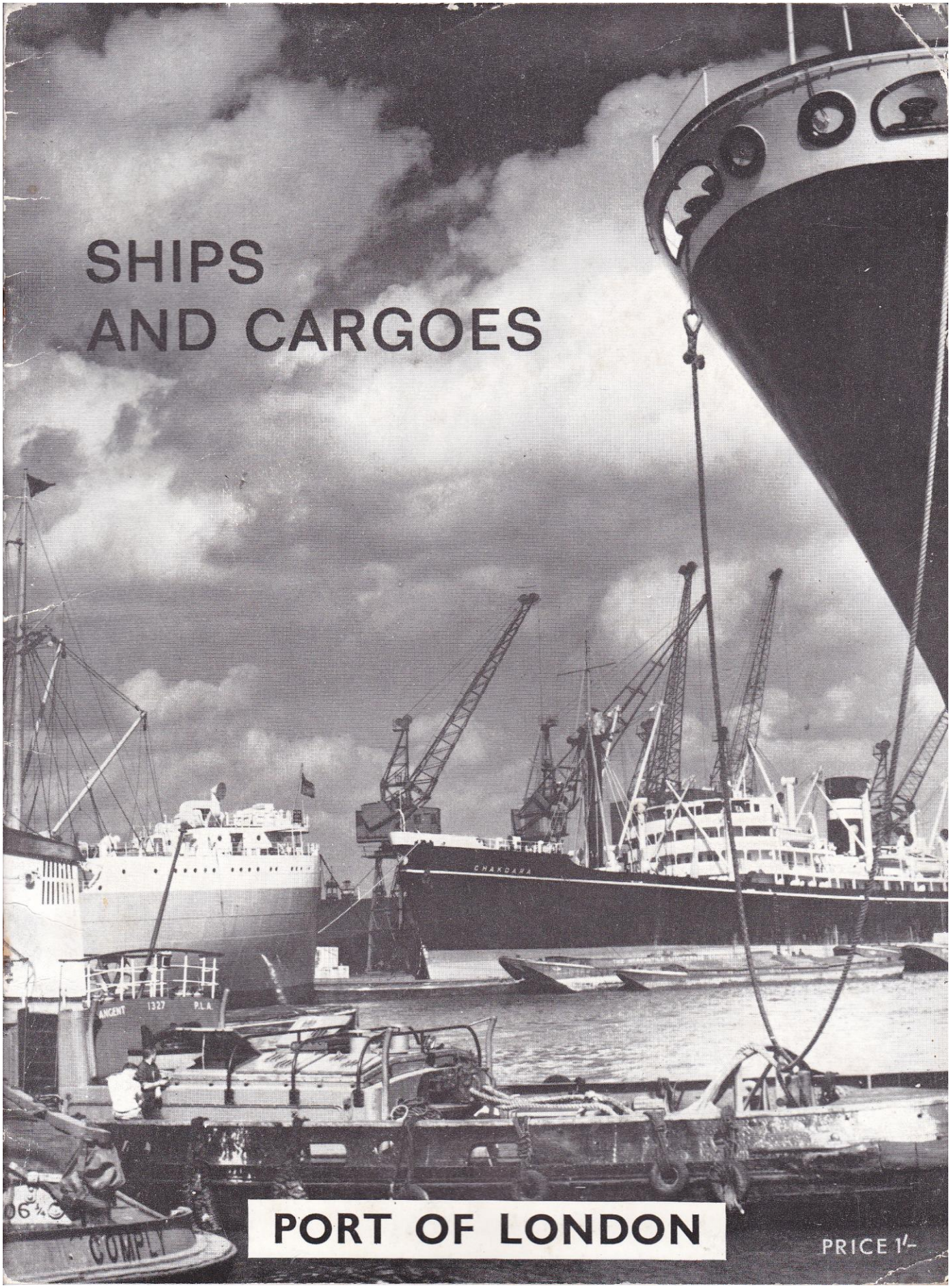
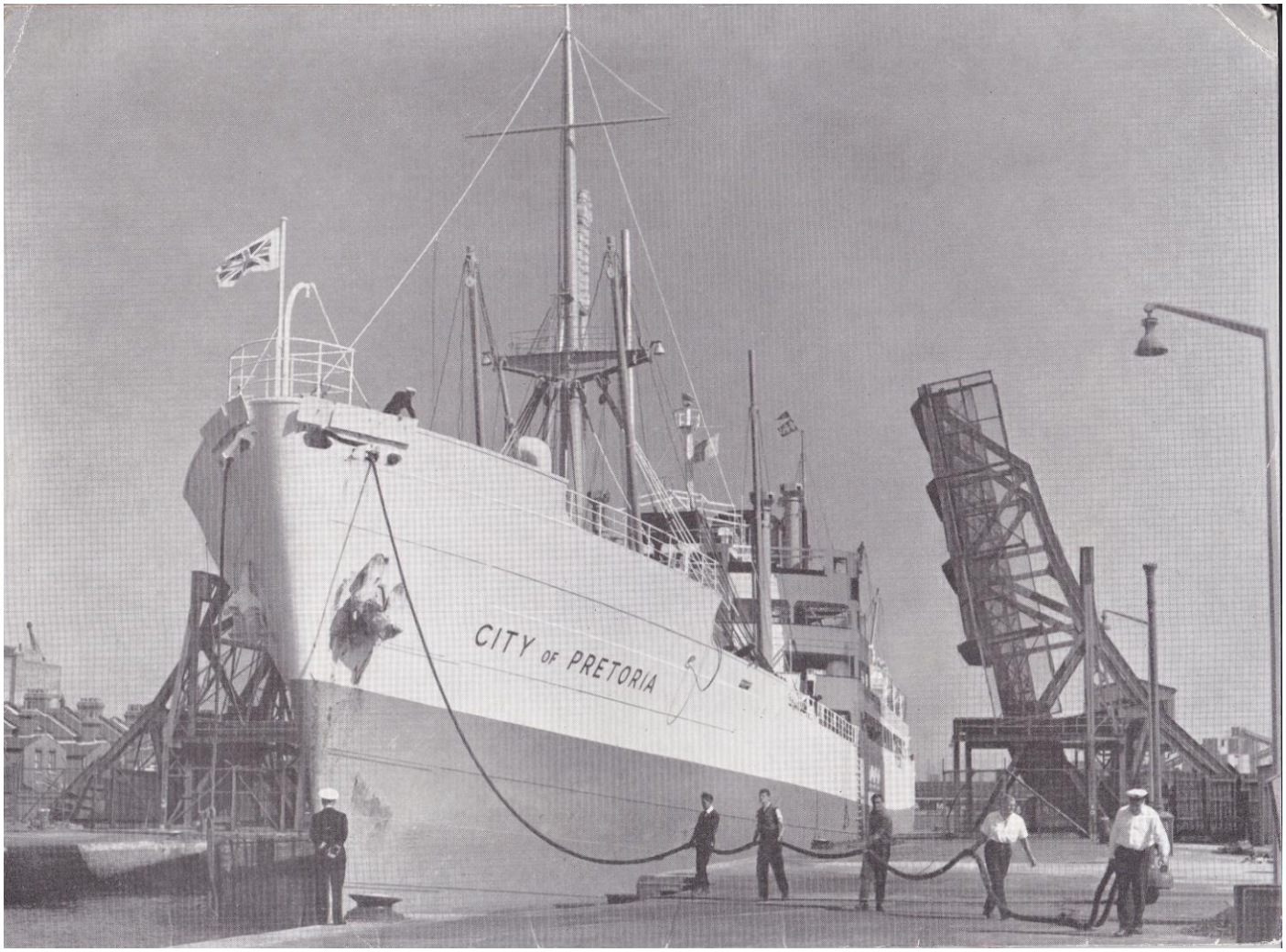


SHIPS AND CARGOES

PORT OF LONDON

PRICE 1/-


CITY OF PRETORIA

Ships and Cargoes . . .

and the Port of London

A PORT is a junction between land and sea transport, where provision is made for the ship to be berthed and for the necessary equipment and machinery to be available for the speedy discharge of inward cargo and for the ultimate loading and sailing of the vessel to overseas ports.

The aim of this brochure is to tell the story of the arrival and departure of a ship as far as the Port of London is concerned.

Ships fall into a number of categories. There is the large passenger and cargo liner, the cargo liner, the tramp steamer, and the short-sea and coastal trader.

The first, the passenger and cargo liner, in so far as London is concerned may range from 15,000 to 30,000 gross register tons. The cargo freighter between 4,000 and 12,000 g.r.t.; the tramp steamer, generally speaking, lies within the same range, while the short-sea and coastal traders can be from 1,000 g.r.t. up to about 3,000 g.r.t. There is, of course, no hard and fast rule governing the tonnages of the class of vessel, and these figures are given solely as an indication of comparison of size.

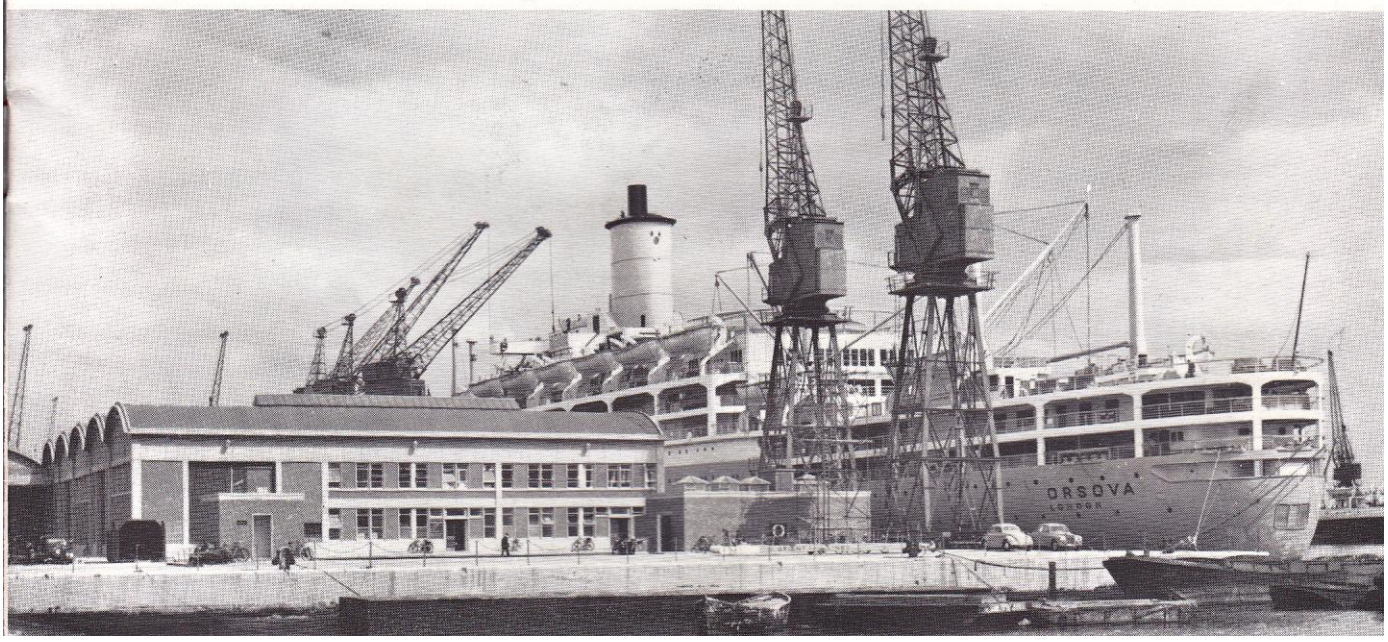
The draught, i.e. the depth of the vessel below the water line, varies according to the tonnage of the ship; the big ships may have a draught of up to 35 ft. when fully loaded, while the small trader can navigate with a clearance of about 15 ft.

In the Port of London, apart from the river-side wharves, are the five main dock systems, under the control of the Port of London Authority. The first group, i.e. Tilbury Docks, is situated off the north bank of the river some 40 miles inland from the mouth of the Thames.

In the 26 miles upstream from Tilbury lie the four other dock systems; the Royal Docks, 16 miles above Tilbury and again on the north side, and the India and Millwall Docks at Poplar, a further four miles up-river; on the south side opposite to the India and Millwall Docks are the Surrey Commercial Docks while the London and St. Katharine Docks are situated just below Tower Bridge at Stepney.

Opposite:—The City of Pretoria *locks in at the South West India Dock entrance.*

Below:—The new Passenger and Cargo Terminal at No. 1 *Berth, Tilbury Docks. with the Orient liner* Orsova *alongside.*



The principal arrangements for the arrival of a ship to be berthed in the docks of London are made between the relevant shipowner or his agent and the Port of London Authority, but there are many other services involved. For example, pilotage plays a most important part in the over-all picture, the deep-sea pilot brings the ship, either via the South Channel from Dungeness or the North Channel from Harwich, into the estuary as far upstream as Gravesend. Here the river pilot takes over and it is his job to pilot the vessel up-river and into the lock entrance of the dock system which has already been agreed between the Authority and the shipowner.

At Gravesend, the Waterguard and Preventive branch of Her Majesty's Customs and Excise will board the ship while (according to her size) attendant tugs will escort the vessel up-river.

One of the most recent innovations provided by the Port of London Authority is the Thames Navigation Service at Gravesend. This service combining radar and radio-telephone collects and broadcasts to ships all possible information as to weather conditions, obstructions in the fairway, movement of other ships, etc., which proves of great assistance in the difficult task of navigating within the comparatively narrow confines of the River Thames. Should the master of an incoming ship require medical assistance, this can be made readily available by the Port Medical Officer whose headquarters are at Gravesend.

Opposite to Gravesend is the Tilbury Landing Stage, a floating stage designed to accommodate liners at all states of the tide, where passengers can disembark before the vessel moves to one of the dock systems upstream for the discharge of her cargo.

London is essentially a cargo port, but over 200,000 passengers arrive at and leave the port in the course of a year. This involves the handling of a great deal of luggage and, of course, the examination of inward baggage in the Baggage Hall on the landward side of the Stage by officers of Her Majesty's Customs and Excise. The dispersal of passengers from the Landing Stage may be made by road or rail; in the latter case the British Railways will arrange for a boat train to be at the Tilbury Riverside Station which is adjacent to the Baggage Hall.

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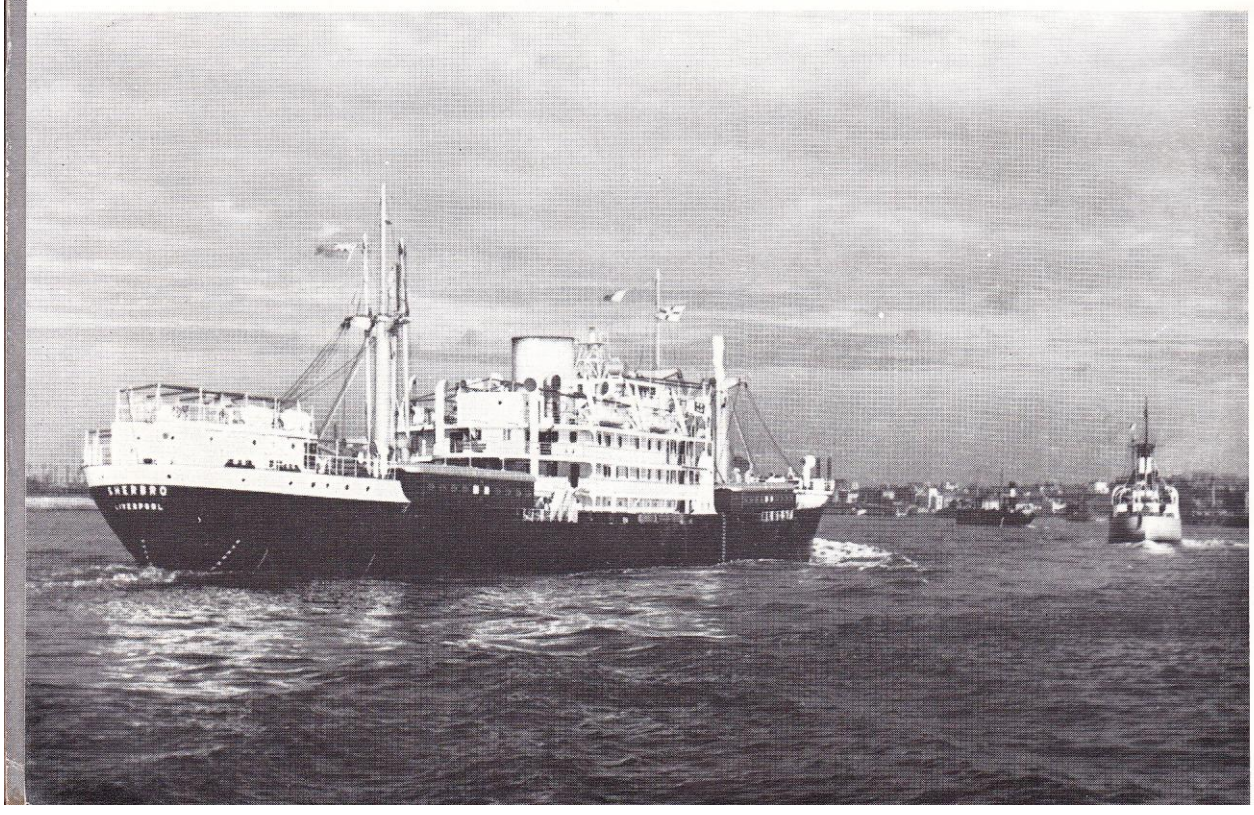
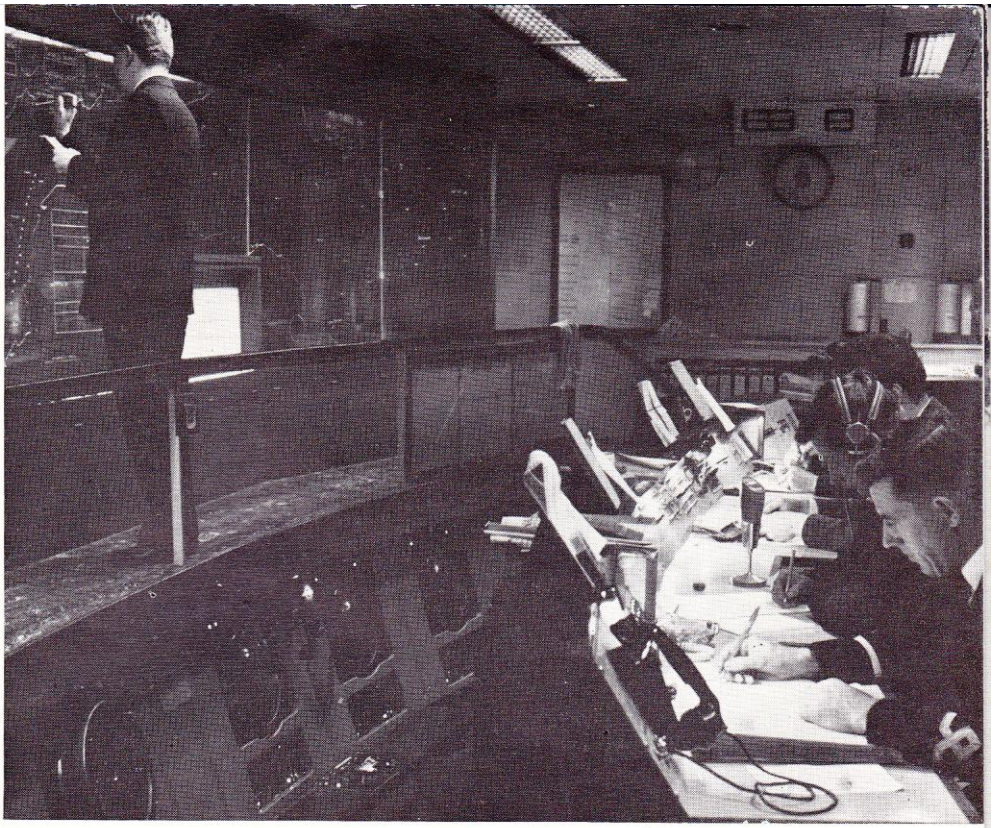
Outward bound. The deeply laden Sherbro *of Elder Dempster Lines, moves downstream.*





The Operations Room of the Thames Navigation Service at Gravesend. The Authority's Harbour Service patrol launches equipped with radar and radio telephony are one of the sources of information which co-ordinated by the Thames Navigation Service is broadcast to shipping using the Port.

Arrangements having been made for the ship to be berthed at one of the dock systems, the passenger and cargo liner leaves the stage and moves upstream. In the case of the cargo liner, i.e. a vessel with little or no passenger accommodation, the conditions governing the movement into the Port of London is the same as for the bigger vessels with the exception that she does not call at the Stage but moves steadily up-river to the dock of discharge. There are wharves on the riverside which can accommodate a cargo vessel but in this brochure the emphasis is on the arrangements made within the control of the Port of London Authority, and the riverside wharves are outside that control.

Having been cleared by Her Majesty's Customs and the Port Health Authority at Gravesend, the ship moves upstream with the river pilot on board. Here it may be as well to assume that the cargo liner is from Australia and New Zealand and is bound for the Royal Docks at North Woolwich.

Off the entrance to the King George V Dock, one of the three docks of the Royal Docks group, it may be that the Dockmaster is prepared to take the ship in without delay, in which case the escorting tugs will close in, take the ropes and turn the liner into the lock. If, for example, a ship is already in the lock waiting to move out into the river, then the new arrival will anchor a short distance downstream and await the Dockmaster's instructions.

With a minimum of delay, the ship is received into the lock and the process of levelling up is begun. It must be understood that the Thames has a rise and fall of about 20 ft., while the water in the dock is maintained at a steady level, some 2 ft. 6 in. above the normal Thames high water. Thus it is necessary to accept the ship at river level, close the outer lock gates and by means of sluices, etc., raise the water in the lock to the level of the dock water beyond. When these levels are attained, the inner lock gates open and the ship, now under control of a dock pilot, is towed by the tugs to her pre-arranged berth.

When arrangements are made for the arrival of the vessel, the nature and disposal of the cargo are matters of prime interest. General cargo, i.e. cargo which represents a cross-section of the exports of the country where the ship has loaded, can of course be dealt with at the great majority of berths, but

(Left) Timber. Surrey Commercial Docks are the traditional home of the softwood timber trade in the Port of London. Extensive under-cover storage is provided by the Authority at this control.

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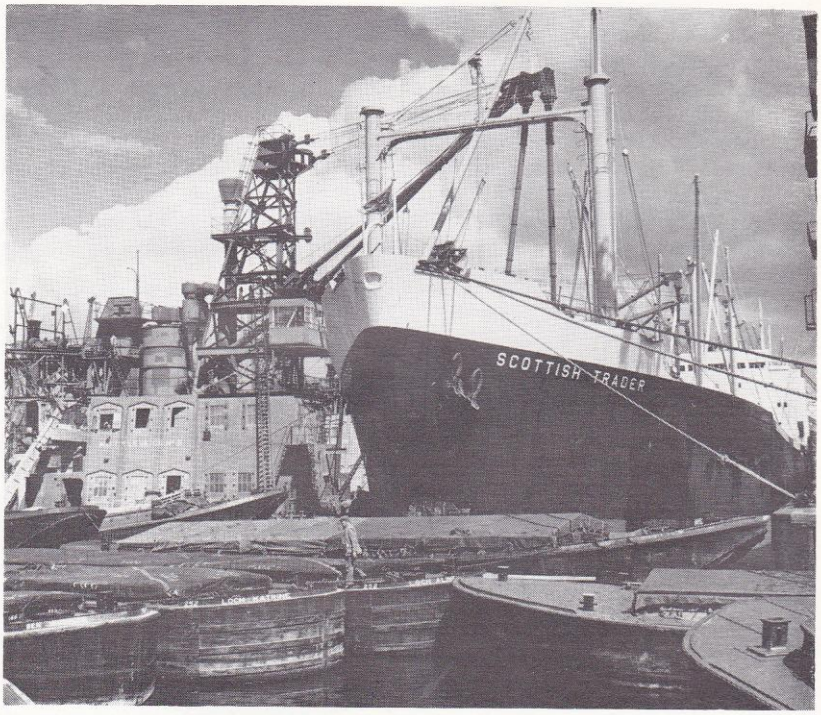

A fleet of floating grain elevators is maintained and operated by the Authority for the overside discharge of bulk grain.

(Right) Meat. Sources of supply of imported meat range from the Canterbury Plains of New Zealand and the sheep farms of Australia to the pampas of South America. At the Royal Docks, Cold Stores are provided for the storage of carcases prior to distribution to the markets of this country.

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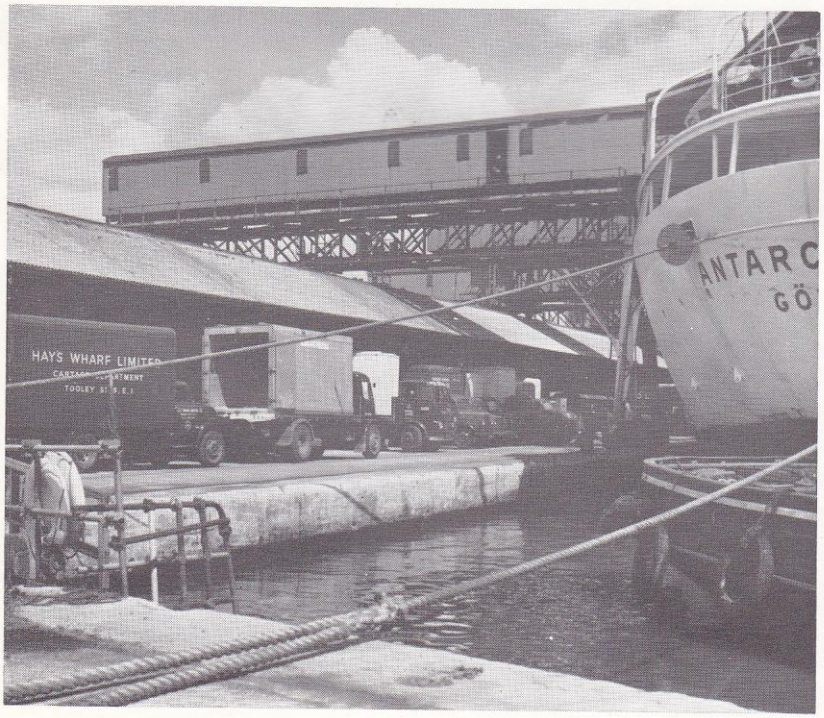


(Left) Bananas. At the western end of the North Side of the Royal Albert Dock, a fully mechanised berth has been specially constructed for the discharge of bananas. The overhead gantries which carry the conveyor belt system from the ship's hold to the land transport can be clearly seen. By full mechanisation, manual handling of the fruit is reduced to a minimum.

Photo: Aerofilms

This aerial view is taken looking down the Royal Victoria Dock from the western end. The range of flour mills flanking the south side of the dock (centre picture) dominates the scene. Beyond the furthermost mill is No. 4 Shed, the largest transit shed in the Port of London. On the north side is the range of three-storey warehouses. The Royal Albert Dock is connected to the Royal Victoria Dock by the Connaught Road Cutting. Immediately below the Cutting on the north side is the Banana Berth, then the Cold Stores, followed by the long line of transit sheds.

On the south side are the repair depots and dry docks and again a range of transit sheds for dock working.

Parallel to the Royal Albert Dock and connected by water cutting is the King George V Dock with ships at their berths and a vessel in the King George V Dry Dock. The three lock entrances to these docks are at the top left centre of the picture—the main entrance to the King George V Dock and two further entrances (one ship and one craft) to the Royal Albert Dock Basin leading into the Royal Albert Dock.

On the left of the picture lie the marshalling yards of the dock system, while the river swerves away from Woolwich Reach (right) into Gallions Reach (top left).

there are ships which engage in the transport of specialised or complex cargoes. Thus, a grain ship will be accommodated at the Central Granary, Millwall Dock, where fixed pneumatic grain elevators discharge the bulk grain via a conveyor belt system to the storage floors of the Granary. In the Royal Victoria Dock and again in the Millwall Dock, are flour mills and granaries owned by milling companies which have every facility for dealing with large bulk grain cargoes.

At the Royal Albert Dock, a berth has been specially equipped to deal with the mechanised discharge of bananas. This is effected with the minimum amount of handling by stevedores and dockers by the simple use of conveyor belt systems carrying the stems of bananas from the ship's hold to the waiting rail or road transport.

Cargo may be delivered over the ship's side to barges for despatch to one of the many wharves or factories on the riverside, or in some cases to small coasters for transhipment to other ports, or alternatively orders are placed for the cargo to be landed across the Authority's quays. In this case the Authority may be requested to (a) deliver to conveyance on what is termed " Immediate Delivery " or (b) to take the goods into warehouse for storage on behalf of the importer.

Immediate delivery means that the goods must be accepted by the importer within 72 hours of being ready for delivery and for this the charge rendered is comparatively lower than that for landing and warehousing. There are many different rates chargeable for the latter services and schedules are published and issued free for the benefit of the importer,

Shipping scene. Royal Albert Dock.

The P.L.A. employ a Police Force of over 500 officers and men. The dock groups are enclosed by a Customs fence and the authorised gates are manned by constables who direct incoming traffic and check all vehicles leaving the dock areas.

but for the purpose of this brochure it is sufficient to say that the Authority charge for the services they provide, and that cargoes are handled according to the instructions which are given by the merchant.

Ships engaged on regular trade routes discharge their cargoes at a pre-arranged berth and on completion of discharge will, as a general rule, move to another berth, usually within the same dock group, to load outwards.

The date of the commencement of the loading programme is agreed between the Authority and the shipowner and the ship will be accommodated at a berth adjacent to a transit shed. A transit shed is a single storey building used for the temporary accommodation of cargoes as opposed to the warehouse in which goods can be stored for periods of time.

About three or four days before the ship is due to load notices go out via the postal services and the Press giving information relating to the date of sailing, the ports at which the ship will call, the shed or berth and dock at which the vessel will load together with the fact that the shed will be open to receive cargo for shipment as and from a certain date.

This date is within the three or four days before the actual commencement of the loading into the ship and enables the Authority to accumulate some 1,200/1,500 tons of cargo in the shed prior to the first day of the ship's loading. Thus there is a reasonable assurance of a steady flow of cargo from the shed to the vessel during the loading programme. It would be uneconomical to have a ship arrive at a berth in dock where no export cargo had previously been accumulated in the shed because the time a vessel spends in dock is important to the shipowner and the Port Authority.

Neither the shipowner nor the Port Authority can afford to waste time in dock and it is most essential that the ship is able

(*Above*) *The transit shed provides an extensive area for the stowage of export cargo according to the various ports of destination at which the liner will call.*

"Lock ups", i.e. small caged areas, are for the holding of goods which, subject to heavy duty, are liable for detailed examination by H.M. Customs prior to shipment.

(*Opposite*) *One of the fleet of heavy floating cranes lifts a London bus which has been sold overseas, and is being loaded on board a cargo liner in the West India Docks.*

The maximum lift of the London Mammoth, *the largest of the fleet, is* 200 *tons.*

to start loading from the shed immediately on arrival at the berth.

Prior to the first day of receiving cargo the shed is marked out into divisions according to the ports of destination. For example, a vessel loading for a terminal port in New Zealand may well call at a number of ports on her journey from London and cargo for each port will be loaded in the reverse order to that of discharge, i.e. the cargo for the last port of call will be loaded first.

The closing date for receiving cargo in the shed is usually some 2/3 days before the ship sails, thus ensuring as far as possible the completion of the loading programme. It may well be that cargo will arrive after the closing date and this may lead to the cargo being " shut out ", i.e. having arrived at the shed too late to be accepted by the shipping company for that particular liner.

As in the case of imported cargo, lighterage, or the conveyance of goods by barge, plays an important part in the export trade. Apart from the cargo which is received from rail or road transport, a considerable tonnage will arrive at the ship's side by craft. This necessitates careful pre-planning to ensure the dovetailing of overside loading into the ship with the cargo which is being received across the quay.

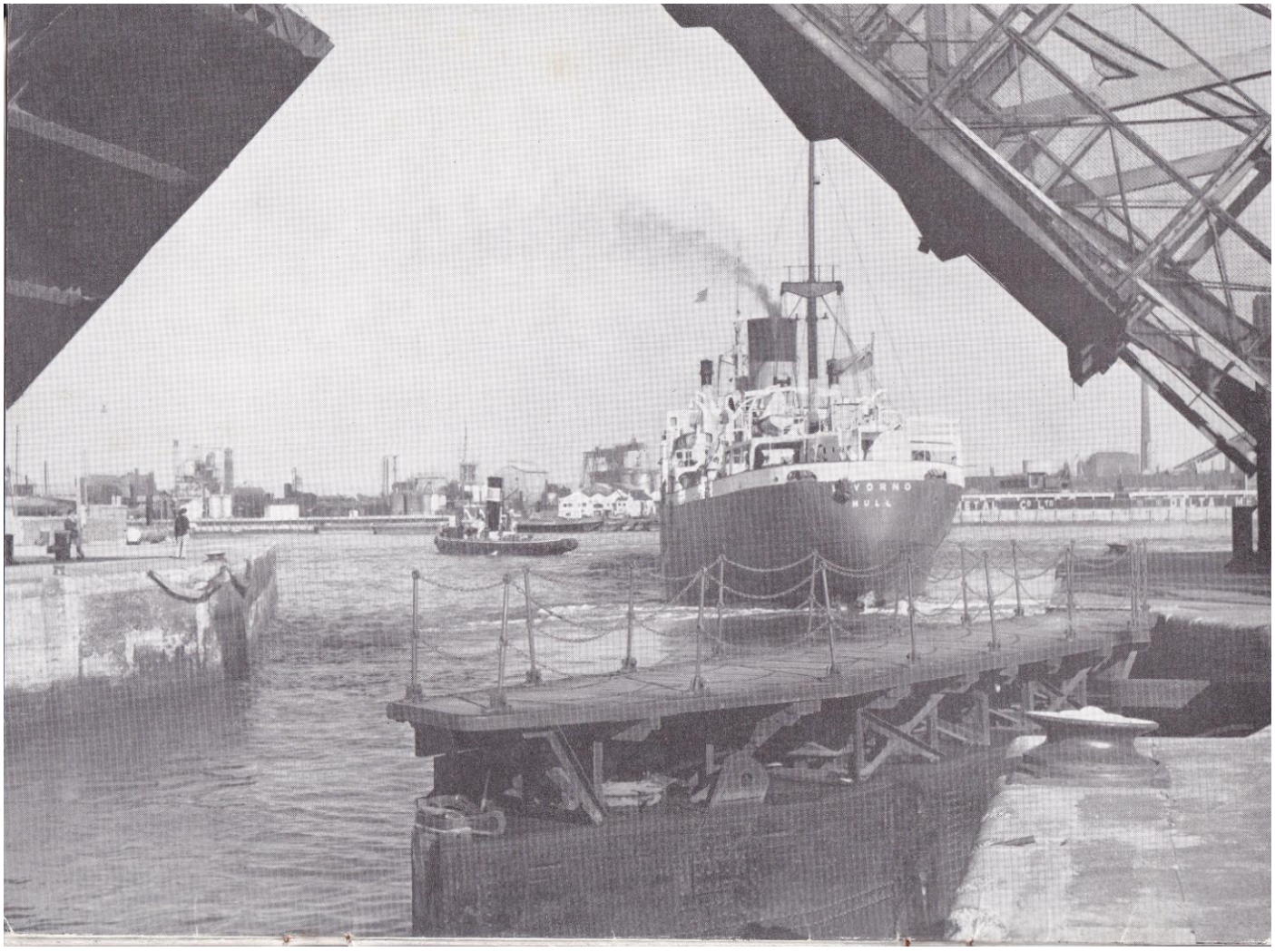
Quay cranes, generally speaking, range from three tons to five tons and are capable of dealing with the greater proportion of general cargo but there are many consignments both inward and outward which may weigh far and above the capacity of the normal quay crane. Such consignments, e.g. transformers, generating machinery, locomotives, etc., are handled either by the ship's heavy gear or, more often, by one of the Authority's fleet of heavy floating cranes. This fleet includes the *London Mammoth* which has a maximum lift of 200 tons.

In this brief outline of the arrangements for the receiving of a ship into the port, its subsequent discharge and loading programme, it is possible only to make a short reference to some of the major provisions made for the import and export trades.

As a background to the over-all picture here lies the endless problem of keeping pace with the demands for new equipment, machinery, etc., necessary to meet developments in the design of ships and the packaging of cargoes.

Opposite:—Departure, The Ellerman liner Livorno *leaves the South West India Dock.*

Below:—One of the vehicle " roll-on, roll-off " ferries of the Atlantic Steam Navigation Co. takes on motor transport for the Continent.


VORNO
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