

CHAPTER V.

PORTS, HARBOURS, AND SHIPPING.

Chief ports—Port trusts—Harbours—Tonnage cleared—Shipping companies—
Freight rates.

Chief Ports.—Although India has a very extensive seaboard, it is deficient in good harbours. By far the most important ports are Calcutta and Bombay, followed at a long distance by Rangoon, Karachi, and Madras. There is a large number of smaller ports, of which Chittagong in Bengal; Moulmein, Bassein, and Akyab in Burma; and Mangalore, Cannanore, Tellicherry, Calicut and Cochin (on the west coast), Tuticorin, Negapatam, Cuddalore, Masulipatam, Cocanada, Vizagapatam, and Bimlipatam (on the east coast), all in Madras, deserve special mention in connexion with foreign trade. The five chief ports, which together receive 98 per cent. of the imports of foreign merchandise and despatch 90 per cent. of the exports of merchandise to foreign countries, are the capitals and chief outlets of the five littoral provinces, and are also great railway termini.

Calcutta, the capital and the premier port, is a receiving and distributing centre, not only for Bengal, but for Upper India, part of Central India, and Assam. It is fed with products brought by a network of railways, and by the great river highways, the Ganges and Brahmaputra. It has factories, foundries, and many minor industries. Calcutta imports chiefly cotton piece-goods (especially grey), cotton twist and yarn, iron, steel, copper, and other metals, apparel, drugs, tobacco, hardware and cutlery, glass and glassware, machinery and millwork, railway materials, salt, spices, provisions, liquors, sugar, woollen goods, and petroleum. It has almost a monopoly of exports of jute and jute manufactures, coal, lac, and saltpetre, and has large exports of tea, opium, seeds, rice, indigo,

hides and skins, silk, etc. Calcutta has the greater share of the trade with Europe, and an increasing trade with other continents. Bombay has almost as large a European trade as Calcutta, and the largest trade with African and Asiatic countries. Bombay, which long bade fair to surpass Calcutta as a port, has been greatly afflicted in recent years by the evil consequences of famine and plague, and by the decline in its entrepot trade with the Persian Gulf and the East African coast. But Bombay has great advantages of position, and three trunk lines bring thither the produce of Western India, the Deccan, and the Central Provinces. The imports of Bombay resemble those of Calcutta, except that it imports considerable quantities of coal, dyeing and tanning materials, and silks, but not salt. Its chief exports of produce are wheat, seeds, opium, and raw cotton. Bombay is the chief centre of the cotton industry in India, and exports large quantities of cotton yarn and piece-goods. Karachi, the port of Sind and the Indus Valley, is chiefly noted for its large but fluctuating exports of wheat and seeds. Its trade has grown rapidly in recent years. Rangoon is the flourishing port of prosperous Burma. Its trade consists mainly of the export of rice, which has greatly expanded in the last forty years, and of teak. Madras is hardly within the main channels of foreign trade, and it has smaller possibilities of development than Rangoon or Karachi, but it has a large coasting trade with other Indian ports and with Ceylon. Moreover, Madras has only half the foreign trade of the Presidency, smaller ports diverting the rest. Only in Southern India is trade largely distributed along the coast-line. From Goa to Cochin on the Malabar coast are several ports accessible in fair weather, Calicut being the chief; but on the Coromandel coast there is no very safe harbour or navigable estuary. Cocanada is the best and safest port on this coast. Chittagong in Bengal exports tea to a much larger extent than formerly, owing to improved railway facilities, and also jute, while it imports oil. In Burma, Moulmein exports teak and rice, while Akyab and Bassein export chiefly rice.

Port Trusts.—At Calcutta, Bombay, Rangoon, Karachi, Madras, and Chittagong, the affairs of the ports are administered by Port Trusts invested by law with wide powers, though their proceedings are subject to Government control. At all the ports the Europeans on the boards largely outnumber the natives. The Indian Ports Act of 1889 (as amended) fixes the maximum port dues, but the

Provincial Governments do not necessarily levy the full rates, which are about 4 annas (4d. or 8 cents) per ton in India, and rather more in Burma. The port authorities are also authorized to charge fees for pilotage, hauling, mooring, removing, hooking, measuring, and other services, at rates fixed by the Provincial Governments. Special Acts for the different chief ports deal with the dues, rates, tolls, charges, and rents for the provision and maintenance of wharves, quays, stages, jetties, piers, warehouses, appliances, etc., for shipping and landing goods. All information as to the elaborate scales of port dues and charges and pilotage fees can be obtained by applying to the port officer of each port.

Harbours.—Calcutta is situated on the left bank of the Hooghly (Hugli), about eighty miles from the sea. Pilots can take up ships of 5,500 tons, drawing up to 27 feet of water, but it is well that they should not exceed 510 feet in length. The port extends for ten miles along the Hooghly, and moorings are laid down for 170 large vessels. There are two wet-docks at Kidderpur (basin of $9\frac{1}{2}$ acres, and inner dock of 33 acres), having a depth of 32 feet at high-water springs, and a width of 32 feet at the entrance. These docks will take the largest vessels, and there is no difficulty in getting a berth. Steamers usually discharge at the jetties or at the moorings, and go into Kidderpur Dock to load. There are eight jetties where vessels load or discharge, especially the latter. There are ten graving or dry docks, ranging from 225 feet to 710 feet in length. The dry-docks will take in the largest vessels afloat. The most extensive is Kidderpur, with a depth of 25 feet at high-water springs. There is an ample supply of fixed and floating cranes. The draught of water for vessels leaving Calcutta is usually limited to 23 feet, but no absolute rule can be laid down, as the Hooghly is constantly altering its channel. The intricate navigation is managed by Government pilots. Various channels through the Sunderbunds connect Calcutta with the Brahmaputra, while the Hooghly itself and the Nadia rivers connect it with the Ganges. With Goalundo on the Brahmaputra, where steamer traffic begins, it is linked by railway. A bridge across the Hooghly connects Calcutta with the important railway and manufacturing suburb of Howra. South of Calcutta lie the small ports of Diamond Harbour, on the Hooghly estuary, and Canning Town, on the Matla estuary.

Bombay, built on a small island, is the first important port for

vessels coming to India through the Suez Canal. It has a very commodious and extensive natural harbour—12 to 14 miles long, and 4 to 6 miles wide—which is safe for large ocean steamers in all weathers. There are two wet-docks, the Prince's, of 30 acres, and the Victoria, of 25 acres. The former has two entrances, 66 feet and 55 feet wide, and the depth on the sills is about 28 feet at high-water springs. Prince's Dock has a berthage of 5,960 feet, and every appliance for working cargo. Victoria Dock is entered from Prince's Dock, and has a berthage of 7,425 feet, width of entrance 80 feet, and depth at high-water springs about 30 feet. There are eight dry-docks. Of these the Merewether Dry-dock—557 feet in length, 65 feet in width, and having a depth of about 28 feet at high-water springs—can be used whatever the state of the tide. Bombay has ample cranage, and extensive quays and wharves. There is an installation pier for discharging bulk oil. Practically, Bombay Harbour has unlimited accommodation. Coals and stores can be obtained, and all kinds of repairs effected. Pilotage is compulsory on entry and departure.

Karachi (Kurrachee) is situated in a small bay to the west of the mouth of the Indus. Its harbour is artificial, formed on the west by the breakwater running south-east to a distance of 1,500 feet from Manora Point (a low, sandy isthmus connecting it with the main and Baba Island), and on the east by Kiamari Island, and the groyne or pier extending from it nearly one and three-quarter miles in a south-south-easterly direction. The harbour covers 121 acres, with a depth of 20 feet and upwards at low water. It has also 580 acres of shoal ground for native craft. In the entrance channel the depth at high-water spring-tides is about 33 feet. The largest vessels can enter during the period October to April, but during the south-west monsoon the draft is about 27 feet. In Karachi Harbour there are three anchorages, viz., Deepwater, Manora, and Kiamari. Deepwater has two swinging moorings, one for a vessel drawing 22 feet, the other for a vessel of 24 feet draft. Manora has a dry-dock of 167 feet, and seven swinging moorings for vessels of 16 to 22 feet draft. Between Manora and Kiamari there are four head and stern moorings for vessels of 16 to 22 feet draft. The anchorage of Kiamari is used for vessels which are going alongside Merewether Pier. There are two swinging moorings with 12 to 20 feet of water, and hydraulic cranes on the wharves. Merewether Pier is 312 feet

long. The Erskine Wharf, 2,010 feet long, has accommodation for five of the largest vessels.

Madras has an artificial harbour consisting of two moles, which will accommodate several steamers of 13 to 14 feet draft. Anchorage in the roads is exposed to both monsoons, and at times cargo-work is impossible. Inside the harbour is a screw pile pier for landing and shipping cargo. The work is somewhat slow, and dependent on the weather. Harbour extensions and improvements are proposed.

Rangoon, situated 22 miles up the Rangoon River, gives access to vessels of the largest tonnage. The depth at spring-tides is about 30 feet. There are eleven berths and wharves and jetties, with cranes, a gridiron, and a patent slip. Extensive improvements are under discussion. Rangoon is the port of the Irrawaddy Valley.

It may be said generally that vessels of any draft up to*26 feet—the Suez Canal draft—can enter the five chief ports.

The length of the voyage from the chief ports to England and the United States is approximately as follows :

Calcutta to London and Liverpool 32 days ; New York 40 days.

| | | | | | | | |
|---------|---|---|----|---|---|----|---|
| Madras | „ | „ | 29 | „ | „ | 37 | „ |
| Bombay | „ | „ | 24 | „ | „ | 32 | „ |
| Karachi | „ | „ | 27 | „ | „ | 35 | „ |
| Rangoon | „ | „ | 27 | „ | „ | 35 | „ |

Tonnage cleared.—The table on p. 51 shows the number and tonnage of vessels cleared with cargoes and in ballast from all Indian ports for foreign countries, distinguishing steamers and sailing vessels, and steamers which proceeded via the Suez Canal.

Shipping Companies :

The Peninsular and Oriental Steam Navigation Company (122, Leadenhall Street, London, E.C. ; loading berth, Royal Albert Docks). Steamers run on regular services from London weekly to Bombay, and fortnightly to Calcutta. There is communication with Karachi, Mangalore, Cannanore, Calicut, Cochin, and Tuticorin via Bombay, with Rangoon via Calcutta, and with Negapatam, Madras, Masulipatam, Cocanada, and Vizagapatam via Colombo. There are services fortnightly from Bombay to the Straits, China, and Japan. Additional sailings as required.

British India Steam Navigation Company, Limited, has regular mail services along the Indian coast (London agents : Gray, Dawes

VESSELS CLEARED WITH CARGOES AND IN BALLAST.

| Vessels. | 1896-7. | | 1897-8. | | 1898-9. | | 1899-1900. | | 1900-1. | |
|--------------------------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|
| | No. | Tonnage | No. | Tonnage | No. | Tonnage | No. | Tonnage | No. | Tonnage |
| With Cargoes : | | | | | | | | | | |
| Steam | 1,926 | 3,078,441 | 1,930 | 3,084,910 | 2,337 | 3,938,474 | 2,168 | 3,674,339 | 2,155 | 3,698,238 |
| Sailing.. .. | 2,363 | 456,364 | 2,236 | 517,461 | 2,025 | 466,487 | 1,652 | 350,143 | 1,607 | 209,581 |
| Total | 4,289 | 3,534,805 | 4,166 | 3,602,371 | 4,362 | 4,404,961 | 3,820 | 4,024,482 | 3,762 | 3,908,089 |
| In Ballast : | | | | | | | | | | |
| Steam | 150 | 200,220 | 136 | 180,019 | 106 | 74,188 | 165 | 98,421 | 160 | 117,012 |
| Sailing.. .. | 495 | 79,571 | 482 | 84,479 | 808 | 53,811 | 148 | 34,285 | 148 | 19,107 |
| Total | 645 | 279,791 | 618 | 264,498 | 409 | 127,499 | 313 | 132,656 | 308 | 136,119 |
| Total : | | | | | | | | | | |
| Steam | 2,076 | 3,278,661 | 2,066 | 3,264,929 | 2,443 | 4,012,662 | 2,333 | 3,772,760 | 2,315 | 3,815,250 |
| Sailing.. .. | 2,358 | 535,935 | 2,718 | 601,940 | 2,328 | 519,798 | 1,800 | 384,378 | 1,755 | 228,938 |
| Grand Total | 4,934 | 3,814,596 | 4,784 | 3,866,869 | 4,771 | 4,532,460 | 4,133 | 4,157,138 | 4,070 | 4,044,188 |
| Steamers via Suez Canal | 787 | 1,823,784 | 758 | 1,790,223 | 1,004 | 2,341,220 | 875 | 2,132,830 | 808 | 2,010,787 |

and Co., 23, Great Winchester Street, E.C.). Fortnightly service from London via Marseilles, Naples (optional), and Colombo to Madras and Calcutta. Occasional steamers to Karachi, Bombay, and the Persian Gulf ports. Other services are as follows : Calcutta to Rangoon and Moulmein, and back direct, weekly. Calcutta to Rangoon and back direct, weekly. Calcutta to Rangoon, Penang, and Singapore, weekly. Calcutta to Chittagong, Arakan, and Burma, weekly. Calcutta to Northern coast ports, Madras, Ceylon, Malabar ports, and Bombay, weekly. Calcutta and Bombay (coasting), weekly, besides extra steamers. Calcutta to Singapore and Australia, four-weekly. Calcutta to Colombo, Mauritius, and back, four-weekly. Calcutta to Mombassa and Zanzibar, via Aden, four-weekly ; also to Lamu occasionally. Calcutta to Rangoon, Straits, and Manila, three-weekly. Calcutta to Madras, Colombo, Naples, Plymouth,

and London, fortnightly. Madras to Calcutta direct, fortnightly; and viâ coast ports, weekly. Madras to Rangoon direct, weekly; and to Northern Coromandel ports, Rangoon, and Moulmein, weekly. Madras to Rangoon, Singapore, and Manila, three-weekly. Madras to Southern ports, Penang, and Singapore, fortnightly. Madras to Ceylon, Malabar ports, and Bombay, weekly. Madras to Colombo, Aden, Naples, and London, fortnightly. Rangoon to Calcutta, thrice weekly. Rangoon to Akyab, Chittagong, and Calcutta, weekly. Rangoon to Tavoy and Mergui, weekly. Rangoon to Moulmein, four times a week and once a fortnight. Rangoon to Penang and Singapore, weekly. Rangoon to Madras and Negapatam, weekly. Rangoon to Singapore and Manila, three-weekly, and to Australia, viâ Singapore, six-weekly. Rangoon to Northern Coromandel ports and Madras, weekly. Rangoon to Colombo, Coromandel and Malabar ports, and Bombay, weekly. Bombay to Karachi, Persian Gulf ports, and Baghdad, weekly. Bombay to Karachi viâ Kathiawar coast ports, weekly. Bombay to Karachi direct, bi-weekly. Bombay to Malabar coast ports, Ceylon, Coromandel coast ports, and Calcutta, weekly. Bombay to Mombassa and Zanzibar viâ Aden, four-weekly; also to Lamu occasionally. Bombay to Zanzibar, Ibo, Pemba Bay, Mozambique, Beira, and Delagoa Bay, four-weekly. Bombay to Mauritius, four-weekly. Bombay to Red Sea ports, viâ Aden, occasionally. Karachi to Bombay direct, tri-weekly. Karachi to Colombo, Madras, Calcutta, and other ports, viâ Bombay, weekly. Tuticorin to Colombo, daily. Negapatam to Penang and Singapore, fortnightly; and to Colombo, bi-weekly. The company runs numerous extra steamers as trade requires.

Anchor Line (Henderson Brothers). Regular services from Glasgow and Liverpool to Bombay fortnightly, returning viâ Marseilles; and to Calcutta fortnightly, returning usually viâ London.

City Line (Allan Bros. and Co.). Regular services from Glasgow and Liverpool to Calcutta about fortnightly; and to Bombay and Karachi about monthly.

Clan Line Steamers (Cayzer, Irvine and Co.). Regular services from Glasgow and Liverpool to Bombay, fortnightly, and to Madras and Calcutta, fortnightly.

Harrison Line. Regular services from Liverpool to Calcutta about fortnightly.

Hull Line. Regular services from Glasgow and Liverpool to Bombay and Karachi, fortnightly.

Brocklebank Line. Regular services from Liverpool to Calcutta, three-weekly.

Wilson Line. Steamers from Hull to Bombay and Karachi, about every three weeks.

Bibby Line (Bibby Brothers and Co.). Liverpool viâ Marseilles to Colombo and Rangoon and back, fortnightly. Also to Southern India viâ Colombo and Tuticorin.

P. Henderson and Company's Line. Glasgow and Liverpool to Rangoon, about fortnightly, returning to London or Liverpool and Glasgow.

Bucknall Steamship Lines. Regular services from Calcutta to New York and back.

Shell Transport and Trading Company. Carries petroleum from Batoum, United States, Straits Settlements, and Borneo to India, and Indian produce to European ports.

Compagnie des Messageries Maritimes de France, French mail line, has steamers from Marseilles to Bombay direct every twenty-eight days, and steamers from Bombay to Colombo in connection with the Australian liners. There are branch lines from Bombay to Karachi, and from Colombo to Pondicherry, Madras, and Calcutta.

Austrian Lloyd's. Monthly mail service from Trieste to Karachi and Bombay, and thence to Kobe (Japan) for part of year, returning by Calcutta, Rangoon, Bombay, or Karachi. There is also a monthly service to Bombay, Rangoon, and Calcutta. A winter service is established from Trieste to Karachi and Bombay, some steamers going to Rangoon and Calcutta. There is also a branch line from Bombay to Shanghai viâ Singapore and Hong Kong. Extra steamers are occasionally despatched. Full details cannot be given in a brief space.

Navigazione Generale Italiana (Florio-Rubattino). Monthly service from Genoa and Naples to Bombay and back; also from Bombay to Singapore and Hong Kong monthly.

Hansa Line (Bremen). Fortnightly to and from Madras and Calcutta; fortnightly to and from Karachi and Bombay; and three-weekly to Rangoon.

German East Africa Line. Fortnightly service between Bombay

and Mombassa, Zanzibar, and East and South African ports. Eight-weekly services from Rangoon to same ports.

Nippon Yusen Kaisha Line. Monthly service from Yokohama and Hong Kong to Bombay and back viâ Tuticorin and Hong Kong, whence there is a fortnightly service to Seattle.

Bombay and Persia Steam Navigation Company. Service between Bombay and Persian Gulf and Red Sea ports.

Natal Line of Steamers (Durban, Natal). Direct fortnightly service between Calcutta, Madras, Ceylon, and Cape ports, Natal, Delagoa Bay, Beira, and East African ports. Regular through service between South and East African and Chinese and Japanese ports, Singapore and Penang viâ Calcutta.

Indo-China Steam Navigation Company, Limited. Steamers from Calcutta to Hong Kong and Shanghai.

'China' Steamers. Regular service from Calcutta to Penang, Singapore, and Hong Kong.

Archibald Currie and Company's Australian and Indian Line. Steamers to Australia, Tasmania, New Zealand, and Fiji.

Besides the coasting steamers of the British India Company, there are many other coasting vessels. The Asiatic Steam Navigation Company has a fortnightly service from Calcutta to the Malabar coast ports and Bombay, and from Bombay to Calcutta; a weekly service from Calcutta to Rangoon; a weekly service from Calcutta to Arakan; and a regular service from Calcutta to the Andamans, with some extra vessels. Bombay has a large number of small ships trading with the Persian Gulf and with the Arabian and African coasts, while Madras has many small native craft running to Ceylon and the Straits Settlements. The Rivers Steam Navigation Company of Calcutta has a daily service from Goalundo to Dibrugarh (Assam) on the Brahmaputra. The Irrawaddy Flotilla Company has a service of steamers on the Irrawaddy and all its navigable tributaries; its steamers run to Mandalay and Bhamo. River services are maintained by the Hooghly Shipping Company, and also by the India General Navigation and Railway Company on the Bengal and Assam rivers.

Freight Rates.—It is difficult to furnish satisfactory information under this head, as freights vary with ports, seasons, class of vessel, and many other circumstances. But recent rates have been roughly as follows to and from England (or Europe):

Imports into India.—Cotton piece-goods, iron and steel, 20s. per ton; hardware and cutlery, 22s. 6d. per ton; sugar from Hamburg, 25s., and from Trieste, 17s. per ton; salt, 14s. per ton; general merchandise, 25s. per ton.

Exports from India.—Rice, raw jute, and oilseeds, 22s. 6d. per ton; wheat, 21s. 3d. per ton; hides and skins, 40s. per ton; jute goods, 30s. per ton; tea, 37s. 6d. per ton; indigo, 60s. per ton; general merchandise, 45s. per ton.