	50,296	63,652	32,012	39,259	30,563	16,816	26,916	10,702	5,185	4,888	20,670	714	1,155	16,422	594,723
1913-14	172,758	49,314	66,149	41,453	74,210	30,676	22,238	18,401	14,969	5,901	4,892	21,237	480	1,031	16,996	608,133
1914-15	134,659	35,356	79,518	48,506	33,759	26,771	15,035	15,210	12,714	5,002	3,926	15,859	481	1,094	13,500	483,083
1915-16	57,954	38,602	69,778	19,464	31,156	25,250	11,293	25,976	18,670	4,331	3,562	13,788	404	1,127	14,350	482,477
1916-17	93,783	45,652	97,600	12,578	26,770	28,301	9,435	11,188	19,504	4,864	3,001	15,725	459	1,329	12,757	428,887
1917-18	70,612	62,460	107,270	2,393	13,153	23,303	7,515	13,728	14,247	2,508	2,770	29,829	547	1,125	8,864	406,554
1918-19	62,335	171,474	100,893	1,562	7,804	21,333	2,757	1,324	10,964	1,588	1,679	40,624	432	1,256	10,129	406,422
1919-20	199,686	301,075	129,100	17,085	20,764	23,625	3,974	8,789	29,440	2,998	2,168	14,568	424	1,769	10,084	781,263
1920-21	217,783	159,525	78,071	21,897	47,383	42,363	6,068	10,577	29,440	3,786	4,252	12,199	523	1,038	12,321	717,740
Average	156,799	76,464	66,370	28,303	33,899	26,946	15,714	15,096	13,183	6,416	4,667	12,775	2,087	1,213	23,061	521,589

APPENDIX X.

STATEMENT OF TONNAGE OF THE PRINCIPAL EXPORTS FOR EIGHTEEN YEARS, AS DERIVED FROM THE PORT TRUST TONNAGE STATISTICS FOR COLLECTION OF DUES.

Items in App. XI.	29	14-15	10-27	33 a	24	18 a	33 d	12	8 c	25	35 a, c	21	Total.
Year.	Seeds and nuts.	Hides and skins.	Vegetable and provision.	Cotton.	Oil cake.	Bone meal.	Piece goods.	Food grains.	Turnerite.	Ores.	Timber.	Miscellaneous.	All other exports.
1903-04	10,160	13,704	20,791	20,456	...	...	6,444	10,110	21,114	...	622	16,645	9,318
1904-05	8,213	11,457	22,163	16,007	...	...	8,026	4,287	1,433	...	882	18,095	9,844
1905-06	7,403	17,287	16,928	12,764	...	...	5,100	2,879	1,093	...	878	16,382	22,385
1906-07	13,639	18,270	16,378	10,677	...	...	4,580	7,564	1,532	...	727	14,849	28,443
1907-08	24,161	12,772	21,093	17,691	...	...	4,623	5,867	2,821	3,006	695	14,118	18,414
1908-09	34,566	14,388	18,028	10,684	8,961	6,409	5,107	6,113	5,464	3,280	900	9,966	8,238
1909-10	24,484	16,412	17,234	12,914	6,931	7,162	6,212	6,100	3,915	1,117	1,117	9,066	7,159
1910-11	25,986	13,922	17,841	17,495	6,617	4,376	5,279	2,257	2,922	2,922	670	9,971	7,030
1911-12	77,197	10,864	20,587	18,747	9,263	3,954	5,415	2,486	3,810	1,461	1,036	9,227	4,157
1912-13	74,341	18,417	18,362	16,963	9,749	4,490	4,679	1,280	4,352	2,830	808	6,609	14,656
1913-14	89,213	16,222	24,737	12,170	5,715	4,038	4,477	1,270	5,866	3,855	1,008	7,515	12,626
1914-15	98,039	14,244	25,127	8,790	3,673	4,029	3,131	626	2,585	5,327	440	6,507	8,563
1915-16	103,444	22,161	27,553	5,809	2,441	711	4,090	2,835	1,584	16,000	726	8,963	11,809
1916-17	116,450	17,447	19,279	3,936	10,287	177	3,412	3,059	882	16,000	436	11,998	18,550
1917-18	29,548	25,493	7,547	1,940	12,279	608	2,471	2,925	727	21,702	137	13,617	26,014
1918-19	69,889	26,799	7,547	411	16,845	508	2,465	770	525	16,418	613	9,644	16,508
1919-20	51,974	7,310	16,314	7,507	2,553	3,485	4,698	770	300	12,437	454	7,328	14,961
1920-21	...	...	...	4,088	1,647	4,322	4,155	1,088	260	21,853	745	5,555	11,767
Average	60,378	16,473	18,655	10,789	6,539	3,888	4,607	3,395	3,395	8,797	715	10,669	13,226

XI.

ON VARIOUS CLASSES OF GOODS PASSING THROUGH MADRAS PORT.

20.			1918-19.						1917-18.					
Exports.		Total.	Imports.		Exports.		Total.	Imports.		Exports.		Total.		
TONS.	RS.	RS.	TONS.	RS.	TONS.	RS.	RS.	TONS.	RS.	TONS.	RS.	RS.		
..	207	9,815	..	126	..	126	..	16,889	..	..	135	17,024		
..	6,138	6,156	..	15	..	3,596	3,611	..	91	..	5,286	5,377		
250	1,441	2,294	231	1,308	85	486	1,794	240	1,189	43	213	1,402		
2	11	2,255	482	1,998	32	168	2,166	547	2,320	78	352	2,072		
1	11	607	82	486	1	18	504	107	459	3	15	474		
1	3	19,252	173	453	..	..	453	12,145	25,834	2	4	25,838		
458	205	205	..	..	..	..	..	52	76	..	..	76		
358	293	4,245	1,151	3,052	296	496	3,548	1,531	3,534	53	100	3,634		
6	18	3,936	1,256	2,854	19	51	2,905	1,125	2,179	1	4	2,183		
599	1,057	7,197	4,089	10,236	337	839	11,075	5,852	11,279	593	860	12,139		
706	464	81,650	(a) 82,238	36,425	..	..	36,425	(a) 70,513	34,552	..	..	34,552		
..	..	295	97	..	..	..	..	99	90	..	..	90		
208	462	462	..	..	546	1,149	1,149	62	62	181	273	326		
300	707	707	12	23	525	1,147	1,170	5	10	727	1,219	1,229		
1,278	6,418	14,292	1,388	3,499	1,107	5,490	8,989	992	2,139	378	1,620	3,759		
9	21	691	69	134	22	48	182	1,499	2,810	4	8	2,818		
4,357	7,777	7,777	..	..	4,851	8,507	8,507	..	..	5,386	7,547	7,547		
185	493	972	1,528	2,115	214	545	2,660	57	116	327	506	622		
24	121	11,191	1,758	5,183	12	62	5,245	2,478	5,834	29	116	5,950		
..	..	4,05,242	149,935	2,88,051	448	923	2,58,974	49,542	75,299	734	1,373	76,672		
770	1,582	1,19,777	21,539	44,535	2,477	5,420	49,955	12,918	19,203	2,325	4,262	23,465		
340	764	9,408	1,985	5,591	169	506	6,097	1,859	4,165	121	220	4,485		
4,141	8,669	10,990	3,841	6,852	3,290	6,921	13,773	5,281	7,916	1,411	2,393	10,309		
22,658	94,682	94,907	174	704	25,203	1,04,297	1,05,001	48	182	16,036	53,229	53,421		
81	336	10,721	1,679	7,715	9	56	7,771	2,770	10,693	4	28	10,721		
125	339	13,684	1,047	2,749	28	102	2,851	1,615	3,527	41	93	3,620		
3,485	6,141	6,141	..	..	608	1,065	1,065	14	18	..	..	18		
2,650	10,751	11,013	26	108	2,757	11,485	11,593	..	..	896	2,418	2,418		
6	16	10,928	2,077	5,285	2	19	5,284	4,169	9,063	..	..	9,068		
98	264	987	1	2	1	3	5	..	..	5	11	11		
25	73	1,804	149	613	11	46	659	528	1,026	17	51	1,077		
764	704	34,306	5,179	12,968	498	682	13,650	8,115	15,054	2,559	1,574	16,628		
..	..	1,257	285	934	17	64	998	112	340	..	..	340		
..	..	12,655	2,128	5,493	..	..	5,493	4,019	8,363	88	166	8,529		
..	..	2,218	62	193	..	..	193	381	866	3	8	874		
7,228	16,403	46,134	10,129	26,304	9,644	21,936	48,240	8,864	22,155	13,617	19,810	41,965		
..	368	28,401	..	315	..	79	394	..	2,048	..	41	2,089		
..	26	1,889	..	243	..	4	247	..	227	..	26	253		
6	22	4,409	400	1,471	1	4	1,475	809	2,566	2	10	2,605		
3	8	2,11,489	80,318	1,60,443	..	..	1,60,443	89,315	1,42,140	1,928	4,655	1,46,795		
70	233	56,922	20,575	57,535	..	..	57,535	17,955	37,359	5	12	37,371		
442	1,580	2,900	326	1,031	4,519	13,756	14,787	711	1,777	6,725	19,831	20,608		
2,552	4,459	4,489	43	70	16,845	29,717	29,787	39	59	10,287	15,146	15,205		
12,437	5,441	6,560	269	118	16,418	7,096	7,214	99	33	21,702	7,816	7,849		
66	158	11,327	6,881	15,112	163	412	15,524	5,600	10,226	128	355	10,581		
3,683	11,935	19,527	1,588	4,079	2,482	7,178	11,257	2,508	4,747	6,566	8,354	13,101		
..	..	45,167	1,852	4,975	4	9	4,984	2,393	5,131	..	..	5,131		
1,248	2,187	2,187	53	92	11,459	19,742	19,834	296	184	12,658	18,292	18,476		
1,946	3,407	3,407	..	..	44	96	96	..	..	..	..	..		
65,258	1,14,429	1,14,623	647	1,005	16,218	26,840	27,845	1,140	1,578	100,710	1,41,949	1,42,777		
1,437	2,847	4,578	1,032	1,584	1,827	3,638	5,222	217	268	2,082	3,240	3,508		
99	270	2,151	1,113	3,017	21	57	3,074	1,890	3,055	2	4	3,059		
435	1,172	4,957	2,728	6,190	302	770	6,960	1,914	2,950	786	1,555	4,515		
773	1,377	31,632	40,624	87,287	741	1,585	88,872	29,829	53,152	2,454	4,180	57,312		
7,507	16,408	16,550	2,126	4,173	411	899	5,072	506	331	1,940	3,340	3,671		
147	347	355	..	..	70	242	242	..	..	83	141	141		
981	2,067	8,804	2,758	7,099	197	491	7,590	5,515	11,046	102	217	11,263		
4,693	12,569	23,062	2,767	7,387	2,465	6,505	13,842	7,515	15,852	2,471	5,447	21,299		
14	25	2,179	1,141	1,726	27	48	1,774	1,426	1,703	42	64	1,767		
1,019	2,478	4,710	454	1,170	973	2,045	3,215	331	1,227	582	930	2,147		
966	2,554	4,191	400	966	1,327	3,479	4,465	160	328	859	1,835	2,168		
553	2,563	5,310	1,062	4,514	594	2,575	7,089	661	2,348	833	2,795	5,144		
307	539	41,031	21,198	36,565	11	20	36,585	22,407	31,114	76	96	31,210		
147	346	1,333	135	294	609	1,143	1,437	896	1,587	51	77	1,614		
65	181	1,511	631	1,894	49	73	1,467	748	1,974	44	58	1,932		
1,583	6,163	21,323	10,968	40,418	1,561	7,928	48,346	14,247	40,806	6,540	21,480	62,386		
159,501	3,62,321	17,15,838	476,930	9,26,415	132,550	3,12,558	12,35,977	105,854	6,62,383	225,170	3,64,231	10,26,014		

(a) This includes coal imported into the harbour by rail.

APPENDIX XII.

VALUE OF THE TRADE OF THE MADRAS PORT FROM 1913-14 TO 1920-21.
(As supplied by the Collector of Customs, Madras.)

Class of trade.	1913-14.		1914-15.		1915-16.		1916-17.		1917-18.		1918-19.		1919-20.		1920-21.	
	Private.	State.	Private.	State.	Private.	State.	Private.	State.	Private.	State.	Private.	State.	Private.	State.	Private.	State.
Imports.																
Foreign merchandise from foreign ports ..	13,35,54,916	43,19,136	10,07,57,466	35,09,267	9,25,88,759	63,07,038	10,47,15,893	97,03,846	9,82,46,887	1,17,30,212	9,38,11,098	1,25,69,858	10,65,48,084	45,15,306	21,29,48,937	29,98,713
Foreign treasure ..	15,99,076	..	18,77,187	..	2,60,508	..	1,56,509	..	17,91,539	..	..	..	9,41,180	..	12,03,545	..
Indian merchandise from Indian ports ..	1,46,52,127	8,55,425	1,11,97,334	10,45,173	1,15,81,467	4,93,000	1,69,95,606	3,38,782	2,03,13,313	14,32,955	3,92,16,064	7,82,537	5,38,06,231	3,89,810	4,62,08,773	34,99,402
Foreign merchandise from Indian ports ..	7,29,700	1,60,932	7,15,030	64,532	9,68,007	1,21,476	51,79,029	1,76,424	11,10,794	2,447	30,51,603	18,217	56,38,386	2,22,864	22,65,245	14,143
Treasure from Indian ports.	..	..	..	..	..	..	15,00,000	..	..	..	..	..	..	..	..	..
Total, Imports ..	15,05,35,819	63,36,493	11,45,47,017	46,18,972	10,53,98,741	69,21,514	13,00,46,036	15,00,000	12,14,62,533	13,25,621	13,60,78,765	13,37,0,612	17,19,31,881	51,27,719	26,26,26,500	66,12,258
Less, Treasure ..	15,99,076	..	18,77,187	..	2,60,508	..	1,56,509	..	17,91,539	..	..	..	9,41,180	..	12,03,545	..
Net, Imports ..	14,89,36,743	63,36,493	11,26,69,830	46,18,972	10,51,38,233	69,21,514	13,00,46,036	15,00,000	11,96,70,994	13,25,621	13,60,78,765	13,37,0,612	17,09,90,701	51,27,719	26,14,22,955	66,12,258
Exports.																
Indian merchandise to foreign ports ..	7,40,89,860	98,722	6,19,42,104	2,97,725	8,59,53,607	87,537	9,54,87,004	1,78,70,000	3,84,62,650	4,21,61,495	11,23,84,646	6,336	17,11,79,696	1,71,879	7,82,70,038	64,973
Foreign merchandise re-exported to foreign ports ..	12,02,202	85,201	8,00,433	64,801	10,78,002	53,243	10,58,668	51,331	10,20,105	7,41,763	7,56,270	10,563	21,82,197	1,01,569	19,37,444	4,584
Treasure to foreign ports ..	37,631	..	1,45,075	..	4,30,000	..	9,84,950	..	55,000	..	..	..	..	..	42,500	..
Indian merchandise to Indian ports ..	84,50,360	4,12,578	1,30,71,751	3,13,392	95,16,217	3,81,356	95,03,041	4,39,495	1,54,35,045	15,35,661	1,10,24,552	9,62,663	1,85,52,344	9,88,880	1,36,06,928	3,92,534
Foreign merchandise to Indian ports ..	6,73,417	2,69,903	3,79,661	2,08,661	4,62,903	1,30,889	9,14,338	2,06,237	10,12,212	4,98,242	8,82,567	4,58,301	15,79,275	1,04,589	10,54,517	94,943
Treasure to Indian ports ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total, Exports ..	8,41,53,470	8,56,404	7,62,39,034	8,74,579	9,73,76,729	11,37,125	10,79,25,651	1,85,03,583	5,59,85,012	5,24,37,161	12,48,27,036	14,37,863	19,34,33,411	14,27,017	9,29,11,458	2,05,47,034
Less, Treasure ..	37,631	..	1,45,075	..	4,30,000	..	9,84,950	..	55,000	..	..	..	..	..	42,500	..
Net, Exports ..	8,41,15,839	8,56,404	7,60,93,959	8,74,579	9,69,46,729	11,37,125	10,69,30,101	1,85,03,583	5,59,30,012	5,24,37,161	12,48,27,036	14,37,863	19,34,33,411	14,27,017	9,28,68,958	5,47,034
Total, Imports and Exports.	23,49,89,289	61,92,897	19,07,86,051	54,99,551	20,37,75,470	80,58,539	23,79,71,087	3,03,0,435	17,74,47,545	6,56,42,782	26,09,05,800	1,48,08,465	36,54,25,292	66,54,786	35,55,37,958	70,59,292
Less, Treasure ..	16,36,707	..	20,22,262	..	6,90,508	..	9,94,950	..	18,46,532	..	..	..	9,41,180	..	12,46,045	..
Total, Imports and Exports.	23,33,52,582	61,92,897	18,87,63,789	54,99,551	20,30,84,962	79,58,539	23,69,76,137	2,88,10,435	17,56,01,006	6,56,42,782	26,09,05,800	1,48,08,465	36,44,84,112	66,54,786	35,42,91,913	70,69,292

APPENDIX XIII.

ANALYSIS OF THE TRADE DONE AT MADRAS IN 1920-21.

Some idea of the relative importance of the various branches of trade handled at Madras in 1920-21 may be gained from the following abstract of the values of the chief items imports and exports gleaned from the Customs returns. Government stores are excluded.

Imports into Madras of foreign goods from foreign ports.

	Rs.	Rs.
1. Yarn and textile fabrics	Woven goods	4,19,78,427
	Twist and yarn	2,17,79,918
	Others	8,62,855
		6,46,21,200
2. Iron and steel, 42,867 tons		1,91,46,956
3. Articles of food and drink		1,47,76,807
4. Railway materials		1,40,33,044
5. Wearing apparel		49,99,775
6. Oils, 9,288,207 gallons		57,82,080
7. Chemicals, drugs, dyeing and tanning materials, etc.		51,4,626
8. Hardware and cutlery		77,65,766
9. Machinery		1,34,08,095
10. Glass, glassware and earthenware		22,82,745
11. Carriages, motor-cars, cycles, etc.		1,33,47,225
12. Paper and pasteboard		96,78,167
13. Unmanufactured articles, foreign coal, hides, timber		6,77,311
14. Instruments, musical, scientific, etc.		29,71,282
15. Arms, ammunition, and military stores		9,77,849
16. All remaining articles		3,30,73,029
Value of imports of foreign goods from foreign ports		21,29,48,937

Imports into Madras of Indian goods from Indian ports.

	Rs.	Rs.
1. Grain and pulse.	Rice	1,79,68,061
	Wheat flour	65,278
	Pulse, etc.	62,83,111
		2,42,86,450
2. Oils, mostly Burma mineral oils, kerosene, 10,961,161 gallons		48,00,963
Others		43,84,880
		91,85,843
3. Timber, mostly Burma teak		49,31,001
4. Coal, all Bengal, 1,28,323 tons		35,17,501
5. Hides and skins, raw, for tanning and for re-export, tanned		3,31,754
6. Printing paper from Bengal		64,756
7. Jute, mostly gunnies from Bengal for Madras exports		7,29,893
8. Cotton		6,80,830
9. Candles from Burma		5,40,416
10. Fodder, brn, hay, straw, etc.		420
11. All other Indian goods imported		20,40,409
Value of Indian goods imported from Indian ports.		4,62,08,778

Exports from Madras of Indian goods to foreign ports.

	Rs.
1. Skins, dressed and tanned, goats, sheep, etc., 2,331 tons (Nos. 8,463,597)	1,78,27,450
2. Hides, dressed and tanned, ox, cow, buffalo, etc., 3,239 tons (Nos. 1,269,878)	85,69,281
3. Cotton, 4,385 tons	52,94,845
4. Piece-goods	1,37,33,811
5. Earth-nuts	1,19,84,926
6. Goat and other skins, untanned 1,758 tons (Nos. 2,121,309)	47,74,284
7. Textiles other than piece-goods	36,99,418
8. Foods and drinks	26,46,306
9. Manure (5,844 tons)	7,23,595
10. Tobacco, chemicals, etc.	..
11. Mica (7,334 cwt.)	8,54,881
12. Castor seed	49,206
13. Other oil-seeds	1,90,080
14. Fodder, oil-cake, etc.	2,59,066
15. Horns (10,758 cwt.)	1,74,868
16. Silk	2,43,769
17. Apparel	86,166
18. All other items	51,58,085
Value of Indian goods exported to foreign ports	7,62,70,039

Exports from Madras of Indian goods to other Indian ports.

	Rs.
1. Seeds, chiefly ground-nuts	15,01,770
2. Provisions, fresh vegetables, etc.	17,60,554
3. Hides and skins	5,40,798
4. Grain and pulse	1,86,917
5. Oil	2,69,371
6. Spices, cardamoms and chillies	54,514
7. Metals	15,400
8. All other articles	91,77,739
Value of Indian goods exported from Madras to Indian ports	1,36,06,963

APPENDIX XIV.

SUMMARY OF THIRTY-FOUR YEARS' REVENUE TRANSACTIONS.

The revenue transactions of the Trust during the years commencing 1887-88 and ending 1920-21, that is, during the thirty-four years in which it has been paying off debt to Government, may be summarized as follows :—

	RS.
(1) Receipts on Revenue account	3,29,07,899
(2) Expenditure on Revenue account, 75 per cent	2,46,63,319
(3) Profit on working, (1) minus (2)	82,44,580
(4) Port Fund surplus allotted by Government	17,95,237
Total, net receipts	1,00,39,817

These receipts have been disposed of as follows :—

	RS.
(5) Balance at beginning of 1887-88	6,89,883
(6) Balance at end of 1920-21	10,06,494
(7) Increase of balance, (6) minus (5)	3,16,611
(8) Paid-off debt to Government	46,40,464
(9) Contributed by Revenue to Capital	50,82,742
Total, as above	1,00,39,817

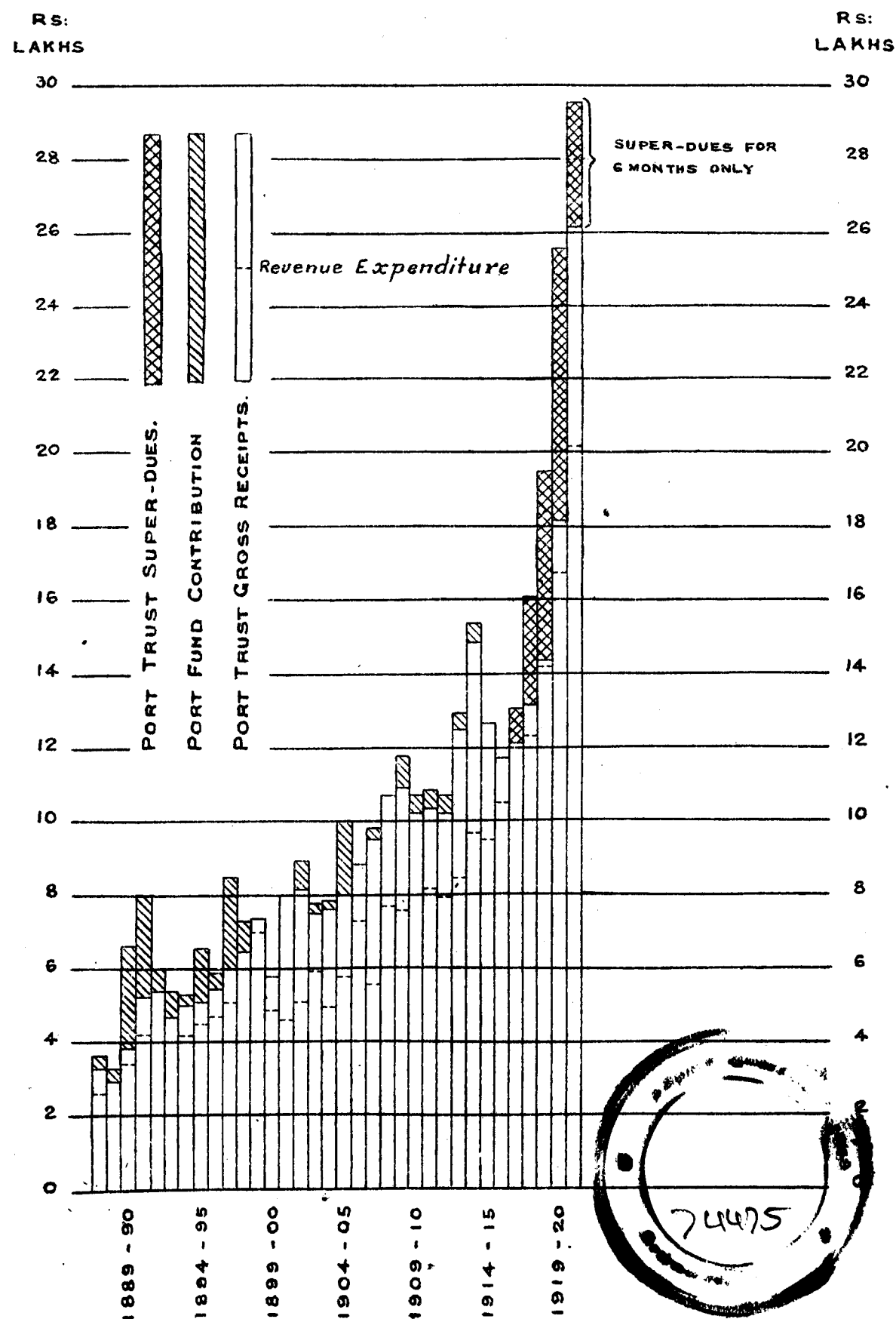
MADRAS PORT TRUST
DIAGRAM OF REVENUE RECEIPTS AND EXPENDITURE
FOR 34 YEARS

SCALES { HORIZONTAL 10 YEARS TO 1-INCH.
VERTICAL RS. 4 LAKHS TO 1-INCH.

NOTE:—

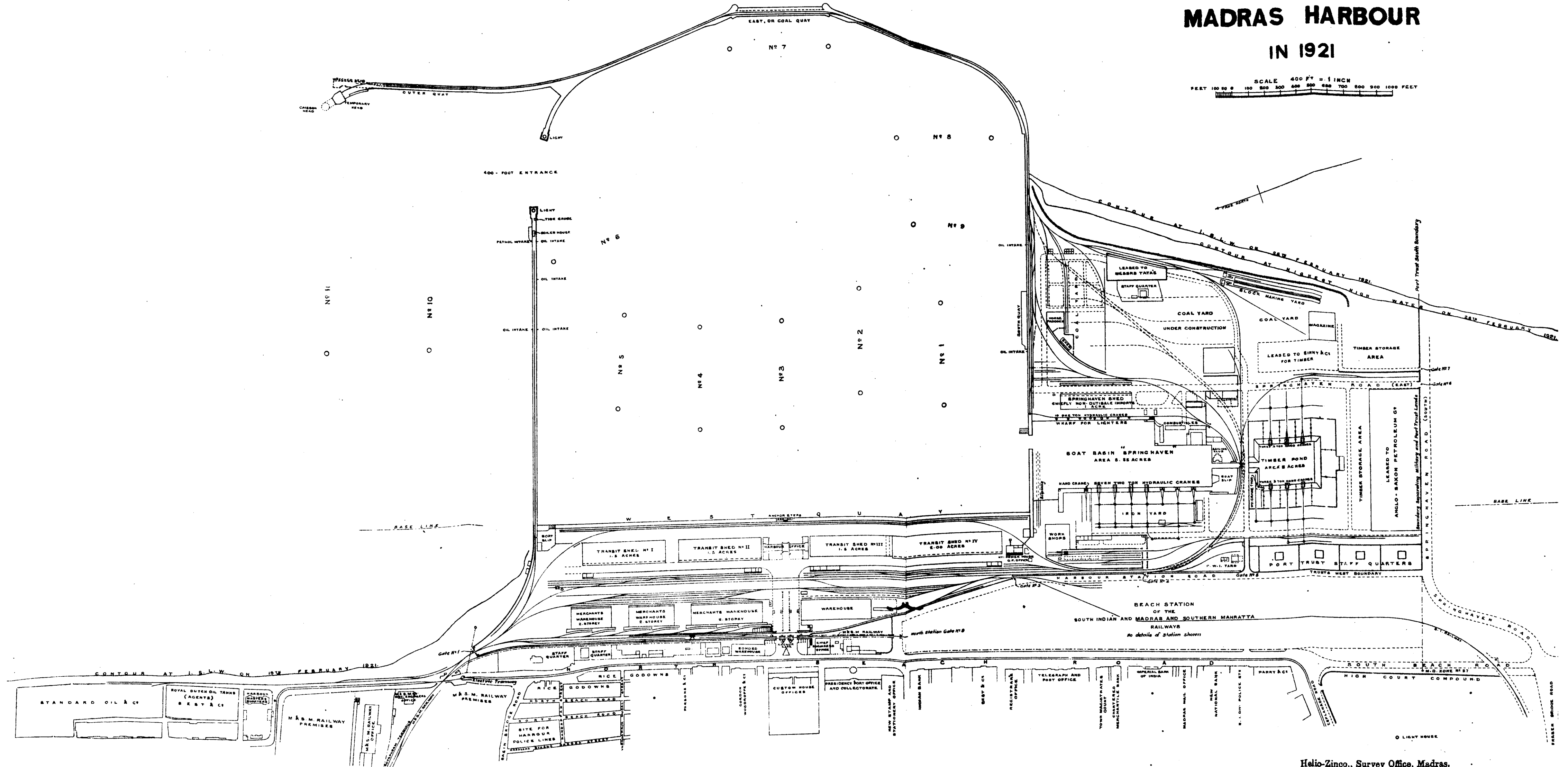
THE PORT FUND SURPLUS MADE OVER
TO THE TRUST BY GOVERNMENT FROM TIME TO
TIME IS SHOWN HATCHED

DOTTED LINES SHOW EXPENDITURE



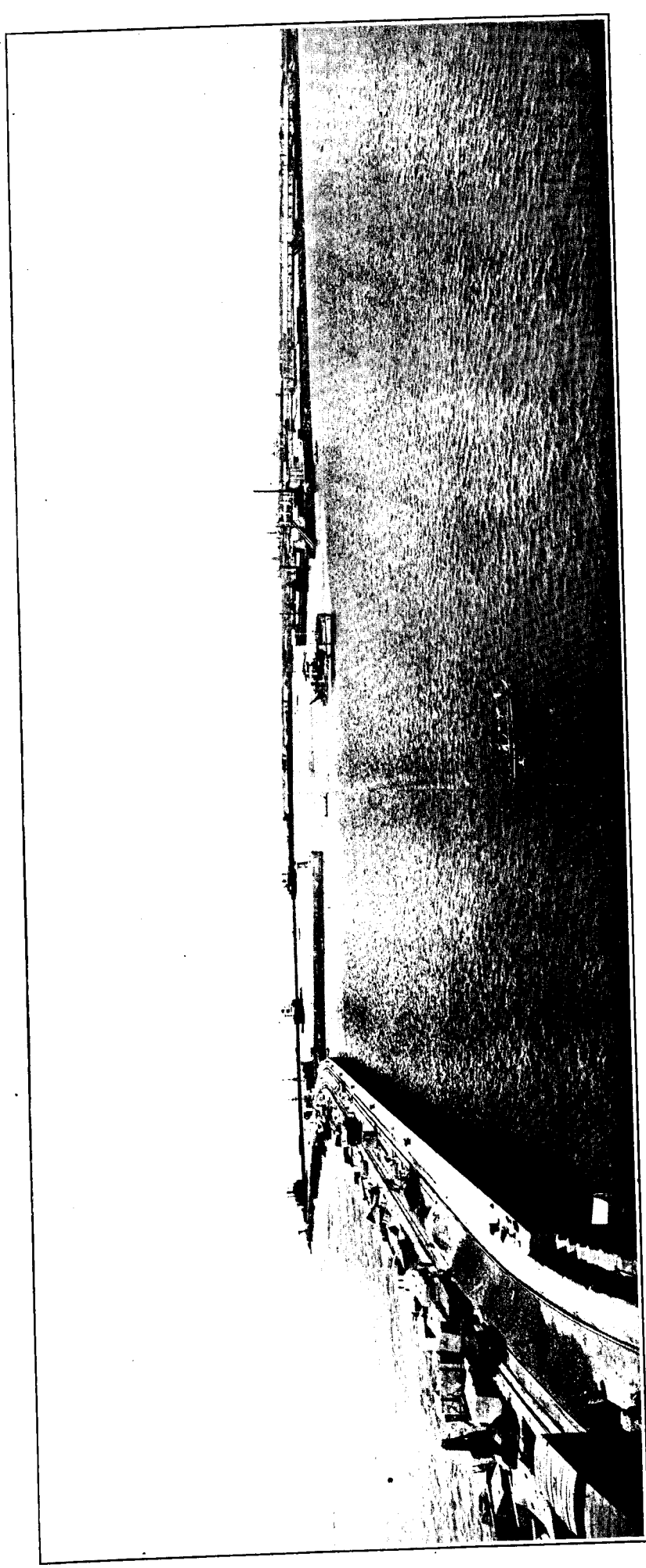
MADRAS HARBOUR IN 1921

SCALE 400 FT. = 1 INCH
FEET 100 200 300 400 500 600 700 800 900 1000

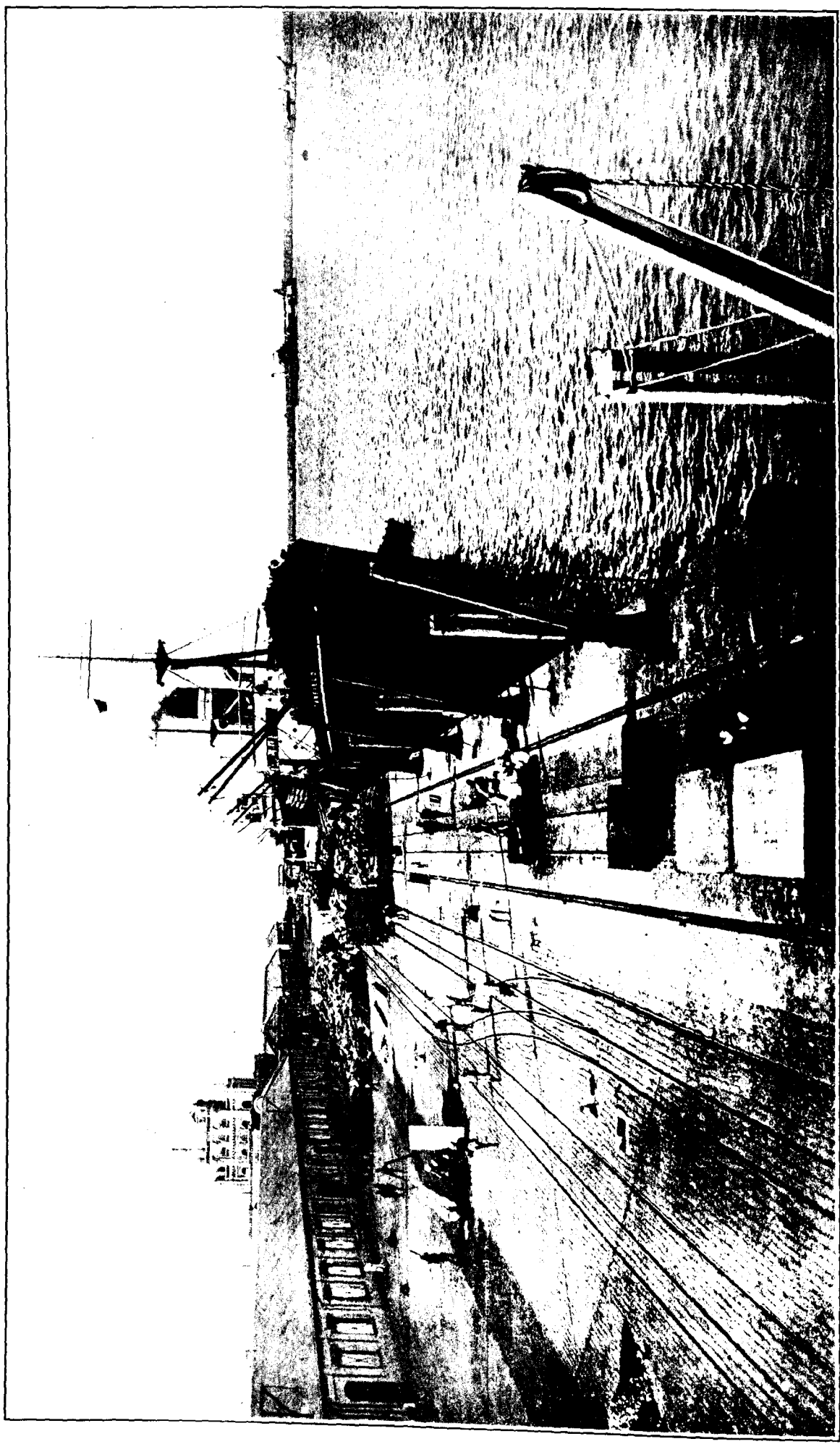


NOTE.—Reproduced from the original supplied by the
Chairman, Port Trust, Madras.

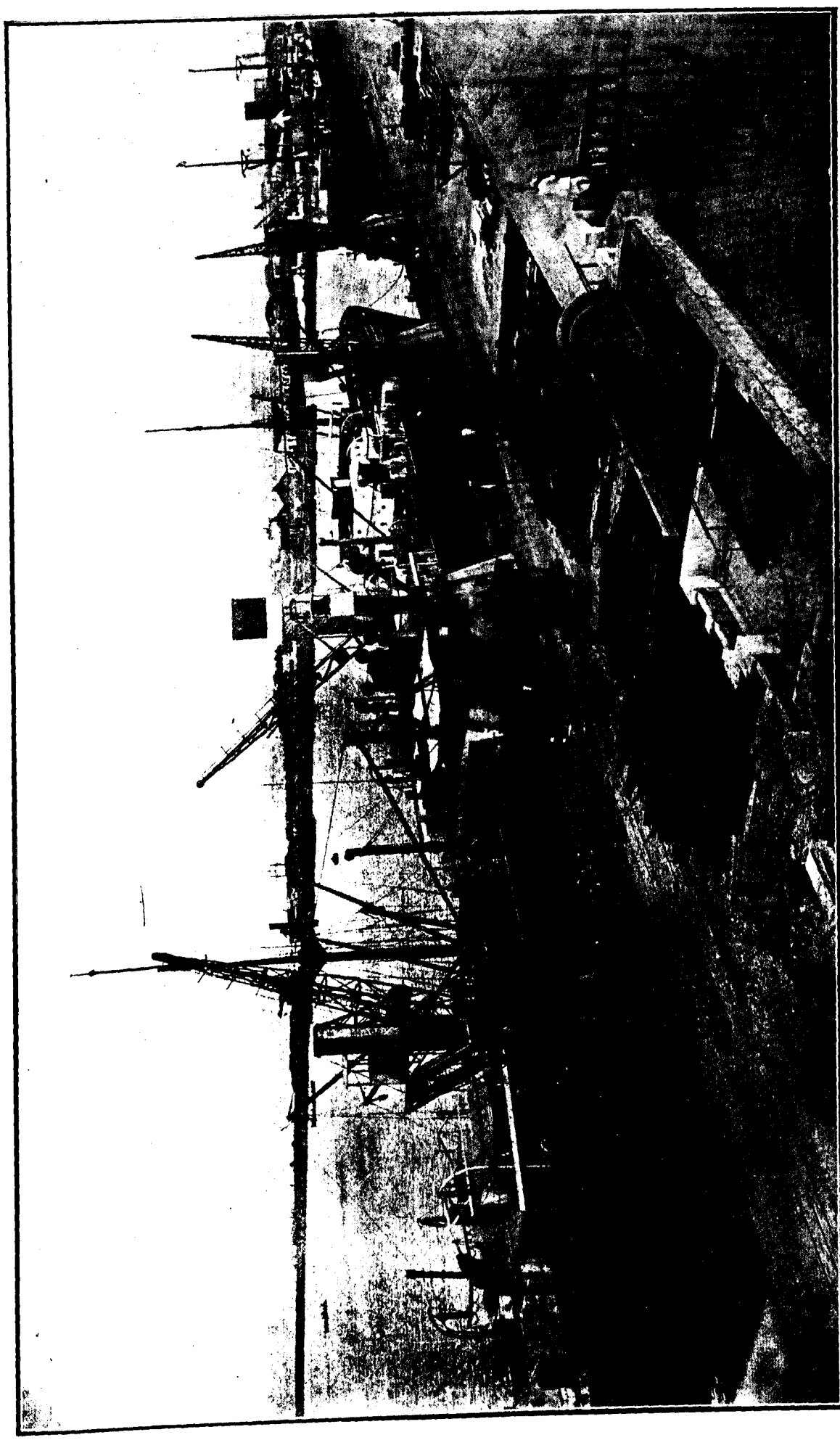
Helio-Zinco, Survey Office, Madras.
1921.



GENERAL VIEW OF THE HARBOUR LOOKING SOUTH.



WEST QUAY LOOKING NORTH

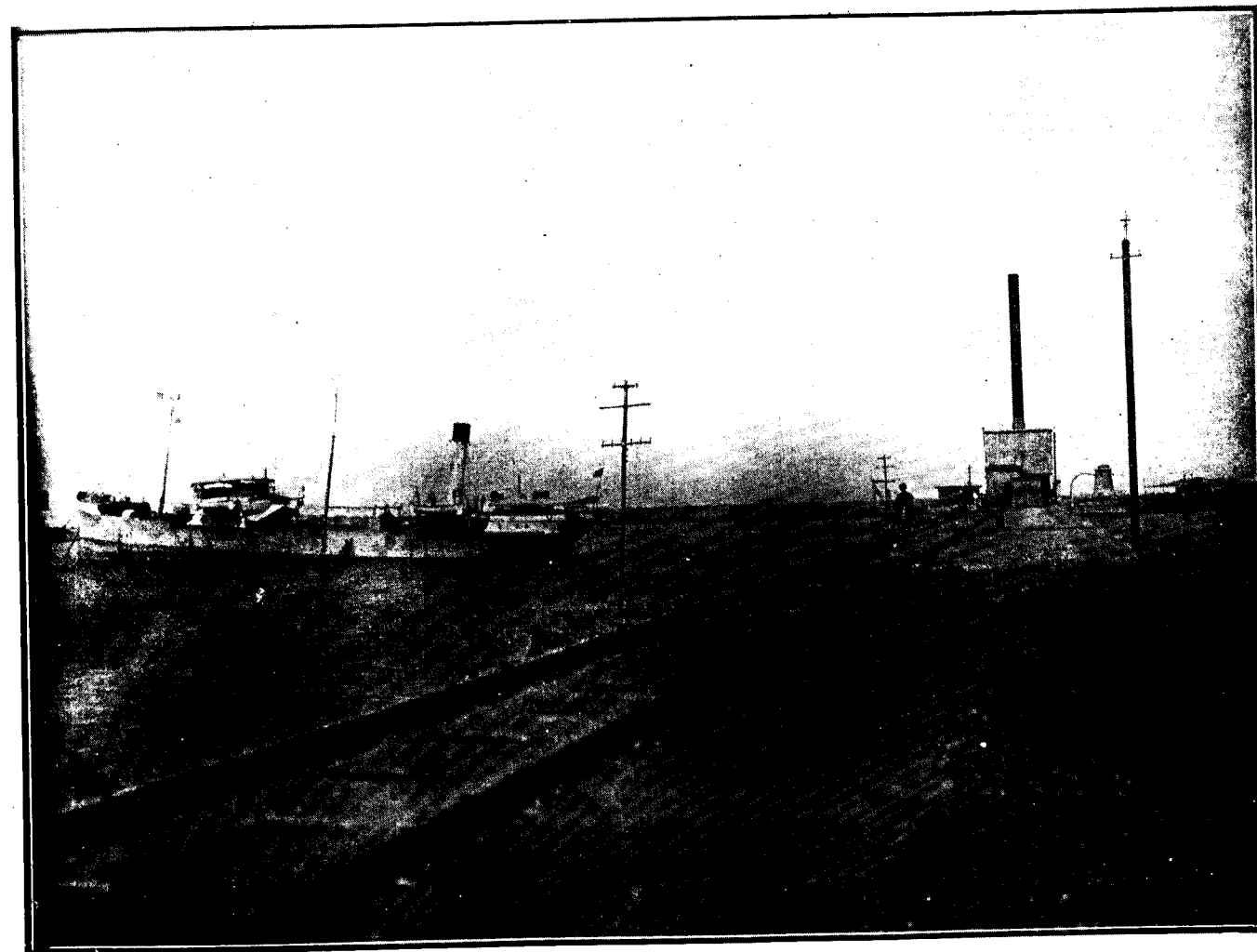


WEST QUAY LOOKING SOUTH



RANGE OF NEWLY COMPLETED WAREHOUSES.

METHOD OF DISCHARGE OF BULK PETROL.

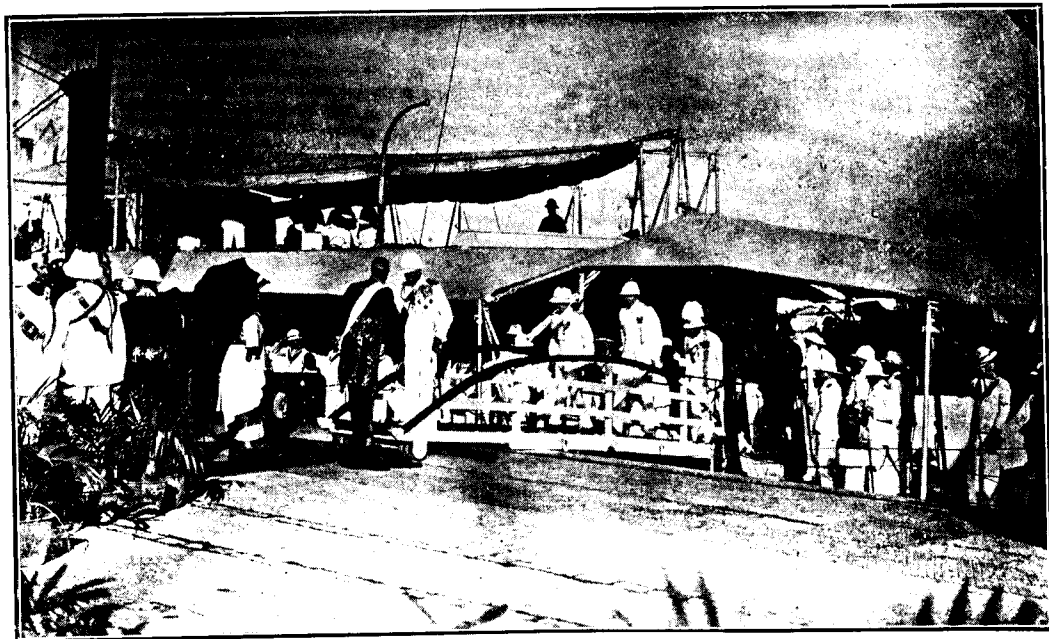


VESSEL DISCHARGING WITH STEAM SUPPLIED FROM A BOILER ON THE GROUYNE.

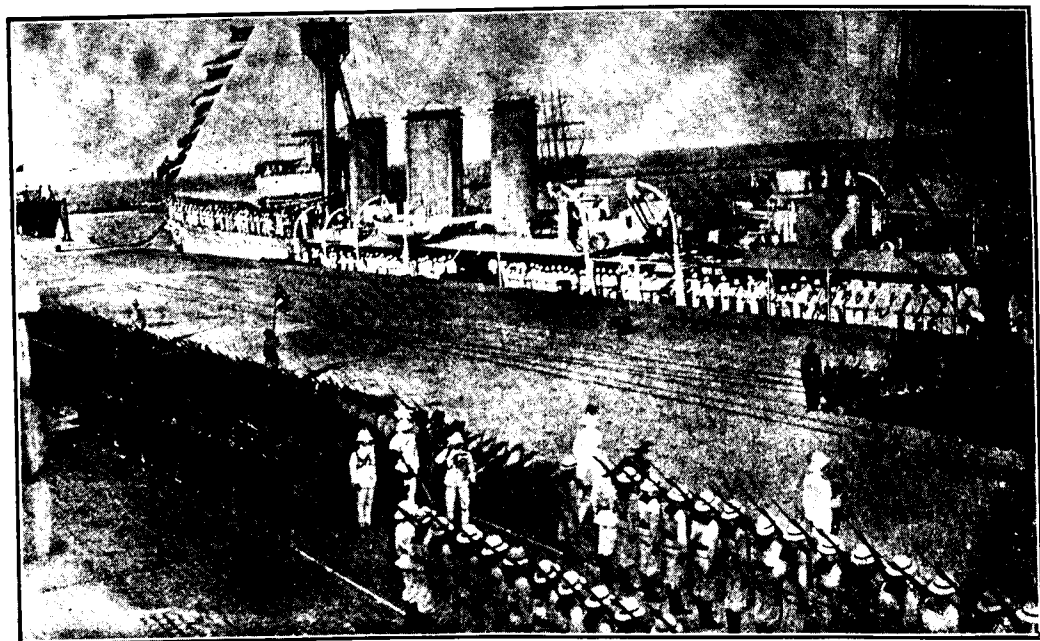


VIEW OF SUSPENDED STEAM PIPE AND FLOATING OIL PIPE.

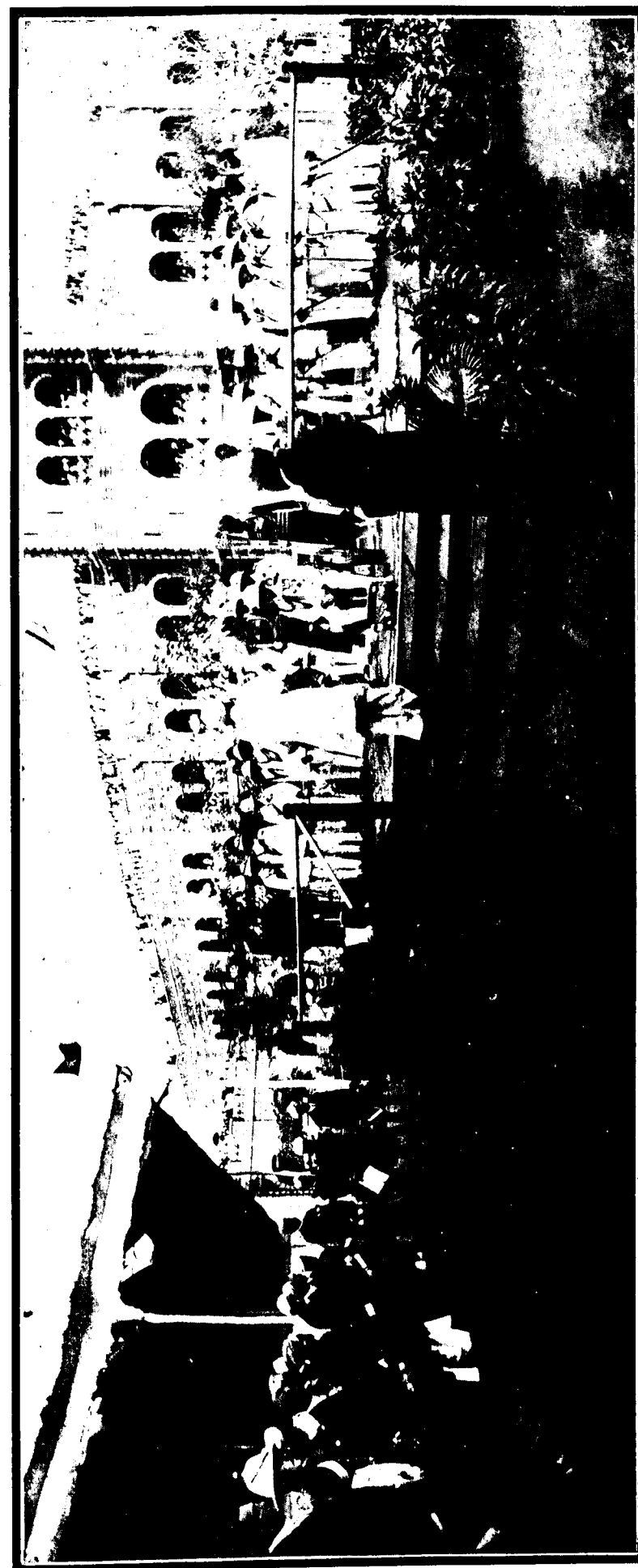
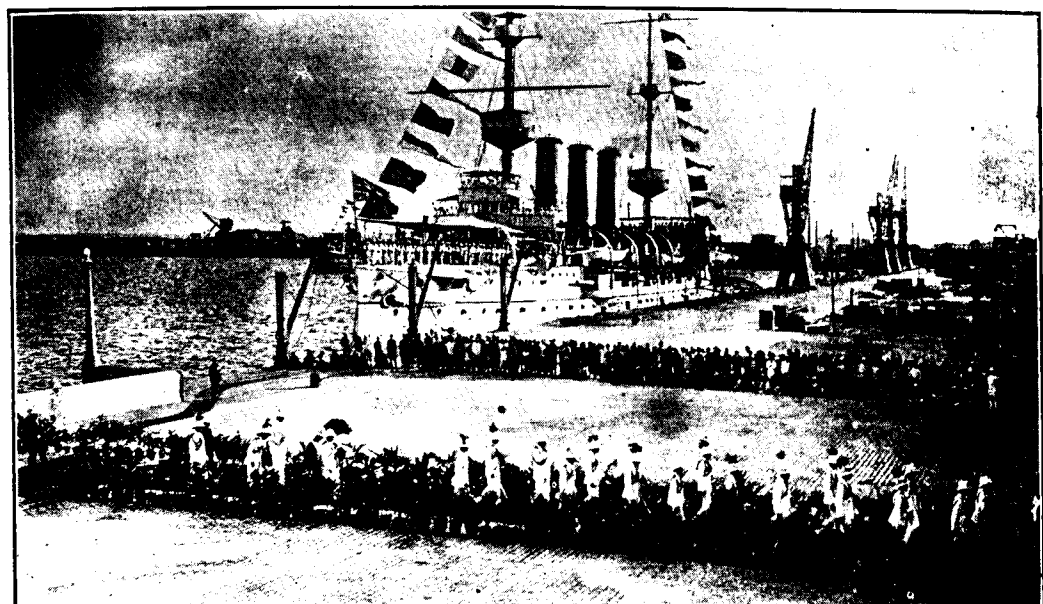
LANDING OF HIS ROYAL HIGHNESS THE DUKE OF CONNAUGHT
AT THE HARBOUR ON THE 10th JANUARY 1921.



HIS ROYAL HIGHNESS RECEIVED AT THE QUAY BY THEIR EXCELLENCIES
LORD AND LADY WILLINGTON.



HIS ROYAL HIGHNESS INSPECTING THE GUARDS OF HONOUR.



PRESENTATION OF THE ADDRESS OF WELCOME BY THE PRESIDENT OF THE MADRAS CORPORATION.

