

The

P.L.A.

MONTHLY

The Magazine of the Port of London Authority

SUNSET AT PORT PHILLIP BAY

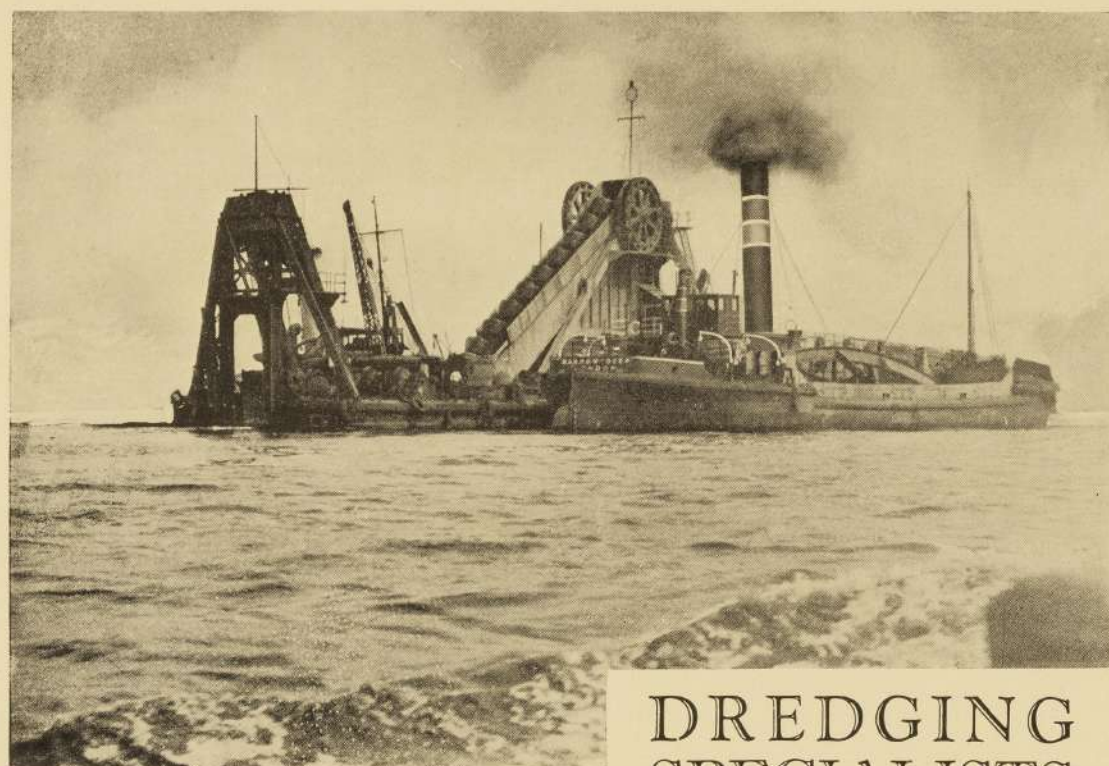


This issue includes a pictured record illustrating some of Australia's leading Industries, her Landscapes, her Towns; and the Ships of London which sail to the Ports of the Commonwealth; and Scenes in the Docks and Warehouses of the Port of London Authority. With accompanying Letterpress.

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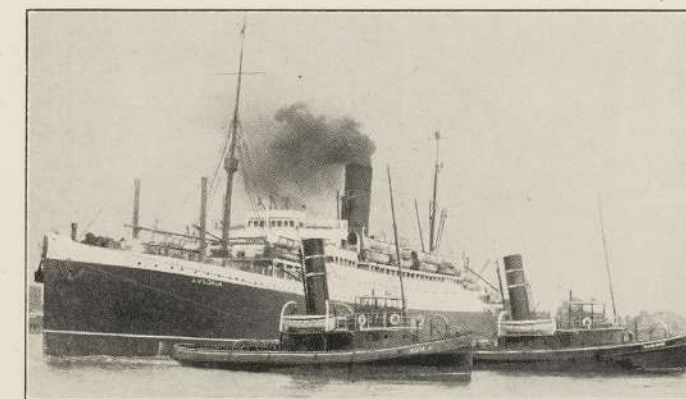
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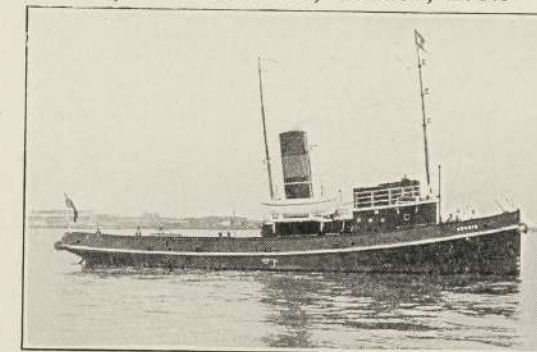
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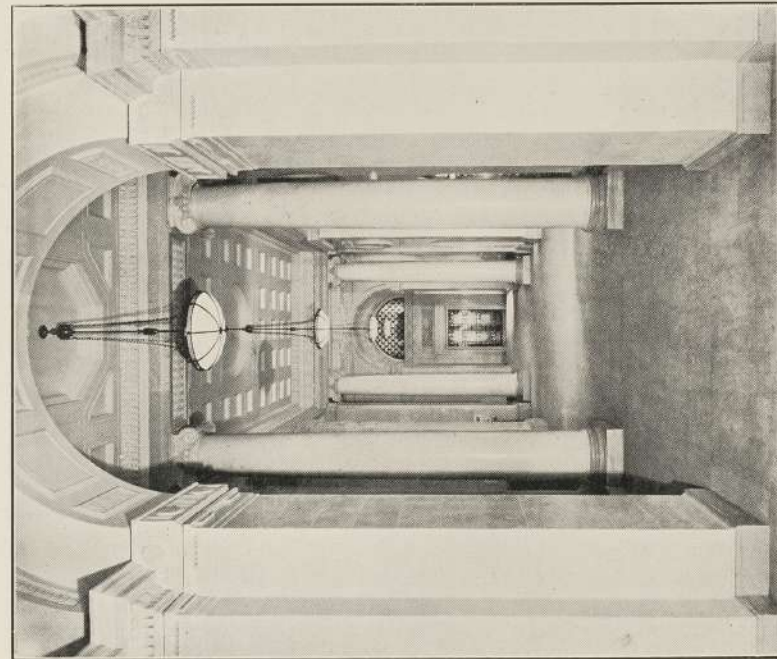


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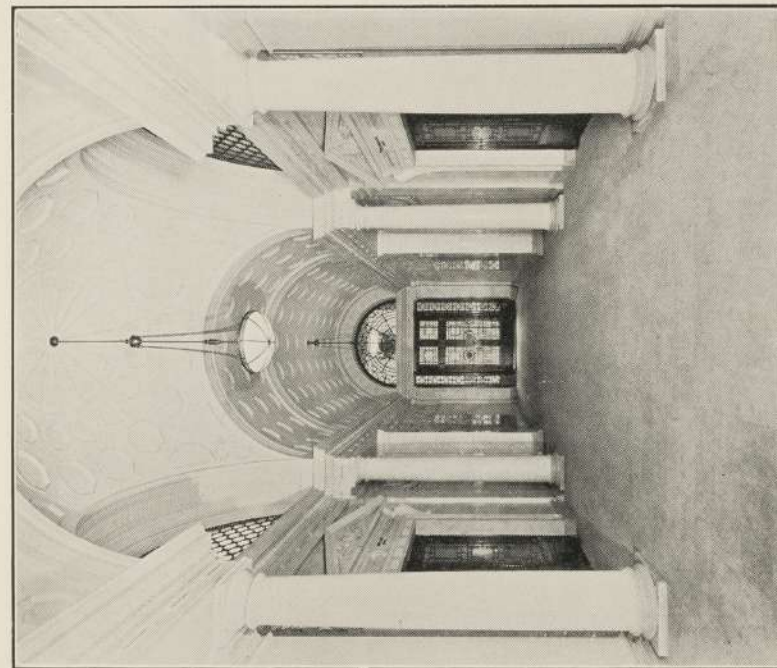
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THE P.L.A. MONTHLY

THE MAGAZINE OF THE PORT
OF LONDON AUTHORITY

NOVEMBER
1935

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The
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Being the Magazine of the Port of London Authority

NOVEMBER, 1935

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AUSTRALIAN SCENE: IN THE FLINDERS RANGES

RIVERSIDE RAMBLES.—IV. THE SOUTH BANK OF SEA REACH

By A. G. LINNEY



FROM CURTIS & HARVEY'S JETTY (NEAR LOWER HOPE POINT, SHOWING MARK INDICATING LIMIT FOR
PETROLEUM CARGOES: THAMESHAVEN OIL TANKS IN DISTANCE

Photo: A. G. Linney

AT VARIOUS TIMES AND UNDER various conditions I have succeeded in following the banks of the River Thames within the Port of London wherever it is possible to walk between the western limit below Teddington and Coalhouse Point on the Essex side and Higham Creek on the Kent bank; and from Lower Hope Point to Yantlet Creek.

It is to be admitted that difficulties face the walker who desires to gain knowledge of the south side of Sea Reach because it is hard of approach by land as no roads come anywhere near the water's edge. It is but rarely that there arises an opportunity to land anywhere on this stretch, so that when such an occasion did offer itself I was

pleased to be able to take advantage of the chance. Not that this south bank offers any particular thrill or high note of interest, because, for the most part inland from the sea wall are plain saltings or fields running south among the farms. Industry is hardly represented at all, and the sole nucleus of a village is at All Hallows, well east towards Yantlet Creek.

Having landed near Lower Hope Point and climbed up the slippery stone facing of the wall, I found myself looking across a dyke on to the estate now belonging to the Port of London Authority on Cliffe Marsh. During the War, the activities of Messrs. Curtis & Harvey, manufacturers of explosives, extended

here, and relics of that period are still to be observed in the sheds, concrete flooring, tin chimney, and earthwork protecting embankments scattered among the poplar trees. The house occupied by the manager of the place during the war-time working has now been demolished and no longer stands adjacent to Lower Hope Point itself. Rather farther on is Messrs. Curtis & Harvey's Upper Jetty. A notice-board bears the inscription "Factory in Disuse. Explosives Act, 1875" etc. More extensive reminders scatter about the marsh and here poplar trees are numerous.

In the tideway, no long distance from Curtis & Harvey's Lower Jetty, rises from the water the beacon mark indicating the Mucking limit in connection with the transport of petroleum. Down by the water are several nice little sandy beaches, some being composed almost entirely of broken sea shells, a feature which manifests itself at various points all along this south shore. Northwards the Blyth Sand extends like a shallow sickle out in the stream for miles along, its proximity being indicated to mariners by the trio of fairway buoys.

A curious incident regarding one of

these buoys was recorded in "Lloyd's List" recently.

"Often wrongly, occasionally with reason, someone reports that a lighted buoy was not showing at such and such a time. That means that the proper button in Trinity House is pressed and steps are taken to tackle the matter. It fell on a day that the word came that the Middle Blyth Buoy was out, and so a Trinity House ship was deputed to take a look-see. She sent a boat across and, sure enough, something was seen to be wrong. Why, in the name of wonder, a queen bee should in her headlong flight have chosen to insert her royal body in the lamp of the Middle Blyth Buoy I can't pretend to say; but apparently this had happened and the swarm had followed her. Trinity House tenders do not carry the paraphernalia of the apiarist, and T.H. men are as susceptible to stings as other mortals.

"But sea-trained men are not easily fazed, and ingenuity was quickly brought to bear on the problem. The tender came alongside the Buoy, a hose from the oil gas tank was led into the lamp, and as the crew sang 'The Honeysuckle and the Bee,' the swarm ceased to be a swarm—and that was that!"

Presently the spaces of tough grass between high water mark and the foot of the river wall grow wider and more strewn with odds and ends of flotsam, though this is not of the solid nature of the stuff that washes up along Erith



ALL HALLOWS, AN ASPIRING LITTLE RESORT WEST OF THE MOUTH OF YANTLET CREEK, SOUTH BANK OF SEA REACH

Photo : A. G. Linney



THE UNKNOWN PORT OF LONDON : BETWEEN ST. MARY'S BAY AND DAGNAM SALTINGS, SOUTH BANK OF SEA REACH

Photo : A. G. Linney

Reach and Rands. There are various salty pools well inhabited by crabs. Bird life on the southward marsh seemed fairly abundant and there were plenty of wild duck put up. It is very lonely, the flats stretching away to low, distant, wooded hills. Patches of samphire showed between wall and water. The summer was one of drought (1934) and Cliffe Fleet gave token of its winding course only as a reedy swamp with clear water patches here and there, though a sluice runs under the embankment into the stream. More wild duck rose; we flushed several coveys of partridges; now and again a hare chivvied across the dried ground into the distance. Grasshoppers abounded and at one place we were almost smothered by a swarm of tiny beetles on the wing. Of butterflies I noted small coppers, wall brownis, and small tortoiseshells.

Egypt Bay dents its way into the

bank as a definite break in the south river wall; it has extensive beaches of broken shells and big patches of samphire. The soil being bone dry we were able to walk right across it instead of having to toil round its inland edge. St. Mary's Bay, rather farther on, could be negotiated in the same way. Near it is a telegraph beacon answering to that on the shore of Thorny Bay, Canvey Island; their presence indicates the War Office cable running on the bed of the stream across Sea Reach.

No sign of human habitation on the flats stretching from the river wall southwards is to be observed, though near St. Mary's Bay again the flat of the marsh is broken by various sheds and protection embankments like those near Lower Hope Point. A curving beach perhaps 150 yards in length is presently seen, the sand and shell being of an almost brilliant buff colour.



THE WEST BLYTH BUOY, SEA REACH
Photo A. G. Linney

Continually one realised the effects of the prolonged drought, for the fleets were mostly dry and all cracking and powdering, with watercourses or ditches shrunk either to a trickle or quite to nothing. A man working with one of the ditch-cleaning gangs told me that they found eels still alive a foot down in the barely moist clay.

There is little variety landwards in the view presented—marsh flats stretching gently to uplands with abundant woodland on the skyline. The river bank begins to take on an almost seashore look, with distinct tidal channels and lots of samphire. Hereabouts came the first actual sign of human habitation; a rough hut with several ramshackle sheds at hand, and apparently the squatter in charge pays attention to the salvage question, for he had a small pram or infantile coracle in a dugout pool and a few piles of junk lay in some sort of order. The henhouse possessed

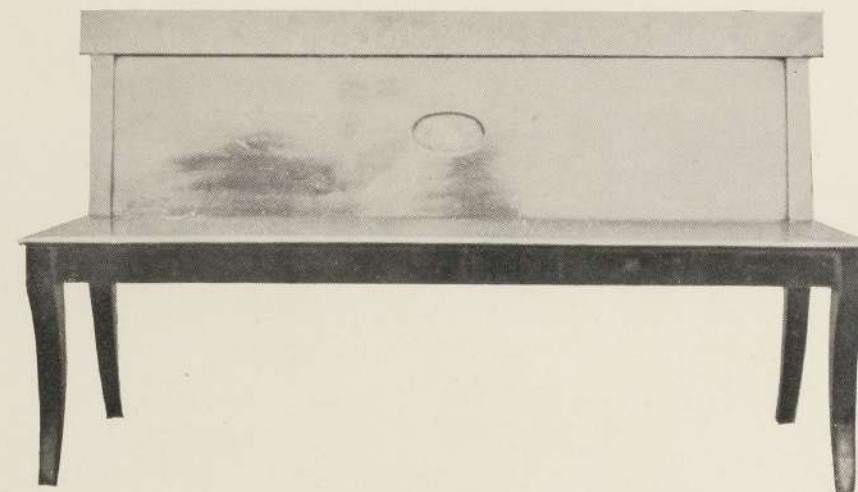
a minute flagstaff surmounted by a solar topee retrieved from the waves! From near this spot a track seems to lead away inland and one of several bathers told me that the locality is called Dagnam Saltings with Dagnam Farm through the fields.

A few minutes' walk brought us to All Hallows, a little Kent bank "seaside resort" which has grown up. Call it about opposite the east end of Canvey Island. The nucleus of All Hallows must have been the white-faced, red-tiled farmhouse which stands back some way from the water; until a few years ago its position was indeed isolated, but now in its neighbourhood has grown up a beach line of wooden huts of the "Kozykot" and "Sunnyowers" type, a little teahouse or two, deck chairs, ice cream barrows, a plank for boat landing, and an "amusement park." The whole atmosphere and appearance of All Hallows struck me as much like what I had seen across the stream where Leigh Beck, Canvey, comes to the River's edge. I ought to say in candour that, on the flood tide, one might bathe here without repulsion, even if remembering Barking Reach and Crossness. All Hallows boasts a recently-opened railway station and a brand-new hotel.

As one passes beyond the eastern limit of All Hallows, the shell beaches end abruptly and the landscape is of purely marshland character; the rolling uplands of the distance have died away and Kent is just flat marsh with a few trees. And here we have Yantlet Creek before us, with Yantlet Beacon and the London Stone, the latter to the east.

It is to be admitted that the fifteen mile walk in question presents nothing of interest to any save the enthusiastic port-explorer, and I would warn intrepid hikers against heading west from All Hallows along the bank.

INTERESTING OLD FURNITURE AT TILBURY HOTEL



MAHOGANY BENCH AT ONE TIME IN THE BOARD ROOM OF THE EAST AND WEST INDIA DOCK COMPANY.

Photo: A. G. Linney

TILBURY DOCKS CAME INTO existence in 1886 under an Act promoted by the East and West India Dock Company and were taken over by the Port of London Authority in 1909. Adjacent to the Docks the East and West India Dock Company built a large hotel which was opened on the same day as the Docks, April 17th, 1886, the guests on the occasion of the opening returning to the Hotel for luncheon.

Along with the Docks the Hotel became the property of the Port Authority and continues to serve a useful purpose for travellers leaving by vessels calling at the Passenger Landing Stage. Incidentally, its long terrace forms the finest position on the River for watching the panorama of Thames shipping.

A legacy of the Elder Days, certain old furniture belonging to the Hotel is of distinct interest. There is a 6-foot-long mahogany bench (See photograph) and several mahogany chairs bearing

the intertwined lettering in gold, E.W.I.D.C., on a skyblue background. This bench used to occupy a position in the lobby of the Board Room of the Docks Company and is remembered in that position by officers of the Authority who came into the service of the P.L.A. in 1909 from the London and India Docks Company, successors to the East and West India Dock Company.

There are, too, several dark oak chairs of uncompromising simplicity and hardness; on these there appears the coat of arms of the Corporation of Trinity House superimposed on those of the Corporation of the City of London. Seemingly this is a sort of symbolism as if to represent interlinking jurisdictions over certain duties then carried out by the respective bodies indicated. The mahogany bench and chairs must be quite a century old, and the oak chairs doubtless date from an even earlier time. (Photo: See page 46.)

A. G. L.



THE CORPORATION OF TRINITY House have appointed Mr. J. M. Nicolle to be their Secretary in succession to Mr. H. T. Miller, C.B.E., who has retired after forty-six years' service.

* * *

THE DEATH IS ANNOUNCED of Alderman Joseph Mears, formerly Mayor of Richmond. Mr. Mears had numerous interests connected with the riverside, including pleasure steamers and launches. His name is perpetuated in Mears' Walk, Richmond, recently presented by him to the town of Richmond.

* * *

CAPTAIN A. R. H. MORRELL has been elected Deputy Master of the Corporation of Trinity House in succession to Vice-Admiral Sir Robert Mansell, K.C.V.O., C.B.E., who has relinquished office on account of ill-health.

* * *

THE CHARTER OF INCORPORATION elevating Beckenham to the dignity of a municipal borough has been handed over by the Lord Mayor of London to Sir Josiah Stamp, Charter Mayor of Beckenham.

REACHING LONDON IN COOL chambers of the Union-Castle liner *Carnarvonshire Castle*, a splendid collection of South African wild flowers has been displayed in the Company's windows in Fenchurch Street.

* * *

THE NEW ZEALAND SHIPPING Company has placed an order for two cargo vessels for their New Zealand and Australian trade. It is expected that they will be ready towards the end of next year.

* * *

THE SOUTH METROPOLITAN Gas Company's collier *Effra* has completed her one thousandth voyage in the Company's service; her first trip for the "South Met." was made in March, 1915.

* * *

TILBURY PASSENGER LANDING Stage has become increasingly used by vessels undertaking pleasure cruises. These figures are significant :

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1934	74	888,855	24,608
1935	112	958,042	34,747

The P.L.A. Monthly

November 1935



A pictured Record illustrating some of Australia's leading Industries, her Landscapes, her Towns: and the Ships of London which sail to the Ports of the Commonwealth: and Scenes in the Docks and Warehouses of the Port of London Authority.

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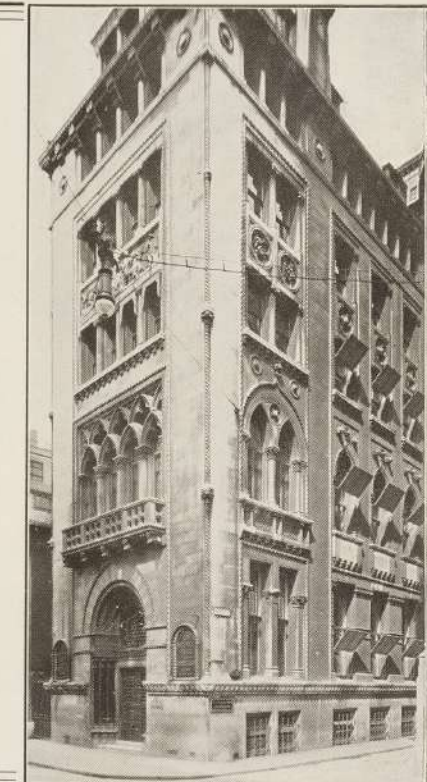
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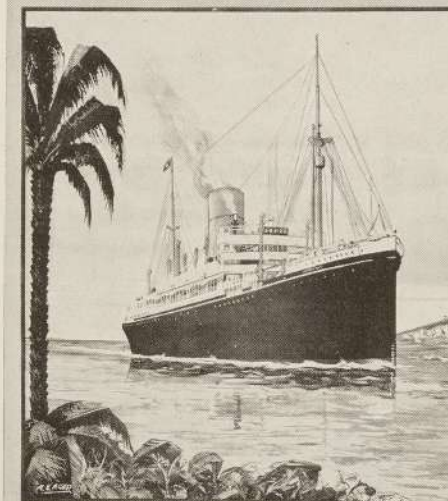
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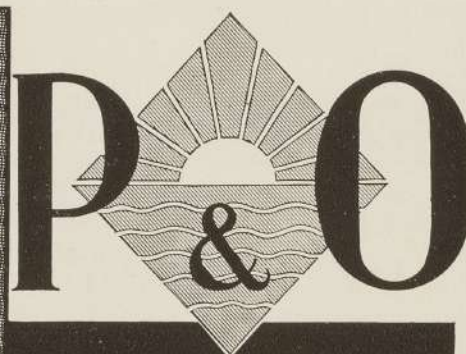
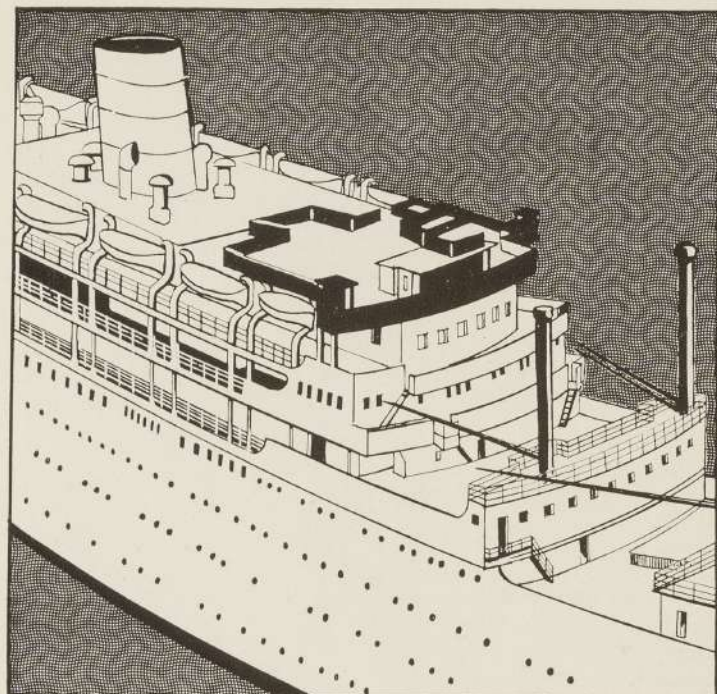
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SEEING AND STUDYING AUSTRALIA

By **CAPTAIN A. W. PEARSE**

Representative of the Port of London Authority in Australia and New Zealand

DURING THE PAST FORTY-FOUR years I have travelled Australia on many occasions from its far east to its far west and from Port Darwin in the north to Hobart in the south. These journeys have been made by steamer, buggy, on horseback, and, more recently, by motor-car. Thus I have gained good knowledge of the country's conditions. During all these trips I have found only a very small proportion of people not devoted to the Home Land and not intensely loyal. Occasionally I meet with some who dislike England and dislike the Empire, but such men are generally those who dislike their own country as much as they hate anything in the way of discipline or order; their number is small. Whatever changes follow the swing of the political pendulum Australia's fundamental loyalty is beyond challenge.

Australia should be a great resort for tourists, everything being so markedly different from what it is in most other lands. The vast plains with their millions of sheep, the lovely coastal country with its numerous cattle, the northern tropical coasts with their sugar, bananas, pineapples, pawpaws, mangoes and like fruits, and the wonderful coral reefs and islands, all worth visiting by travellers from other shores. The animal life shows the marsupials, platypus and other remarkable creatures.

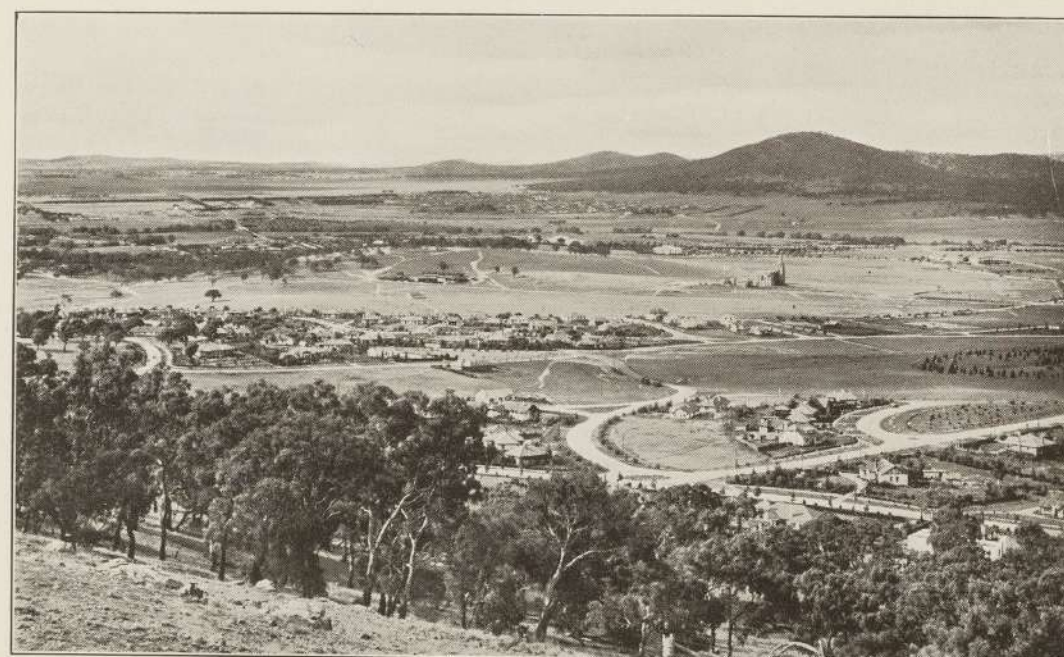
As regards shipping the produce, the bulk of this is done by merchants and Boards in the cities. Few people ship on their own account. There are Dairy, Dried Fruit, Egg,

and other Boards and combinations; these ship to those parts of the world which pay them best. Then there are the great wool and financial houses which either sell the wool at the local sales or ship it to London for disposal. The wool owners give the instruction as to whether to sell locally or no.



For fourteen years I have had the honour of representing the Port of London Authority and during my travels I have given lantern lectures again and again in various centres of population. The lantern slides show not only London's docks and wonderful produce stores, but, in addition, round - the - world travel pictures which greatly add to the interest. I have addressed Chambers of Commerce and Rotary Clubs in nearly every city and port in the Commonwealth and New Zealand and I have lectured to nearly all the leading boys' and girls' schools in Australia and New Zealand; without exception I have enjoyed a splendid reception. Also, on nearly every steamer by which I have travelled I have given a lantern lecture to the passengers, so that I can say with conviction that the advantages of the London Market and the varied work undertaken by the Port of London Authority are thoroughly well known and appreciated both in Australia and in New Zealand.

I feel that I should close this brief contribution with a renewed expression of the recognition of the warm friendliness which I, as in a sense standing for London, have received far and wide throughout the great Commonwealth.



Upper :—MELBOURNE FROM EAST MELBOURNE. Lower :—VIEW FROM RED HILL, CANBERRA, CAPITAL OF THE COMMONWEALTH OF AUSTRALIA

SHIPPING COMPANIES TRADING FROM LONDON TO AUSTRALIA

Their Origin and Position To-day



AIR VIEW OF TILBURY PASSENGER LANDING STAGE WITH A P. & O. "STRATH" ALONGSIDE, AND TILBURY DOCKS: GRAVESEND WATERFRONT IN THE FOREGROUND.

THE AUSTRALIAN SHIPPING TRADE is reasonably regarded as one of London's own, for by far the greater part of it is based on the Thames and the interest that is always centred on the companies engaging in it makes it conspicuous. This interest is, perhaps, due to a mixture of Imperial feeling and an appreciation of the close connection of many of the present-day companies with some of the most romantic periods of shipping history. The Australian trade is always associated with sail, partly because of the Australians' great enthusiasm for anything to do with sailing ships and partly because the first-class sailing vessels survived longest on that service, on account of the steamers' difficulties with coal supplies.

As far as the Australian trade itself is concerned the senior company is the Aberdeen Line, which was started by George Thompson of Aberdeen in 1825, and which engaged in the Australian trade as far back as 1840.

It was the Gold Rush of the 'fifties which drew the clippers, but Thompson put some very fine ships on to the berth in the 'forties, although it was the Gold Rush which caused him to build some of the finest clipper ships in our history—*Patriarch*, *Aviemore* and above all the wonderful *Thermopylae*, among many others.

The Aberdeen Company is now only a shade of its former self, having been involved in the post-war grouping tendency, and is combined with the former Australian Govern-

ment steamers to form the Aberdeen-Commonwealth Line whose fleet is now principally comprised of the "Bay" ships, most of the "classicals" having gone to the Shaw Savill Line in the re-shuffle.

But the Aberdeen Line did not take to steam until a comparatively recent date and, if steamers only are to be considered, the P. & O. Steam Navigation Company is the senior on the route. They started a mail service in 1852 but in order to overcome the coal difficulty they ran it as a branch line from Singapore in connection with their Eastern steamers, while rival companies were vainly trying to combine the advantages of sail and steam in big auxiliaries going round the Cape of Good Hope, vessels which always failed both as steamers and sailing ships. But the directors were not satisfied with the Singapore route and accordingly gave active encouragement to machinery improvements that would lead to greater economy; thus they were soon enabled to run their branch line from Ceylon, a great saving in time, and, when the Suez Canal was cut, to establish a direct service right through.

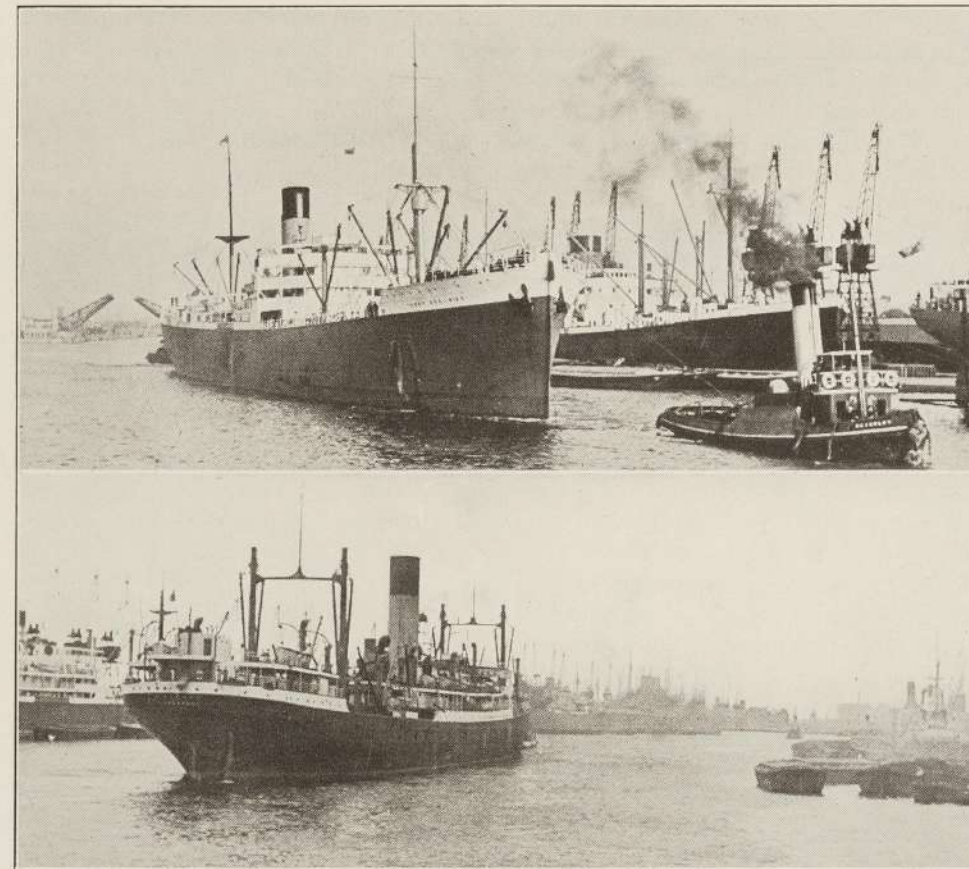
For many years past now the P. & O. ships

on the Australian service have been at least among the finest vessels running East of Suez, although for a long time they were handicapped by the limitations imposed by the size of the Suez Canal. Since the War they have been improved to the limits of the economical possibilities of the trade and the turbo-electric ships of the *Strathnaver* class, with the newer *Strathmore*, can challenge comparison with any ships of a similar type in the world.

The Orient Line, which is now closely associated with the P. & O. without losing its identity, has a connection with the old Orient clippers, but started in steam in 1877 with the backing of the Pacific Steam Navigation Company, which supplied most of its early steamers. The Company's ships first ran round the Cape, but they were soon transferred to the Suez route and made a great name for themselves in keen rivalry with their present allies. It was the Orient liners which made a huge difference to the Australian emigration business, and they have built some of the most famous steamers on the trade. Since the War they have standardized a 20,000-ton, 20-knot type with



THE NEW "ORION" OF THE ORIENT LINE AT SEA. SHE IS A SPLENDID SHIP OF MORE THAN 23,000 TONS



Upper.—THE COMMONWEALTH & DOMINION LINE "PORT ADELAIDE" COMING UP KING GEORGE V DOCK. IN THE DISTANCE IS SEEN THE ROAD BRIDGE ACROSS THE ENTRANCE LOCK IN THE ACT OF CLOSING. Lower.—A BLUE FUNNEL LINER IN KING GEORGE V DOCK

P.L.A. Photos

great success. The new 23,000-ton *Orion* marks another step forward.

The Aberdeen, P. & O., and Orient Lines are to-day the principal passenger companies on the Australian route, and naturally attract most public attention, but as far as actual business is concerned the cargo side is probably of more importance, and although these passenger companies carry large quantities in every one of their ships, there are many important concerns which are interested in the cargo side only and whose passenger business is mostly confined to the dozen which the Merchant Shipping Act permits to be accommodated without special certificate.

Of these, the Blue Funnel Line might be

described as half way, for although its ships are immense cargo carriers, they also have a very popular passenger side. Messrs. Alfred Holt & Company started some years before the War a passenger and cargo service by way of the Cape with 10,000-ton steamers, and it proved so successful that they built the fine 14,000-ton ships of the *Nestor* type which now run in conjunction with the remnants of the White Star Australian fleet and the Shaw Savill section of the old Aberdeen Line.

The British India Line is rather apart from the others, as its Australian interests are severely limited. The steamship's natural route, with its anxiety to pick up all the

business that it can, is along the west and south coast of Australia and up to Queensland on the east, but the Queensland Government found this a very serious handicap and, as long ago as 1880, made a contract with the British India Line to carry mails by the Torres Straits route, a business which they have been maintaining from London ever since that time.

The Clan Line entered the Australian trade at the beginning of the present century, and are particularly interested in the carriage of refrigerated cargo and wool. They are now building a 10,500-tons twin-screw, 16-knot steamer, to be fitted with refrigerated plant by Messrs. J. & E. Hall, Ltd., to carry frozen meat, chilled meat, butter, fruit, and eggs. She will also be fitted with poppet valves and Bauer-Wach Low Pressure Turbines.* The boilers will be fitted to burn coal and/or fuel oil, as desired, which is extremely interesting, as most modern vessels trading with Australia are Diesel-driven. This steamer, therefore, will be one of the most up-to-date cargo liners afloat, and has the advantage that she will almost entirely be burning coal mined in this country, South Africa, and Australia.

Messrs. Turnbull, Martin's Scottish Shire Line, which started in the mid-'seventies, is still well known and identified in the Australian business on account of their being among the pioneers of the meat trade and of the carriage of emigrants by steam, although latterly they have been associated with The Clan Line Steamers, Ltd., who now own them. A similar steamer to that described above is also being built for The Scottish Shire Line.

The Commonwealth & Dominion Line (more familiarly known as the "Port" boats), which is in association with the Cunard group, has a big Australian service and, indeed, it was interested in that route entirely when it was formed in 1913 by the amalgamation of four companies. These were Messrs. James P. Corry & Son, who started

with sailing ships in 1849; Messrs. T. B. Royden & Company, who were originally shipbuilders and started owning steamers in 1888; the Tyser Line, which transferred from sail to steam in 1889; and Messrs. William Milburn & Company who, after a long history with coasting colliers, began to own steamers in 1868, and eleven years later formed the Anglo-Australasian Steam Navigation Company.

The latest arrival in the trade is the Blue Star Line, which is connected with the Union Cold Storage Company and is primarily interested in refrigerated produce. Starting in the Eastern business shortly before the War, it became interested in the River Plate and Northern Pacific trades, and entered the Australian field when the improvement in refrigerating with the use of carbon dioxide permitted Australian meat to be transported chilled instead of frozen. They have placed on the run 16-knot ships of 10,000 tons apiece, and the keenest competition is expected.

There are, of course, other companies interested in the Australian trade either on a smaller scale, less regularly by the use of what are practically tramps, or under foreign flags. But the British companies, and especially those based on the Port of London, maintain their pre-eminent position in the Australian trade and by their watchful enterprise appear likely to do so for many years to come.

FRANK C. BOWEN

"There are stars of gold on the Wallaby Track,
And silver the moonbeams glisten;
The great Bush sings to us, out and back,
And we lie in her arms and listen;
Our dull hearts quicken their rhythmic beat
For a wild swan's southward flying,
And gather old memories sadly sweet
From a wind-swept pine-bough's sighing."
—From "The Wallaby Track":

Will H. Ogilvie



* This steamer will be the first vessel to be fitted with the Clan Engineering Patents, Ltd., flexible coupling between the exhaust turbines and the main engines.

FLOREAT IMPERII PORTUS!

The Port Authority's Facilities for Australian Trade



AIR VIEW OF THE ROYAL DOCKS WHICH RECEIVE MUCH AUSTRALIAN PRODUCE ON ARRIVAL IN THE PORT. ON THE LEFT IS THE ENTRANCE LOCK TO KING GEORGE V DOCK. A STEAMER MAY BE SEEN PASSING FROM THAT DOCK INTO THE ROYAL ALBERT DOCK THROUGH THE ADELAIDE CUTTING. AT THE FAR END OF ROYAL ALBERT DOCK LIES ROYAL VICTORIA DOCK AND THE TIDAL BASIN. TO THE LOWER RIGHT HAND ARE THE LOWER AND UPPER ENTRANCE LOCKS INTO ROYAL ALBERT DOCK BASIN

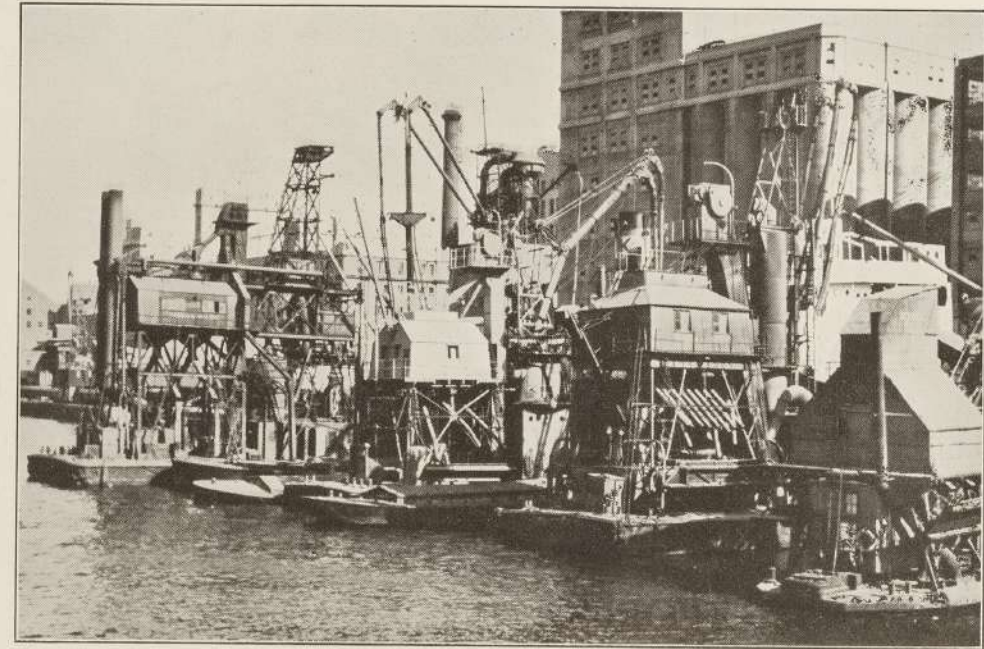
FOR MANY YEARS THE PORT OF London has been the centre of importation for a very large proportion of the produce shipped to the United Kingdom by Australia and the Port of London Authority as the custodians of the Port regard it as highly desirable that they should co-operate closely with those concerned with the production and shipment of this great volume of goods.

The people of London have always had a special interest in the development of Australian trade and it is generally conceded that the phenomenal increase in the volume and variety of those products prepared for export has been materially facilitated by the machinery and power of the London Market. The Port and Market of London are inextricably interwoven and it can be said that the Port of London Authority since its inception twenty-six years ago have done their part to ensure that adequate facilities should be available for the reception and distribution of the fruits of the Common-

wealth's labour. Producers will readily understand that to warrant the reputation that "if entrusted to London, his wares will look as immaculate in British shop windows as when they part from his hands" has necessitated a great deal of thought, care, and expenditure upon the provision of port facilities to keep pace with constantly changing conditions; problems arising from the increase in size and design of ships, methods of packing and stowage, scientific discoveries requiring the adaptation of old methods of handling and storage, are constantly being faced and solved. The Port Authority have, in fact, spent large sums of money on the extension and improvement of dock facilities and equipment and a very large proportion of this expenditure has been in connection with London's ever increasing Empire trade in general and Australian trade in particular. "London's Docks in the last quarter of a century," to quote from a recent treatise, "have been appointed to deal with the



TYPICAL QUAY TRANSIT SHED IN A PORT OF LONDON DOCK, SHOWING VARIED AUSTRALIAN PRODUCTS (WOOL, FRUIT, MEAT, ETC.) AWAITING DISTRIBUTION
P.L.A. Photo



P.L.A. FLOATING PNEUMATIC GRAIN ELEVATORS AT DISCHARGE WORK ALONGSIDE MILLS AT ROYAL VICTORIA DOCK. ON THE SOUTH SIDE OF THIS DOCK ARE SEVERAL LARGE FLOUR MILLS AND AT MILLWALL DOCK IS THE PORT AUTHORITY'S GRANARY AND ANOTHER LARGE FLOUR MILL
P.L.A. Photo

manifold commerce of the world, but a special care has been employed to smooth the entry of Empire traffic."

The Port of London includes about 70 miles of the course of the River Thames and the docks off its banks. The commercial heart of the Port, where the bulk of the annual traffic of 59,000,000 tons of shipping and the 39,000,000 tons of merchandise are handled, may be said to extend over the 26 miles between Gravesend and London Bridge, all the docks and most of the riverside wharves being in this section.

While Australian goods shipped find their way to many warehouses and depots all over the Port, the principal shipping lines trading between London and Australia berth in the Royal Docks system and the Tilbury Docks. The former, although only one of the five great docks systems, is equal in area, accommodation, and traffic to many creditably large ports. With a water area of 245 acres providing 12½ miles of deep-water quay berths some 500,000 tons of shipping can be dealt

with simultaneously and it is here that the bulk of Australian commodities are discharged and despatched by means of the most up-to-date facilities to the markets. Meat discharging berths, equipment for the handling of fruits, and grain-discharging plant are here in plenty—together with the experienced staff trained to deal with specific commodities.

Wool was once Britain's staple export; to-day it is one of the most important items in the list of imports. The finest warehouses in the port of London at the London and St. Katharine Docks are devoted to the storage of wool, and here large sums of money have been expended to provide acres of well-lighted show floors and the equipment necessary for quick efficient handling. As our earlier quoted source remarks, "The Authority have not counted expense in forwarding another great Empire trade—wool. Though selling in Australian and New Zealand has developed, London will always remain the "spot" market for Europe—and the market, it may be added, which commands

the best prices. The Yorkshire manufacturer can obtain his raw material a matter of hours after it has been bid for in London, and the Continental Mills take delivery inside a few days. The P.L.A. can store a million and show sixty thousand bales."

The Port Authority is a Public Trust created by Parliament. It consists of twenty-eight members, eighteen of whom are elected by the payers of Port dues and charges and ten appointed by Government and other administrative authorities. The Members, who are prominent men of wide business and technical experience, hold office for three years and they receive no remuneration for their services. The Port Authority is not subsidized by Government nor aided from

the rates of municipal authorities. The capital of the P.L.A. is represented in Port Stock which gives holders returns at general rates of interest and after the working expenses and the interest on the Port Stock have been paid, the surplus is used for the benefit of the users of the Port which in the nature of things must ultimately be shared by shipowners, merchants and overseas producers.

It is permissible to conclude this article by a quotation from "The Port of London 1909-1934":—"The P.L.A. are not merely at the Empire's service in the figurative, courteous sense; they are at the Empire's service with experts, mechanism, space, haulage, warehouses, promptitude, appliances, good docks."

LONDON'S EXPORT TRADE TO AUSTRALIA

Britain's Factory Products Gather for London Shipment

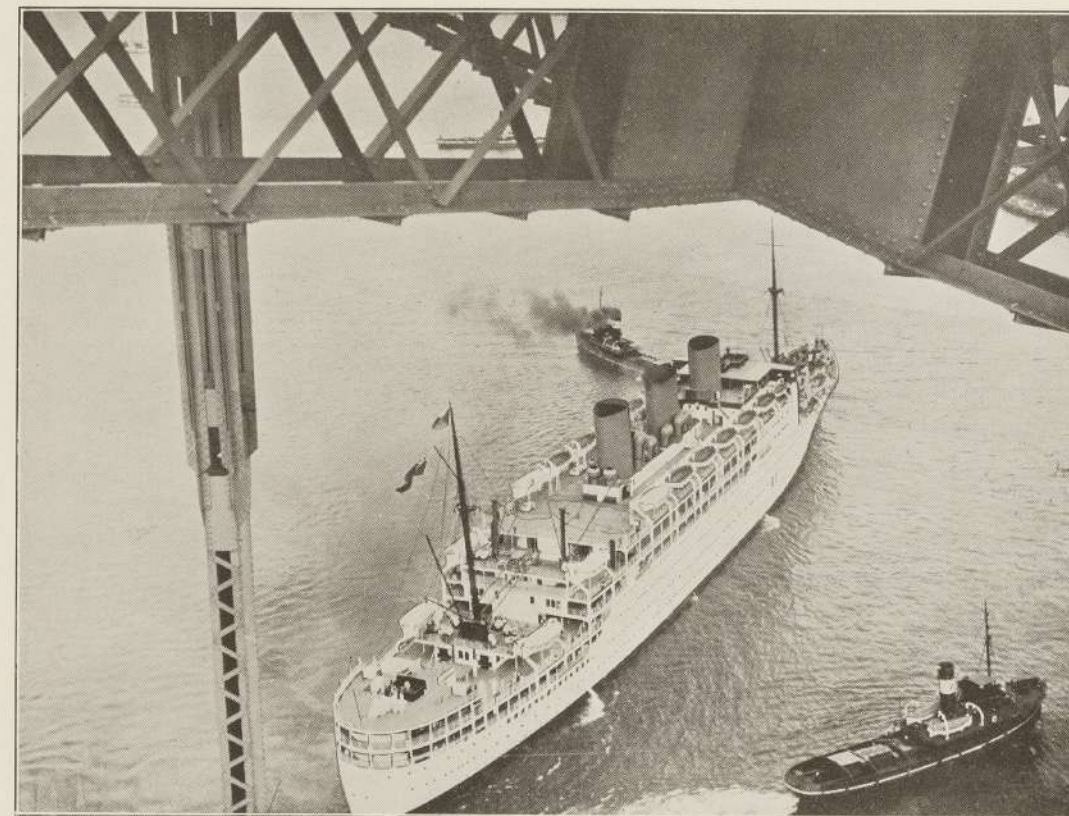
STATISTICS ARE NOTORIOUSLY AS cold and as uninviting as the waters of Woolwich Reach in grey November, but a few figures are essential as a background for any adequate picture of the flow—*via* the Port of London—of Great Britain's exports to the Commonwealth.

At the outset, it must be emphasized that *Australia is the United Kingdom's third best overseas customer*. In a normal year we sell goods to the value of roughly £27,000,000 to the Commonwealth, and each working day the year round sees manufactured products, which have been consigned to London by coasting steamer, canal, rail and road, being loaded at the Port of London direct for Fremantle, Adelaide, Melbourne, Sydney, Brisbane, and, in some cases, Tasmania's chief port, Hobart.

These goods come from Scotland's iron foundries, Lancashire's looms, Northampton's boot factories, Coventry's motor works, Birmingham's engineering shops and the expanding manufacturing districts round London itself, and they are handled in the extensive docks of the Port of London with

a despatch and efficiency only possible where the most up-to-date cramage, warehousing and kindred facilities are in use.

To gain some idea of the enormous value and striking variety of the shipments, let us glance at the detailed record of what the Mother Country has sold to Australia during the first eight months of this year. Under the heading of "Home Made Spirits" we find that exports amounted to 316,677 gallons, valued at £349,246. Plate and sheet glass shipments were valued at £71,153, while other items, with the values in parentheses, included asbestos manufactures (£38,815), steel plates and sheets (£34,805), galvanised iron sheets (£244,894), tinned plates (£609,259), wrought iron tubes, pipes and fittings (£187,761), various non-ferrous metals and manufactures thereof (£357,547), cutlery, hardware, etc. (£626,203), electrical goods and apparatus (£729,898), electric generators (£29,523), electric motors (£69,836), other electrical machinery (£71,201), oil-driven internal combustion engines (£203,839), grey unbleached cotton yarns (£117,998), bleached and dyed cotton yarns (£170,360), cotton



THE P. & O. TURBO-ELECTRIC LINER "STRATHAIRD" PASSING BELOW SYDNEY'S FAMOUS BRIDGE

piece goods (£2,175,440), woollen tissues (£101,009), worsted tissues (£53,159), carpets, rugs, etc. (£499,720), silk yarns and manufactures (£73,662), linen piece goods (£334,065), chemicals, drugs, dyes and colours (£1,061,319), paper, cardboard, etc. (£1,084,478), vehicles, including locomotives, motor cars, lorries and aircraft (£2,548,033), india rubber manufactures (£65,545), and books and other reading matter (£596,016).

These are, it will readily be agreed, impressive figures, and although it must be clearly understood that they refer to Great Britain's total exports to Australia through all ports of departure, there is no doubt that, in the majority of instances, a considerable proportion of the amounts specified represents shipments *via* the Port of London.

In fact, just as the Australian wool grower,

general agriculturist and primary producer realize that the Port of London—with its vast and ever growing adjacent consuming markets—is the natural destination for his wares, so should the Commonwealth public appreciate that many of their everyday necessities, their luxuries, their utility lines (in short, their imported supplies) reach them *via* London and its great network of docks. Quite definitely, though this fact is rarely sufficiently emphasized, the Port of London plays as significant a part in catering for Great Britain's huge export trade to Australia as it does in affording facilities for the reception and distribution of the imports from the Commonwealth.

Manufacturers know that all the great railway systems are in direct communication with the London docks and that these railways



HYDE PARK, SYDNEY, N.S.W., WITH MODERN SKY-SCRAPER BEYOND

have despatching and receiving stations adjacent to the Port. These railway services are supplemented by 145 miles of track on the quays and in the shunting yards of the Port of London Authority, while there are over 1,500 cranes to complete the process of loading, as well as a number of floating derricks for lifting awkward and unusually heavy weights such as machinery and iron castings. These derricks are available for use at any of the docks or in the river, as required, and the largest of them, the "London Mammoth," is capable of lifting up to 150 tons.

To indicate all the advantages enjoyed by the manufacturer regularly shipping to the Commonwealth *via* London would require far more space than is immediately available. The commercial links forged between Australia and London when the first bale of wool was received in the Thames 127 years

ago and when, in 1880, the first consignment of frozen meat arrived, have been strengthened each year, and to-day the export traffic to, and the import traffic from, the Commonwealth, forms no mean proportion of the £406,000,000 which represents the latest total annual trade figure of the Port of London.

And, finally, just as London and its immediate environs are providing an ever-growing market for Australian produce owing to the density of the population, so is an increasing proportion of the goods being shipped to Australia being actually manufactured in the South of England. There is, indeed, the closest business bond existing between London and the Commonwealth and the Port of London Authority is constantly doing everything in its power to develop that bond by providing facilities for the handling of outward, not less than for the inward cargoes.



GOLD WASHING, OLD STYLE

AUSTRALIA'S POSITION AS THE WORLD'S LARGEST WOOL GROWER

Development and Ramifications



SHEEP DROVING IN THE MURRAY VALLEY

AUSTRALIA WAS RICHLY ENDOWED by Nature in her special suitability to the pasturing of merino sheep. The growth of her wool industry has been one of the world's most remarkable developments. Its product is exported from the Commonwealth to thirty manufacturing countries and indirectly in the form of fabrics, rugs, and blankets reach probably every quarter of the earth where civilized man exists. Little imagination is needed to visualise its ramifications. A fleece growing on a sheep running in the great semi-tropical plain areas of the Commonwealth 900 miles and more from the coast eventually may be worn as apparel by an individual in need of warm clothing in some remote Arctic latitude. The stockowner producing the wool has little thought for its "journey's end" or for the widespread transport, marketing, and manufacturing

matters which come in the train of things. He is one unit in an industry which yearly produces more than one-half of the merino wool the world grows and annually shears the world's largest national clip, ranging from 2,900,000 to 3,200,000 bales.

Captain Macarthur, whose descendants are still engaged in pastoral pursuits at Camden Park and elsewhere, New South Wales, and the Rev. Samuel Marsden were chiefly responsible for the flocks upon which the nation's welfare largely depends. The first merino sheep, however, were brought from the Cape by Captain Waterhouse and Lieutenant Kent in 1797. Shortly following on that consignment George III permitted John Macarthur to purchase a number of Spanish blood rams and ewes in England and these were shipped to Sydney. In later years stock were imported by others interested

including the famous Australian Agricultural Company and the various consignments formed the nucleus of the merino flocks in existence to-day.

The development of the industry has been phenomenal. It has from time to time experienced serious setbacks owing to unfavourable seasonal conditions but over the course of the years has made steady progress as the following figures covering Australia's annual production of the staple industry show :—

	Bales
1830	8,003
1899-1900	1,196,500
1919-1920	2,045,912
1929-1930	2,867,000
1932-1933	3,206,610

The quantity produced has since 1932-33 decreased owing to dry seasons, production for 1933-34 totalling 3,043,106 bales and 1934-35, 3,146,000 bales with an estimated output of 2,930,000 bales for 1935-36. During 1933-34 the quantity grown was distributed among the various States with the proportion of merino as follows :—

	Bales	Merino
New South Wales	1,495,000	90%
Victoria	511,298	55%
Queensland	510,000	100%
South Australia	254,808	94%
West Australia	220,000	97%
Tasmania	52,000	20%

Of the total clip 82 per cent was merino. The balance chiefly comprises crossbred wool of medium to fine quality but includes come-back, bordering on merino in fineness, Corriedale, Polworth and the product of Romney Marsh and Border Leicester stock.

As the percentages shown indicate, the crossbred types are chiefly pastured in the easterly states of the southern half of the continent, where rainfall is heavier and more frequent, and lucerne, other fodder crops and fattening grasses can be readily grown. Production of lamb is the objective and demand and prices for that product have during the past 20 years justified landholders' activity in that respect. During the war years prices for crossbred wool were high and values for stock attractive. By 1919-1920, 34 per cent of Australia's wool was crossbred.



STUD MERINO RAMS ON A STATION IN CENTRAL NORTHERN NEW SOUTH WALES



AN ELECTRIC WOOL-PIILING MACHINE AT LONDON DOCKS RAISING AND PLACING A WOOL BALE IN POSITION

That percentage has since decreased, the latest figure being 18 per cent. Marked variation in that quantity is not probable but the proportion of merino is not likely to increase whilst a quick monetary return can be obtained for the lambs bred and fattened. A large export trade in lamb has developed. The merino flocks of Australia grow remarkably heavy weights of wool per head. A cut of 12 lb. to 14 lb. of medium to broad quality merino wool is commonly experienced from wethers pastured on the plains of New South Wales and South Australia. In the former State in 1876 the sheep gave an average yield of 4 lb. of greasy wool per head. By the aid of climatic conditions, pastures, and the influence of skilful breeding that average was increased to (1896) 6.25 lb., (1906) 7.84 lb., (1913) 8 lb., (1925) 8.2 lb., and since then to 8.9 lb. Seasonal circumstances naturally have effect on the quantity grown and in some

years the figures have consequently regressed. It is questionable how far the development in the amount of wool grown on the individual sheep can proceed. The high-class animal of to-day carries a densely-packed fleece growing on practically every inch of a frame which is giant-like compared with the stock of half a century ago. From the mutton-selling standpoint it is inadvisable for the carcass to be too large. Partly for that reason a judicious limit must be aimed at. The weight of wool grown per sheep in early years of the industry was only about half of that grown in recent years but even during the last quarter of a century it has increased appreciably. In 1913-14, by way of example, 85,096,859 sheep produced 1,966,576 bales in the Commonwealth, but in 1932-33, 114,341,000 sheep grew 3,206,610 bales. Actually 34 per cent more sheep grew 63 per cent more wool. Those figures indicate the degree to which the class of sheep



THIS AIR PHOTOGRAPH INCLUDES THE WAREHOUSES AND SHOW FLOORS OF LONDON DOCKS WHERE AUSTRALIAN WOOL IS IN EVIDENCE. KEY TO THE FIGURES IS:—1.—PORT OF LONDON AUTHORITY'S HEAD OFFICE. 2.—ST. KATHARINE DOCK. 3.—THE LONDON DOCKS. 4.—TOWER PIER. 5.—RECENTLY-ADDED SHED AT LONDON DOCKS. 6.—CONVEYOR FOR DEALING WITH WOOL DELIVERED BY BARGE. 7.—FENCHURCH STREET RAILWAY STATION. 8.—THE MINT. 9.—GENERAL REGISTER AND RECORD OFFICE OF SHIPPING AND SEAMEN. 10.—WAR MEMORIAL TO THE MERCANTILE MARINE (TOWER HILL)

General Photograph Agency

pastured has advanced. The improvement in that standard is all the more commendable owing to the fact that closer settlement has proceeded apace during the past 25 years. The smaller landholder, though not as financially strong as the large station owner, has endeavoured and succeeded in improving his stock and shears a considerably weightier fleece per sheep than was shorn in past years.

The war-time period when the British Government purchased the Australian clip

at an average price of 15½d. per lb., plus a share in the profits made on the resale of wool not used for military purposes, undoubtedly assisted in developing the Australian sheep industry, giving pastoralists a certain and good income from which to build up their financial position. Some post-war years also provided high returns. Sharp fluctuations, however, occurred. Very favourable years encouraged many investors

(Concluded on page 38)

RECENT DEVELOPMENTS IN THE AUSTRALIAN MEAT EXPORT TRADE



HEREFORD CATTLE ON THE DARLING DOWNS

APART FROM THE COMPLEX question of British import restrictions or quotas, the outstanding features of Australia's meat export trade during recent years have been the increase in lamb shipments, developments in connection with the transport of chilled beef over long distances, and greater activity of British and foreign-owned meat firms in the trade.

Until a few years ago the principal aim and end of Australian flock owners was wool-growing. It is true that there were exceptions, specially in sheep districts where climatic and pasture conditions particularly favoured meat production, but taking the country as a whole, wool was king. Lamb shipments then ranged from one to one

and threequarter million carcasses per season (1st July to 30th June).

When wool prices slumped at the close of the second decade of the century, however, graziers began to realise the necessity for having a second string. Many of those located within the temperate agricultural zone, where the autumn and winter rainfall is fairly reliable, turned to fat lamb raising. A strong demand sprang up for rams of the leading mutton breeds to put on the prevailing merino and comeback ewes, with the resultant increase in the export type of lambs. The following tabulation, showing clearances to Great Britain in the last seven seasons, illustrates this development:—1928-29—1,373,000 carcasses : 1929-30—1,965,000

carcases : 1930-31 — 2,055,000 carcasses :
1931-32 — 3,204,000 carcasses : 1932-33 —
3,603,000 carcasses : 1933-34 — 4,202,000 car-
cases : 1934-35 — 4,440,000 carcasses.

During the same seven years frozen mutton clearances to Great Britain have ranged from 626,000 carcasses to 1,300,000 carcasses, the maximum being in 1934-35. It may be mentioned in this connection that the mutton output, far more than that of lamb, is governed by seasonal conditions. Much of pastoral Australia is subject to periodic fluctuations in rainfall. The threat of a dry year almost invariably leads to heavy marketings of sheep, when a material proportion of those suitable for the overseas trade are purchased by exporters. As droughts develop the supply of exportable carcasses decreases, and when good seasons return the demand for the available sheep, for restocking purposes, is usually sufficiently strong to force values above export parity. Broadly speaking, that explains how it is that mutton shipments in one particular year may exceed 1,800,000 carcasses and in the next following year be only about 120,000 carcasses. This actually occurred in the 1922-23 and 1923-24 seasons.



A QUAY SCENE AT KING GEORGE V DOCK, PART OF THE ROYAL DOCKS SYSTEM AT WHICH ABOUT 70 PER CENT OF THE MEAT SUPPLIES IMPORTED INTO GREAT BRITAIN IS LANDED

P.L.A. Photo

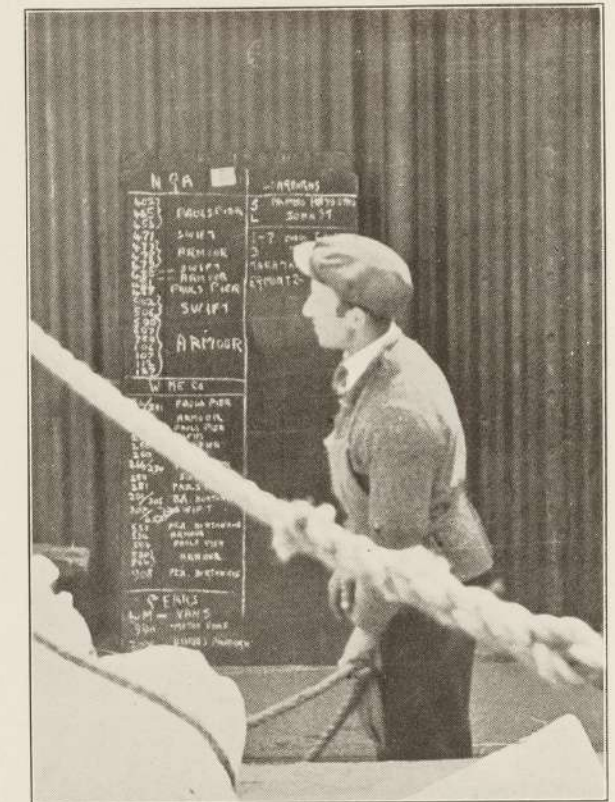
When, some two years ago, research made possible the transport of chilled beef from Australia to Great Britain, beef was the Cinderella of the meat export trade. The closing of Continental ports to meat imports was forcing increasing quantities of hard frozen beef on the British market, and at a time when the demand was on the down grade. Prices were very low and stocks difficult to clear. In the circumstances, it was hardly surprising that the announcement that a 10 per cent. impregnation of carbon-dioxide gas into the atmosphere of ships' refrigeration chambers, plus the adoption of a special technique in meat works' operations and handling, would go a long way towards the prevention of mould on stored soft beef, was hailed with delight. Trial shipments soon demonstrated the practicability of the process, and regular shipments are now being made on a commercial scale.

At present somewhere about 15 per cent of the total export of beef is shipped chilled, and it is reasonable to assume that the proportion of chilled to frozen will become greater as the quality of cattle improves. Shipowners are providing ample facilities for its transport, and most of the meat works

in cattle districts have erected chilling chambers for the handling of larger supplies.

Soft beef being worth more than frozen in Great Britain, exporters have been able to advance the buying price of prime cattle. It must be acknowledged, however, that the rate is still unprofitably low from the grower's point of view, and no great increase in the total output of beef is looked for until selling market conditions improve. Exports to British ports since 1930 have ranged from 650,000 to over 1,000,000 quarters and crops per annum, the heaviest shipments being in 1934-35.

The third outstanding feature is the greater activity of British and foreign companies in the Australian trade. This development can be attributed to the operations of the Ottawa pact, which, in effect, has reduced importations into Great Britain of meat products from foreign sources, and increased those from the Dominions. Weddel & Company, Ltd. (part of the Vestey group), made the first move by absorbing the organisations associated with the purely Australian firm of W. Angliss & Company, Pty., Ltd. That gave the British Company control over large meat export plants in Victoria, New South Wales, and Queensland, and opened the way for the introduction of the Blue Star Line of meat and produce carriers into the Australian trade. Thomas Borthwick & Sons, Ltd., have purchased the Bowen meat works to enable that firm to extend its already very wide operations to North Queensland. Swift & Company (of America) have acquired the Gladstone meat works in Central Queensland, a point from which some of the best



DISCHARGING MEAT IN LONDON: ON THE QUAY IS THE LOTTING BOARD SHOWING DISTRIBUTION OF CONSIGNMENTS

P.L.A. Photo

beef exported from Australia is shipped. More recently Wilson Meats, Ltd., the London representatives of the Chicago packing concern, Wilson & Company, have taken over a Brisbane firm of meat exporters, and so obtained a footing in the trade in Queensland.

AUSTRALIA SUPPLEMENT "THE P.L.A. MONTHLY"

The link between the Port of London and Australia is of ancient fashioning, yet it has strengthened with time. Within London's gates and spreading from the City outwards to green fields within the Home Counties are millions of potential consumers and users of the products of Australian stations, farms, and orchards. We prefer Empire produce brought in British ships. Our "Industrial South" buys generously. Britain's factories ship to you via London all sorts of manufactured goods, necessities and luxuries alike. Our Port receives and stores and distributes what you send; equally, it focusses to its docks what you need from us.

HIDES AND SKINS

BOTH IN ITS EARLY STAGES of settlement and in its more developed periods, the Commonwealth has been a large supplier of the world's requirements in skins and hides. The number of kangaroos, wallabies, opossum, native bears and other fauna available has diminished with the onward march of settlement, but cattle and sheep have replaced them. Unfortunately also, the rabbit and fox, introduced from abroad, flourished and multiplied in Australia's open spaces. The trapping, poisoning and shooting of them has given much employment in Australia and provided appreciable revenue, but that income, at least in the case of the rabbit, has been derived at the expense of the stock industry, owing to the reduced sheep and cattle carrying capacity of rabbit-infested country.

The latest available figures show that in a single year, Australia exported 8,776,974 lb. of rabbit skins, or approximately 61,500,000 skins, chiefly to the United States and the British Isles. In addition, bulky quantities of skins were used by local furriers and hat manufacturers, and large numbers were exported on frozen rabbit carcasses. During the same twelve months 663,177 kangaroo skins, 260,000 fox skins and 177,478 wallaby skins were shipped overseas.

With sheep flocks totalling 109,000,000 head and cattle 13,600,000, vast quantities of stock are slaughtered each year in Australia. Most recent figures show that 19,530,510 sheep and lambs and 2,056,350 cattle were slaughtered during the twelve months. During a similar period 10,500,000 sheepskins were exported and over 500,000 hides, the former being shipped chiefly to France and Great Britain and the latter to the United Kingdom and Italy. Local fellmongers and tanners, in addition, treat heavy quantities of sheepskins. In a single year 1,387,202 hides and 1,160,245 calfskins were tanned and 8,716,600 sheepskins fellmongered in the Commonwealth. The export and local trade in Australia with hides and various types of skins is a huge business, and is one of the largest activities of its type in the world.

AUSTRALIAN WINE IN LONDON BONDS

IT IS ONLY NECESSARY TO GO BACK a few years in the history of London's Bonds to find that wines from the Commonwealth of Australia were relatively unknown.

To a small extent the Australian export may be said to date back some three-quarters of a century, but in sixty-five years, sales of wine in the United Kingdom reached only six hundred thousand gallons per year. The past decade has seen very considerable expansion, for in ten years subsequent to 1924, sales have reached the very substantial total of 3,165,000 gallons per annum. Over that same period the aggregate of importations into Bond has been 25,133,836 gallons, while clearances amounted to 22,733,509 gallons, with some two and a half million gallons remaining in bond.

Trading difficulties in 1925, when preferential tariffs began to operate, necessitated the Australian wines competing for the mass of the trade in the cheaper sweet or "Port type" wines. At the same time, although the more costly wines of Southern Europe were much more difficult to assail, the possibility of slowly capturing a proportion of this trade has not been overlooked.

Experience in shipping to London has steadily improved the condition of shipments arriving, and certain types have securely established themselves with both the public and the distributing merchants.

Although the sweet or fortified wines predominate, the beverage wines have not been neglected, and there is a steady development in the finer table wine trade.

The facilities offered by the Bonding Companies in London have aimed at meeting the increase in shipments from Dominion sources, and now, having overcome initial difficulties, it remains only to consolidate the position and look for a steady increase in consumption of Empire-grown wines.

Australia possesses every type of climate found in Europe. Wine districts are scattered widely in regions having favourable conditions for production.

AUSTRALIA'S GRAIN TRADE

Large Export Trade: The Picturesque "Grain Fleet" of Sail



WHEAT READY FOR HAULING TO RAIL IN NEW SOUTH WALES

THE AUSTRALIAN GRAIN TRADE is responsible for bringing each year to this country a fleet of the picturesque old survivors of sail, some of them discharging in Millwall and Royal Victoria Docks. About a score of sailers arrive to load at such ports as Wallaroo, Port Victoria, or Port Pirie on Spencer's Gulf, taking on board anything from 3,000 to 5,000 tons of wheat in bags for "Falmouth for orders." They are three-masted or four-masted barques and none of them is young.

These old-timers, now largely in Finnish ownership, gladden the eyes of the ship-lover, but their days seemed numbered, for season by season one familiar name, or more, disappears from the list. The major portion of Australia's grain, however, is shipped in tramp steamers, and some of the finest cargo-

carrying vessels regularly work in this trade, with cargoes up to 9,000 tons of wheat, mostly in bulk and mostly via the Cape.

The wheat crop, which is harvested in November and December, varies in volume from 26,000,000 quarters (in 1930 and 1932), to about 17,000,000 quarters last year. This year's crop, owing to droughty conditions throughout the growing period, is expected to be even smaller than last year's, the latest estimates being given at about 15,000,000 quarters.

Drought is the Australian farmer's worst enemy; yet, given good seasonable rains, there is little worry as to the condition or quality of Australia's wheat. Exports vary with the crop, as the home consumption remains fairly constant at around 6,000,000 quarters. In 1931 Australia exported some

16,000,000 quarters of wheat and about half a million tons of flour; in 1934, owing to the small crop, the exports dropped to rather under 8,000,000 quarters, plus rather over half a million tons of flour. Thus, in an average year, when Australia's export would be about 14,000,000 quarters, she would stand third on the list of exporters, Canada ranking first with twenty-odd million quarters and the Argentine second, with, say, sixteen to eighteen million. In flour exports, Australia has headed the list since 1931 with an average of $4\frac{1}{2}$ million sacks (over half a million tons), Canada coming second with about 1,000,000 sacks less.

Of Australia's wheat exports in 1933 and 1934, over half came to Great Britain and Northern Ireland, while of the flour exported less than a quarter reached this market. China and the East are the best customers for Australia's flour.

Within recent years the demand for wheat and flour for China and Japan has grown enormously, and Australia is particularly

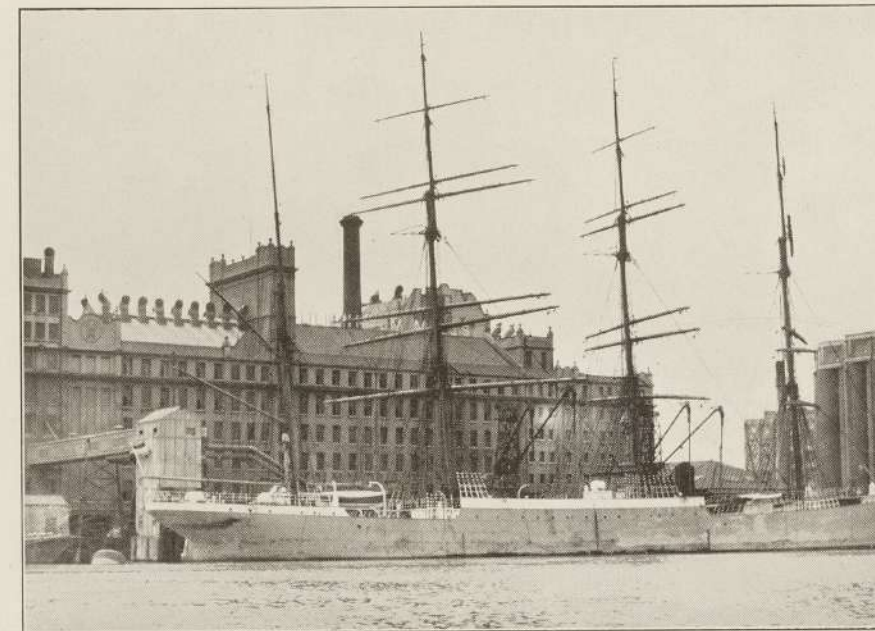
fortunate in being able, on account of her geographical position, to compete favourably for these markets. This may in part be due to unsatisfactory rice crops, but the view is largely held that it is due to slowly but surely changing conditions of living. An extra slice of bread a week for each individual among China's teeming millions means a large increase in the demand for wheat, so that in China Australia has an almost unlimited potential market. India's demand is fluctuating, varying with the amount of her own grain crops.

Wheat is grown on about 15,000,000 acres in Australia. In 1933 New South Wales planted $4\frac{1}{2}$ million acres, South Australia 3.8 million, Western Australia 3.2 million, Victoria 3 million, while Queensland accounted for the small balance. So far as quality is concerned, Western Australia has been most fortunate during the last two seasons in that she has suffered less from drought than the other States.

Taken as a whole, Australia provides



IN THE WIMMERA WHEAT BELT, VICTORIA



THE FOUR-MASTED BARQUE "MAGDALENE VINNEN" WITH AUSTRALIAN WHEAT CARGO IN ROYAL VICTORIA DOCK, LONDON

British millers with some of the finest white wheat grown. Shipments arrive this side almost without exception in good condition. Wheat is shipped sometimes in bags, but now more and more frequently in bulk as the elevator system is growing. At Sydney, N.S.W., the largest steamers can be loaded *ex silo* in two or three days, while in Western Australia the facilities for bulk handling are improving every season.

There is no compulsory Grain Pool in Australia, but farmers are free to join voluntary pools or to sell their grain to one of the big, private exporting houses.

Flour is nearly all shipped to the United

Kingdom in parcels of a hundred tons or thereabouts by liners, as a contract for 500 tons of flour would be considered here quite a big one; whereas China and the East sometimes buy part cargoes of from 3,000 to 4,000 tons at a time. In 1932 the steamer *Siam* carried a cargo of over 9,000 tons of flour from Sydney to Vladivostok, the largest flour cargo ever shipped from Australia. It was loaded at the rate of more than 2,500 tons a day.

Australia exports also small quantities of brewing barley to this country and to the Continent.

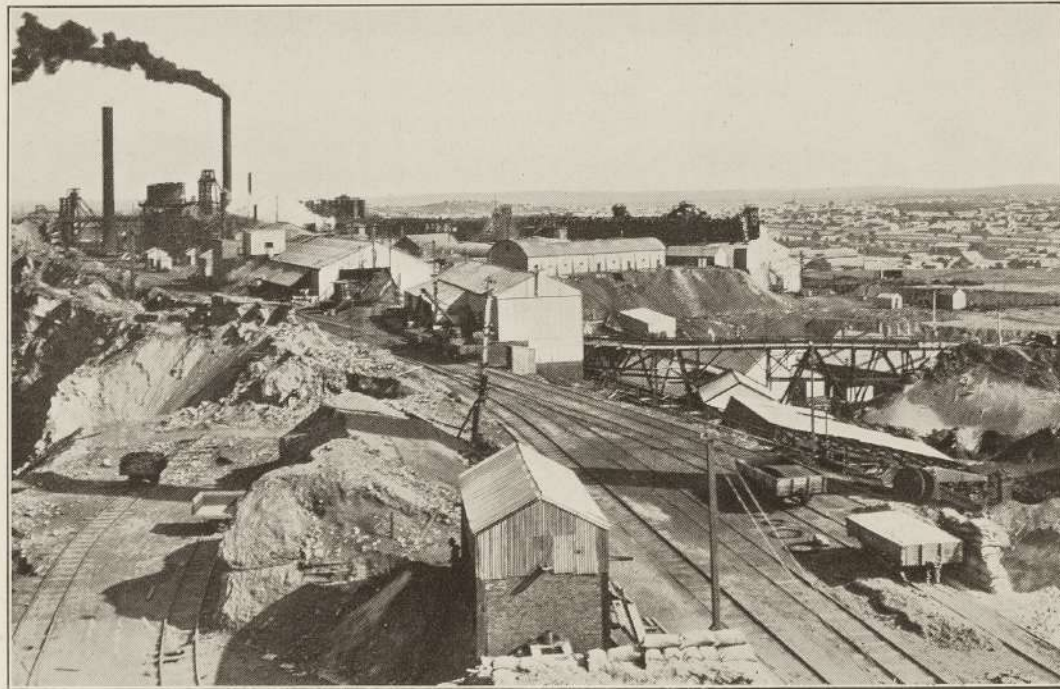
DAVID C. DRYNAN

ACKNOWLEDGMENTS

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BASE METALS AND GOLD

The Broken Hill Field and "The Golden Mile"



THE PROPRIETARY MINE, BROKEN HILL, NEW SOUTH WALES

AUSTRALIA IS WELL ENDOWED with the essential base metals of commerce—lead, zinc, copper and tin—and production greatly exceeds the home demand, giving rise to a substantial and regular export trade. Latest statistics show that in 1934, 181,620 tons of lead, 26,000 tons of lead concentrates, 31,914 tons of zinc, 96,200 tons of zinc concentrates, 1,859 tons of copper and 1,174 tons of tin were exported, principally to the United Kingdom and the East. The indications are that with a maintenance of reasonable metal prices this export trade will expand, for there are many undeveloped sources of supply in various parts of the Commonwealth.

Lead has long been Australia's principal base metal. The Broken Hill field is the most important producer, and the silver-lead

ores from that district are treated at the large and efficient smelters located at Port Pirie, South Australia, where the output amounts to 160,000 to 180,000 tons of refined lead and 8,000,000 ozs. of silver per annum.

The Mount Isa field produces about 70,000 tons of lead bullion per annum. This is shipped to England for refining.

Other potentially important sources of lead in Australia are the Read-Rosebery mines in Tasmania and the Captain's Flat Mine in New South Wales. All of these are at present unworked.

Zinc occurs in association with silver and lead in the ores of the principal Australian mines. At Broken Hill the zinc mineral is concentrated into a product containing 52 per cent metal, and the concentrate is

shipped in part to the works of the Electrolytic Zinc Company of Australasia, Ltd., at Risdon, Tasmania, and in part to the Imperial Smelting Corporation, Ltd., in England. The output of the Electrolytic Zinc Company is approximately 70,000 tons per annum of electrolytic zinc. This zinc, because of its freedom from impurities, finds a ready market, part being sold in Australia and the remainder overseas. The Mount Isa Company is about to commence the recovery of zinc concentrate, which is to be shipped overseas for realisation.

The low price of copper has made the working of many copper mines uneconomical, and the famous Mount Lyell field is now the only large Australian property in production. Its annual output is 13,000 tons of refined copper, the major portion of which is consumed in Australia.

Tin production in Australia has been on a meagre scale for many years, and the output of 2,500 tons annually is not much in excess of home requirements. No important new

sources of supply have been developed in recent years, although the output has been slowly increasing.

The future of the base metal industry in Australia is bright, as the mines have large reserves of ore, and are well-equipped and efficiently operated, while the treatment plants are also highly efficient.

To-day, world conditions have focussed all eyes on gold. In the past eighty years Australia has produced more than 700 million pounds' worth of gold.

Victoria set the ball rolling; New South Wales never fulfilled early expectations; Queensland came into the picture seventy years back; but it is Western Australia which took up the position of the Cinderella of the industry. Her peak period was the opening decade of this century and Cinderella has become a woman of queenly stature. About three-quarters of Australia's gold supply comes from Western Australia and her Kalgoorlie and "The Golden Mile" are an abiding evidence.



THE LAKE VIEW AND STAR GOLD MINE, BOULDER, WESTERN AUSTRALIA

AUSTRALIA'S EXPANDING SUGAR SUPPLIES



AMONG THE SUGAR CANES OF QUEENSLAND

DURING THE PAST DECADE the sugar industry in Australia has steadily expanded from the stage where it was barely able to supply the requirements of the Commonwealth until it has now reached a production with a surplus of some 250,000 tons for export each season.

This increase is due to a variety of causes which may be summarized as follows:—

1. A secured home market with a very high consumption of sugar per head of population;
2. A high standard of increasing efficiency throughout the industry, together with the larger volume of production reducing the cost of manufacture.
3. The preferential market accorded in Great Britain and Canada.

The sugar producers, realizing the danger of an unregulated output, have taken steps

to keep it within the present bounds. There is a limit to the economic period of the year during which sugar cane can be profitably crushed, and the majority of the mills have now reached that limit.

The average value of the surplus sugar is over £2,000,000 annually, of which practically the whole is distributed in wages. A large proportion of this sum eventually finds its way to other States of the Commonwealth than those engaged in sugar production, so that the advantages of the sugar export trade are not confined exclusively to the two sugar States (Queensland and New South Wales).

Over 90 per cent of the Australian cane sugar is produced in Queensland, the balance being manufactured in the northern districts of New South Wales.

The effect of the low prices prevailing on the world's sugar markets during the past

few years has been somewhat mitigated—as far as the return to the Australian producer is concerned—by the Tariff Preference and the exchange premium on remittances from London to Australia. Those items together constitute more than 50 per cent of the nett return received by the producer.

The export of sugar usually commences in July, and continues until the end of the year, by which time most of the mills have completed their work for the season, and the bulk of the surplus sugar has been shipped.

The principal shipments are made from the ports of Cairns, Townsville, Bowen and Mackay, which are the main outlets for the sugar districts of North Queensland. The surplus sugar from Southern Queensland is shipped from Gladstone and Brisbane. The period of export shipments coincides with that during which the sugar for local consumption is shipped to the various

Australian refineries. In the case of the latter shipments, in addition to those from the main ports, sugar is conveyed from a number of subsidiary ports adjacent to the sugar areas, which are not able to accommodate oversea steamers. The number of ports and outports consequently available for despatch of the total output from the sugar producing centres is therefore conducive to rapid despatch of the cargoes, and in most cases the ports are clear shortly after the termination of the manufacturing season.

The sugar is exported in the form of raw sugar, and is consigned to refineries in Great Britain and Canada, the greater percentage being absorbed by the former country.

The quantities exported during the past five years have varied between 190,000 and 311,000 tons; the latter figure is for 1934.

Of the foregoing, an average of approximately 75 per cent is shipped to London.

AUSTRALIA'S GREEN, DRIED AND CANNED FRUITS

DURING THE LAST FIVE YEARS the figures showing imports of all forms of Australian fruit into this country, notably into the Port of London, have increased to a remarkable extent. In a recent year, mainland States sent to London 1,320,000 packages of apples and 416,000 packages of pears, Victoria leading the way with 825,000 packages of the former fruit, but Tasmania has pride of place in the apple-raising and export business, her figures for the period in question being 1,693,000 packages.

The cargoes of Australian apples and pears arrive principally at the Royal Docks, with a proportion at Tilbury Docks, there being adequate handling and warehousing facilities at both. Much of the fruit is sold on sample at the London Fruit Exchange, and Covent Garden and Spitalfields Markets receive large consignments. A detailed description of the business of "Discharging a Fruit Steamer at Tilbury," which appeared in an earlier number of this magazine, gave a clear picture of what happens from the moment the

hatches are lifted on board an incoming ship to the time when the cases of fruit are delivered by road or rail van to their destination.

While steps are continually under consideration for improving the export trade in Australian fruits, the industry owes much to the system of organization carried out by the Apple and Pear Export Council and its subsidiary State Associations. To their credit stand the elimination of the third or "plain" grade for apples—the change in the use of the quality terms to "Extra Fancy" and "Fancy" in accordance with world standards—the removal of varieties not wanted on the British market—the limiting of the quantities for export in accordance with the needs of the markets abroad—and improvements in the packing, grading, labelling, loading, and stowage of the fruit.

Amongst the important commodities reaching the Port of London from Australia are those classed as dried fruits, comprising sultanas, currants, and Lexia raisins. Since

the War shipments have very materially increased in volume, and the figures quoted later indicate quite a surprising increase in recent years.

After the Armistice, Australia established many of her returned soldiers and also ex-Service men from the Mother Country as settlers on the land engaged in various

amount the United Kingdom received 55,142 tons, shipments amounting to nearly 39,000 tons being landed in the Port of London.

The much increased consumption of canned foodstuffs in Great Britain is common knowledge, and of these, canned fruits from Australia represent a considerable proportion. In 1934, importations of canned fruits were



CURRENT PICKING AT MILDURA, VICTORIA. IN THIS DISTRICT IS THE CENTRE OF THE DRIED FRUIT INDUSTRY

agricultural pursuits, a considerable number of men electing to become growers for dried fruits as this industry seemed to offer opportunity for work under decent conditions in a good climate, with adequate rewards to the industrious. The majority of these settlers were established in the fertile valley of the Murray River, in Victoria, South Australia, and New South Wales. Some settled in Western Australia.

In 1925 the harvest totalled 37,200 tons, of which 11,700 were sultanas and 25,500 tons raisins. Of these crop fruits shipments to United Kingdom ports amounted to 22,500 tons, the Port of London receiving 18,000 tons of this total. With the continued growth in volume of dried fruit shipments, London has retained her proportion of United Kingdom shipments—namely, about 70 per cent.

The year 1933 saw a record crop of 78,000 tons of sultanas, currants and raisins: of this

valued at £5,000,000; the total of 173,600 tons rose from a figure of 150,000 tons the previous year.

Of imported canned fruits—mainly peaches, apricots, pears, fruit salads, and pineapples—something like one-half arrived from Empire lands, Australia leading the way, with South Africa, Canada, and Malaya contributing their shares.

The quality of fruit grown in Australia has always been good, but the problem of grading and packing into tins in form suitable to the trade and the housewife has been gradually mastered by Australian canners; it must be remembered that the business is a post-War industry.

Victoria's prolific Goulburn Valley, the orchards of New South Wales, and Queensland districts all contribute to help the 65 per cent of Australian canned fruit reaching London.

AUSTRALIAN TIMBER SURVEY



LOG HAULING IN A FOREST OF WESTERN AUSTRALIA

THE TIMBER INDUSTRY IS OF unusual importance to the Commonwealth. Recent figures show the value of its forest production at some £7,700,000 per annum with a reserved forest area of approximately 20,000,000 acres.

The forests are essentially confined to hardwoods, with over 90 per cent of the trees belonging to the genus eucalyptus and its commercial varieties. Along the coastal strip of Queensland and northern New South Wales hoop pine and the "furniture" timbers of blackbean, walnut and maple, and silk wood are the principal woods found. Each State produces its own particular species; jarrah and karri derive from Western Australia, the softer hardwoods, such as Victorian mountain ash, the Tasmanian oak and the New South Wales spotted gum, are indigenous to the eastern areas.

There has been an extensive use of Australian woods in this country. The harder

woods, more especially jarrah and karri, find their place in certain building operations and wharves construction. Their utilisation as rail sleepers and telegraph poles has proved successful in the Commonwealth and in New Zealand and from this has developed a considerable trade with China and the East.

The characteristics of Australian cabinet woods go beyond strength and durability, with each variety possessing a beauty not often found in association with either of these qualities.

Australian woods generally have gained considerable appreciation and are being used increasingly with pleasing effect in London, from Lloyds to Broadcasting House.

The chief varieties most in demand on account of their beauty of figure and colour are the Australian blackwood, a reddish brown streaked wood, the Queensland walnut used principally for panelling and better class furniture, and the blackbean, technically

described as "mellow," easy to work and taking a fine surface. Jarrah needs no description as a structural timber, but its colour and grain are ensuring for it a wider use. Though heavy, it is frequently used in furniture and possesses the unusual quality of being fire-resistant. The needs served by Victorian and Tasmanian oaks are legion. Silky oak is sufficiently well known to need but little description. It is a Queensland timber used for decorative purposes and as a cabinet wood. It is light to work and may be carved, veneered, polished and stained.

It is generally held that when the forest area in any country falls below 0.86 acres per

head of population, that country will be obliged to import timber. Australia possesses 3.19 acres of forest per head of population and constant silvicultural and other forest research is being carried on by the various States and Federal forestry bureaux. Special attention is being paid to seasoning and grading and a high technique and efficiency is being evolved in this respect.

An increasing demand for Australian wood by the designer and the contractor, and the types of construction with which they are being associated is in itself a tribute and a sufficient admission as to the excellence of their qualities.

AUSTRALIA'S POSITION AS WORLD'S LARGEST WOOL GROWER

(Concluded from page 24)

to pay excessive prices for land and stock which subsequently proved unpayable. Depression years accentuated that position, but with the assistance of banking and pastoral financial institutions the majority of pastoralists have managed to maintain the efficient working of their properties and with gradually improving prices, even though on a moderate basis, it is confidently expected that woolgrowers as a body will eventually re-establish their monetary situation. They have experienced severe times but economies have been effected and the industry to-day is generally better situated financially than during the years 1931 and 1932 when the results of the depression were evident to the greatest extent.

The establishments engaged in wool selling in Australia are actually financiers as well as salesmen. They sell stock, skins, etc., in addition to wool. Being in close contact with the landholder they are in a position to advance money to him not only on his wool, but also on his property and stock. During the 1934-35 season the quantity of wool sold

in the various centres of the States of the Commonwealth was as follows:—

	Bales
New South Wales	1,208,584
Victoria	706,475
Queensland	470,893
South Australia	261,055
West Australia	219,048
Tasmania	41,915
Total	2,907,970

A portion of the New South Wales wool is sold in Victoria as markets in that State are more adjacent to the producing properties than Sydney.

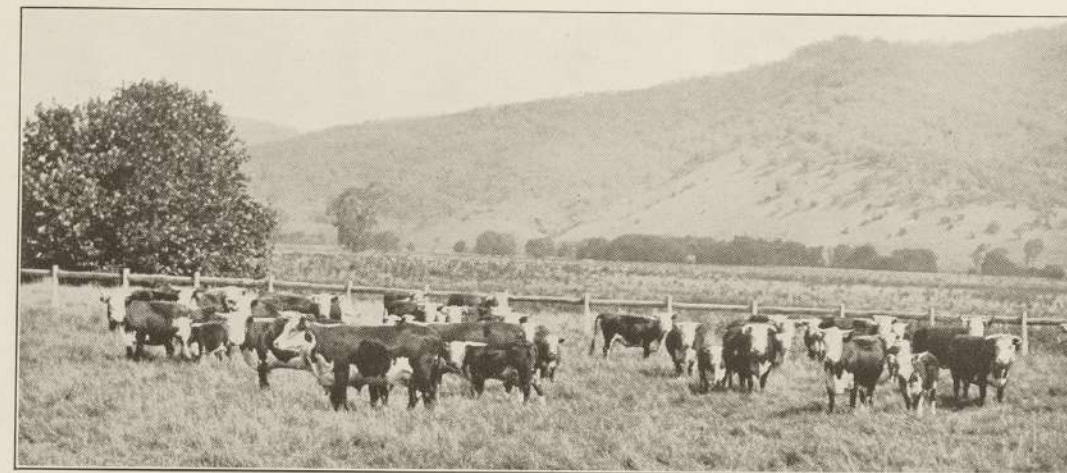
Figures giving exports of wool from the Commonwealth during the eleven months ended May 31st, 1935, reveal the predominance of the United Kingdom and Northern Europe.

	Bales
United Kingdom	1,093,822
Japan	558,381
Belgium	423,797
France	260,900
Germany	94,959
Italy	58,346
Netherlands	53,682
Poland	41,717

ANNUAL INDEX

The Annual Index for the Tenth Volume of "The P.L.A. Monthly" (November, 1934, to October, 1935) is completed. A copy will be forwarded on application to Newton & Company (Publishers) Ltd., 110/111, Strand, London, W.C.2.

AUSTRALIA'S DAIRYING INDUSTRY



STUD COWS AND CALVES IN THE UPPER MURRAY VALLEY IN NEW SOUTH WALES BORDERING ON VICTORIA

PASTORAL, AGRICULTURAL, dairying is the order of importance of Australia's primary industries, but while pastoral products are undoubtedly the mainstay of the Commonwealth, the dairying industry plays no small part in contributing to the national wealth and export earnings. The industries mentioned are more commonly referred to as wool, wheat and butter, for it is from the export of these items that Australia's revenue is chiefly derived.

The history of dairying in Australia dates from the introduction of cattle by the early settlers and with the application of scientific methods in the treatment of animals and pasturages and in the processes of manufacture, coupled with herd testing and effective State supervision, has shown rapid extension. The total number of dairy cows at present in the Commonwealth is approximately three millions, from which over one billion gallons of milk are produced annually, averaging 375 gallons per cow.

Although the quantity of dairy production is largely affected by the nature of the season, a large increase in the output of butter has

taken place in recent years. The average annual production rose from 211,500,000 lb. for the quinquennium 1918-1922 to 350,000,000 lb. for the latest five years. The record season for production was in 1932-33, when, as the result of a specially favourable season, 419,675,000 lbs. were manufactured. That figure, though, is likely to be bettered, as preliminary data indicate a production of over 452 million lbs. The manufacture of cheese has varied but little during the past few seasons, the annual output for the past five years averaging approximately 32 million lbs. The only other dairy product of importance is condensed milk, the manufacture of which is of comparatively recent growth. Greatest development of this product has taken place in Victoria, which State has reached a production total of nearly 50 million lbs. annually.

During the current season dairymen throughout Australia began to realize the necessity of equalizing the standard of choicest butter. New South Wales is the only State at present producing a reasonable high percentage of choicest quality, but

indications are that within a very short time a standard grade and export brand will be established, thus resulting in a higher price being obtained in the overseas markets. Commonwealth statistics show that in New South Wales, where quality is superior, people eat more butter.

An example of the disadvantages of producing the low grade product is shown in the figures relating to prices obtained in the English market. In 1934 prices for Australian butter were 13 per cent lower than in the previous year, whereas the New Zealand and Danish products were 11 per cent and 5 per cent lower respectively. Such an extreme difference in decrease would not exist if 80 per cent of the Commonwealth's exports were choicest.

The increase in production of butter, which has largely balanced the decrease in prices, has been one of the most notable developments of Australian economics during the depression years. More remarkable still is the increase in exports. In 1913, 33,840 tons were exported from Australia, representing £3,565,282, or £105 6s. per ton. In 1928-29,

50,369 tons were shipped, but this year, 1934-35, the estimated shipments are 125,000 tons representing £9,375,000 or £75 per ton. Thus, from 1913 to the present year, the increase in volume is 270 per cent, the increase in gross value 160 per cent, and the decrease in price 30 per cent. Preliminary figures indicate the twelve months' total being very near the estimated figure. For the period from July 1, 1934, to June 16, 1935, a total of 116,444 tons had been shipped, of which the United Kingdom took 109,298 tons. The capacity of the British market to absorb butter has been remarkable, and as the price of butter has declined during recent years, that capacity to absorb has increased. From 1929 to 1934 total imports increased 52 per cent. On foreign imports there is a duty equivalent to about £15 per ton, but, under the Ottawa Agreement, free entry is allowed at present to Empire butter.

The marketing of dairy produce is governed by the Commonwealth Dairy Produce Act (Equalization Plan) and controlled successfully by the Australian Dairy Produce Board.

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Reserve Fund	-	-	-	-	-	£3,250,000	
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UPSTREAM AND DOWNSTREAM

Being sundry Items of passing Interest retrieved

By "THE FERRYMAN"

International Visitors' Port Tour

Members of the International Parliamentary Commercial Conference were the guests of the Port of London Authority on October 4th. Proceeding to Tilbury by special train the party viewed the Tilbury Passenger Landing Stage and then lunched at the Tilbury Hotel. They were welcomed by Mr. J. D. Gilbert, D.L., J.P., Chairman of the River Committee, who was supported by Admiral A. G. Hotham, C.B., C.M.G., Chairman of the Maintenance Committee, and Mr. T. W. Condon, O.B.E., a Member of the Board.

Lord Eltisley, Chairman of the

Conference, returned thanks on behalf of the visitors and expressed astonishment at the magnitude of some of the figures relating to the trade of the Port of London which Mr. Gilbert had mentioned. His Excellency the Iranian Minister and Mr. Paul Reynaud, former Finance Minister for France, supported Lord Eltisley and thanked the Authority for their hospitality.

After lunch the party came upstream in the Authority's steamer *St. Katharine*, viewing the Royal Docks, and proceeding thence to Tower Pier, the sights offered by dock and stream being novel to many of the visitors.

The City of London and British Banks

Speaking at the Mansion House on October 1st, Lord Plender said that to-day in the City of London we see in the art of banking a system suited to the needs of the country's commerce, based on firm foundations, not rigid, not inelastic, but freely moving as legitimate requirements demanded.

Mr. Montagu Norman remarked that there was no need to praise the banks of this country, for they had become the symbol for banking throughout the world, and their co-operation had become a tradition, much greater in the last few years than before.

Britons Eat more Mutton

A publication just issued by the Imperial Economic Committee ("Mutton and Lamb Survey") reveals

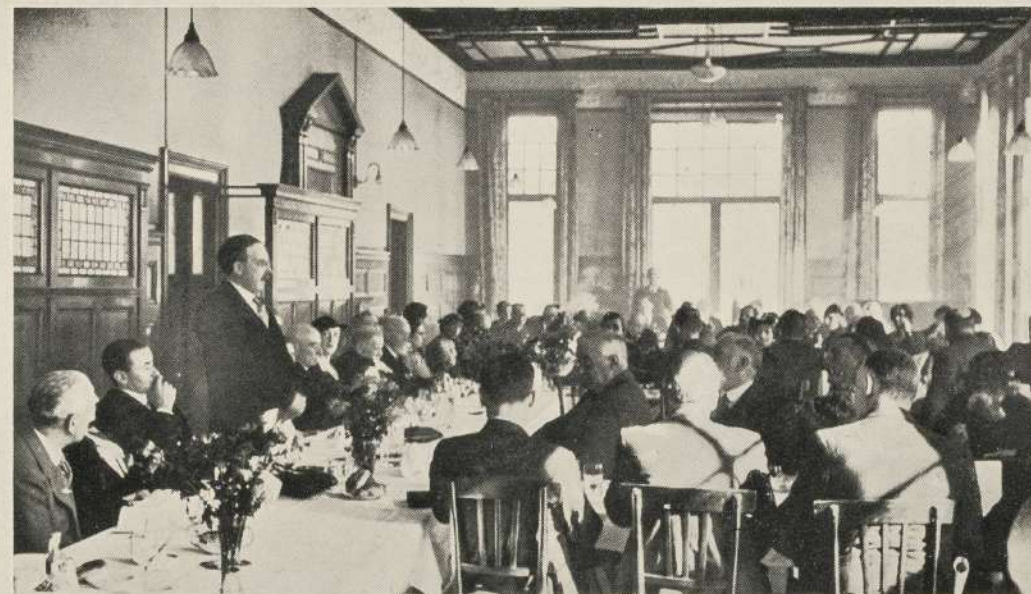
the United Kingdom as the greatest consumer of mutton and lamb, and increasingly mutton-minded.

During the year 1934 close on 334,000 tons of mutton and lamb were imported into the United Kingdom, about 80 per cent. of frozen supplies coming from New Zealand and Australia, compared with 57 per cent a decade ago. Lamb has largely displaced mutton in that period in international trade.

New Zealand supplied 53 per cent of the U.K. imported supplies, Australia following with half that amount, Argentina contributing 14 per cent.

Reminder of P. & O. "Caledonia" Forty Years Ago

One of the regular features of "The Journal of Commerce" which often brings forth interesting memories is



MEMBERS OF THE INTERNATIONAL PARLIAMENTARY COMMERCIAL CONFERENCE IN THE COURSE OF A VISIT TO THE PORT OF LONDON WERE ENTERTAINED TO LUNCHEON AT THE TILBURY HOTEL. LORD ELTISLEY, CHAIRMAN OF THE CONFERENCE, SPEAKING FOR THE GUESTS AFTER MR. J. D. GILBERT (CHAIRMAN OF THE RIVER COMMITTEE) HAD PROPOSED THEIR HEALTH

P.L.A. Photo



MOVEMENT WITHOUT COMMOTION

IN THE FOREGROUND IS THE CUTTING CONNECTING ROYAL ALBERT DOCK WITH ROYAL VICTORIA DOCK (CONNAUGHT ROAD). THE BRIDGE HAS BEEN SWUNG, A DUMMY WITH MEN AND GEAR AND A "SUN" TUG ARE ABOUT TO SLIP THROUGH, AND (left) ONE OF THE ROYAL MAIL LINE "HIGHLAND" BOATS IS GOING ASTERN CHECKED BY DOCK TUGS. TO THE RIGHT IS THE NEW ZEALAND SHIPPING COMPANY'S M.V. "RANGITATA" Fox Photos

entitled "To-day in the Past." On October 3rd last it was recalled that on the identical date in 1894 the P. & O. Company gave a luncheon to guests on board their new steamer *Caledonia* in Albert Dock.

She was a reply to the then fierce competition of the Messageries Maritimes which had put on some fast ships for the Indian and Australian services and the 19½ knots' trial speed was a good omen. The *Caledonia* had a single-screw engine of 12,000 h.p. and her gross tonnage 7,558 tons. Within

twelve months of her coming into service she broke the outward record to Bombay and homeward easily outpaced the rival M.M. steamer.

"After making her name by her speed and comfort, the *Caledonia* settled down to be a most successful vessel. In 1916 she was mined in the Mediterranean, but her hull stood the strain, and she was soon at work again, rendering excellent service trooping. When she was completely overhauled in 1920 her appearance was spoiled by the removal of two of her masts, but she continued to work hard until she was broken up at Bombay in 1925."

Grand Union Canal Publication

Prefaced by a Foreword written by Mr. W. H. Curtis, the Company's Chairman, The Grand Union Canal Company has just issued a large handbook giving a wide survey of the facilities and routes provided in its 280 miles.

"The Canal connects with the Port of London at two points, one in the east at Limehouse and the other in the west at Brentford. From Limehouse the route passes through the most important commercial area of London, and after joining the main line from Brentford, at Bulls Bridge, enters the heart of industrial England, penetrating the Midlands to Birmingham in one direction, and as far north as Langley Mill in Derbyshire in the other, providing an ideal traffic route to or from any district in the areas served by the Canal. Apart from this, the Canal is a link between centres of production in this country, no matter how remote, and the most distant markets in the world."

From time to time mention has been made in our pages of modernization plans which have been carried out in the Canal; the Handbook illustrates some of these. The sectional diagrams, printed in blue, helpfully indicate the far-reaching branches of this important inland waterway.

Congestion at Woolwich Free Ferry

The Free Ferry at Woolwich, property of the London County Council, is the last in-London cross-river link. "The Daily Telegraph" has been calling attention to traffic difficulties there.

"Owing to the steadily increasing traffic congestion, demands on the capacity of the four ferry boats are approaching 'saturation point.'"

"In 1933 the average daily number of

vehicles using the ferry was 2,300, or 16,000 a week. This has now increased to nearly 3,000 a day, or over 20,000 weekly.

"The building of arterial roads and the increase in the number of factories in the neighbourhood on both banks of the river are among the reasons advanced for the growth of traffic. A bad 'bottleneck' formation in the thoroughfare near the ferry adds to the congestion.

"Meanwhile the strings of waiting vehicles in the roadways near the ferry grow longer, despite the highly efficient working of the boats and the swift marshalling of the traffic up the approach runways and stowing on board by experts. More and more vehicles are left behind each time the boats leave."

Anchorage Beacons in Gravesend Reach

The Port of London Authority have given notice that anchorage beacons have been erected on the north bank of Gravesend Reach. The front beacon represents an anchor with flukes upstream and the rear beacon an anchor with flukes downstream. When in line the beacons will facilitate selection of an anchorage in the River abreast of the hulk *Artemis*.

Jubilee Sculling Championship Race

The Jubilee Sculling Championship Race of Great Britain was rowed on September 29th between Putney and Mortlake, the contest being, of course, a professional event involving a stake of £200 a side. The race was fairly even up to Hammersmith and from that point Ted Phelps went ahead and finished with a lead of 20 lengths in a time of 24 minutes 21 seconds. Phelps thus retains the title and again showed his superiority over his rival, Bert Barry.

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THE P.L.A. STAFF HORTICULTURAL SOCIETY HELD ITS AUTUMN EXHIBITION OF FLOWERS, FRUIT, AND VEGETABLES IN A PORTION OF NO. 6 WAREHOUSE, LONDON DOCKS. ON LEFT ARE BALES OF AUSTRALIAN WOOL.

P.L.A. Photo

P.L.A. Jubilee Gift to Their Majesties

The British Carpet of Chinese design subscribed for by Members and Staff of the Port of London Authority as a gift to Their Majesties to commemorate their Silver Jubilee has been on view to those participating. The carpet is destined for the Chinese Room in Buckingham Palace.

The design is one of traditional Chinese character, arranged by Her Majesty the Queen and carried out in colourings of ivory, green, blue and gold, by Mr. F. R. Gibson.

The carpet has been woven in one piece and its fashioning has occupied many expert weavers for about two months. There are more than 32 million ends of yarn in the pile and 405 separate ends to every square inch. No fewer than 1,632,960 tufts have been tied in separately by hand on a foundation

of fine linen yarn. Twenty-two shades of colouring have been used.

G.S.N.C. acquires Moss-Hutchison Line

The General Steam Navigation Company, of London, has acquired the shares of the Moss-Hutchison Line, Ltd., formed in 1934 by the fusion of the Moss Line, of Liverpool, and the firm of Messrs. J. & P. Hutchison, of Glasgow. The Moss-Hutchison fleet now consists of sixteen steam and motor vessels, with a total gross tonnage of 33,000 tons.

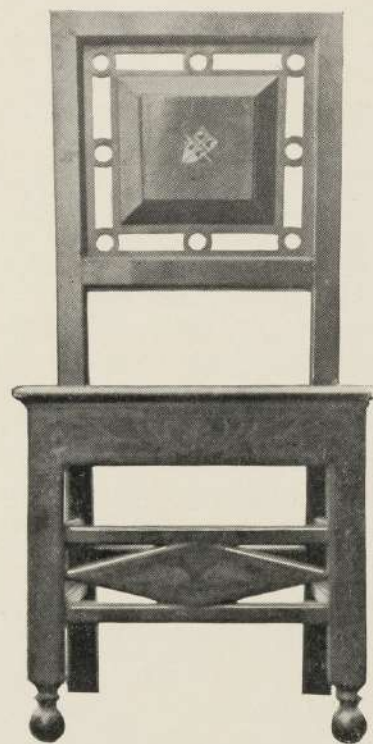
Corn Exchange Service at All Hallows Church

The Corn Exchange Harvest Festival service was held at All Hallows, Barking-by-the-Tower, on October 2nd, and was attended by the Lord Mayor and Sheriffs, the Aldermen, and other civic dignitaries of the Tower Ward, Directors of the Corn Exchange, and members of

the Corn Exchange Benevolent Society.

The address was given by the Deputy-Vicar of All Hallows, the Rev. F. W. Baggalay. Among those present was the Vice-Chairman of the Port of London Authority, the Right Hon. Thomas Wiles, P.C., who has been Vice-Chairman of the Corn Exchange for some years. *Submarine Cable Companies Merged*

It is announced that an amalgamation of submarine cable interests has been arranged between the Telegraph Construction and Maintenance Company (East Greenwich) and Messrs. Siemens Brothers, Woolwich. A new concern will take over the joint interests under style of Messrs. Submarine Cables, Ltd. Manufacture of underwater cable will be carried on at the T. C. & M. Company's premises at East Greenwich. Financial



THE OLD OAK CHAIR NOW AT TILBURY HOTEL, REFERRED
TO ON PAGE 7

Photo: A. G. Linney

details as to the amalgamation appeared in "The Times" for September 30th.

*Death of Dr. Samuel Evans, LL.D.,
of Johannesburg*

As we go to press we learn with regret of the death in Johannesburg on the 10th October, at the age of 76, of Dr. Samuel Evans, LL.D., the Chairman and Managing Director of the Crown Mines, Ltd.

Dr. Evans was born in Wales and had a distinguished career in many parts of the world before establishing himself as one of the foremost mining administrators in the world. When Sir David J. Owen (General Manager of the P.L.A.) and Lady Owen, toured South Africa last year, Dr. and Mrs. Evans, with whom they became acquainted on the voyage out, were foremost amongst the many people of South Africa who extended lavish kindness and hospitality.

Dr. Evans personally conducted Sir David and Lady Owen through the Crown Mines and to other places of interest.

A long obituary notice appeared in *The Times* of 11th October.

Work of the Port Sanitary Authority

The replacement of the old hulk *Hygeia*, the Port Sanitary Authority's floating head-quarters off Gravesend, by an Admiralty steel lighter was the occasion of an interesting account in *The Times* (October 14th) of the work and duties of the P.S.A.

"The Authority's first consideration is to protect the citizens of London from plague and pestilence imported in ships coming from foreign ports. Before the Quarantine Act of 1825 infected ships were destroyed in the Channel. To-day, with financial help from the Ministry of Health, the Corporation of the City, as the sanitary authority of the Port of London, administers one of the finest port health services in the world."

BIRDS OF THE SOUTH BANK MARSHES—AUTUMN

Their great Variety: Migrants, Auf Wiedersehen!

By G. J. SCHOLEY

IT IS ON THE OPEN MARSHES of the south bank that we see the last of those straggling parties of summer migrants winging their silent way to their winter quarters in Africa. Some linger as late as mid-October; belated swallows, martins, willow warblers and late-hatched cuckoos, the last having to discover for the first time their way across sea to sunnier climes without a guide; for did not the adult cuckoos make the journey towards the end of July, leaving their young still in the nests under the care of some devoted robin, wagtail, reed-warbler, meadow pipit, or hedgesparrow? How these young cuckoos of the year accomplish this feat must, I think, for ever remain one of the greatest mysteries of avian migration.

Wheat ears and yellow wagtails took their departure from their ancestral marshland haunts some weeks previously and the absence of chatter in the reedbeds is a sure indication that the tiny reed and sedge warblers have also said goodbye for another season. In fact there is an ominous silence which speaks for itself for these feathered atoms came in a night and they left in a night also.

However, other avian forms return regularly to the marshes during the autumn months—those huge flocks of chaffinches, to feast on the seeding heads of the glorious sea-aster, the many straggling parties of goldfinches, linnets, and greenfinches seeking the seeds of the scattered teasels and thistles, the hosts of yellowhammers

which each autumn find something to their liking among the masses of seeding sedge, and the hordes of countless starlings in search of such insect life as only these huge grazing areas are able to provide. Numbers of skylarks, meadow pipits and reed buntings remain throughout, consorting here and there with the less common rock pipit which rarely fails to visit these areas from its rock-bound breeding-haunts farther north.

Early autumn also sees the return of the gulls, the blackheaded, common, herring and lesser black-backed, though numbers of the first two named have in recent years encroached farther inland, where they follow the plough in quest of worms, grubs, etc. Their places on the marshes are now taken by hosts of rooks and crows, and I shall not be surprised to discover in coming years that some steady evolutionary movement is taking place between these avian blacks and whites. The occasional booming of the bittern is now heard and on rare occasions the charming bearded reedling may be seen in the isolated reedbeds of the various Fleets.

Intensely interesting to watch are the small flocks of green sandpiper foraging among the *algæ* in the fresh-water ditches, some of these delightful birds actually remaining for the whole of the winter when, on occasion, they may be observed at the same pool in company of the kingfisher. Moorhen and coot are resident, while away on the flats a few hooded crows may be seen, having recently returned from their Scottish



FEMALE WHINCHAT: NOTE THE MISSING TOES AND BACKWARD GRIP
Photo: G. J. Scholey

breeding fastnesses. Flocks of dunlin and ringed plover, which upon one's approach whirl and wheel in wild excitement and form a most charming picture with the sun lighting up their underparts which flash like silver against the shallow water and grey mud.

Curlew and whimbrel put in an appearance at not infrequent intervals and the lordly heron keeps his lonely vigil in some sequestered ditch; while flocks of golden plover now fraternize with the lapwing and may be heard nightly in certain favourite feeding-grounds. The redshank, that most difficult of all birds to approach, is fairly well distributed; while common

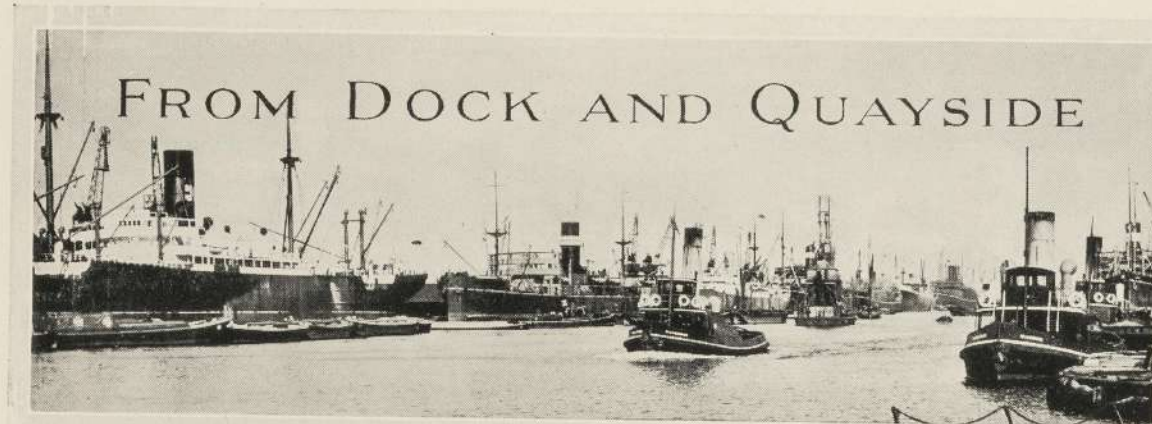
sandpipers, and occasional bar and blacktailed godwits may be seen with the aid of a good pair of glasses!

That rarer autumn visitor, the black tern, may also be located on occasion in the shallow fresh water ditches, one pair in 1931 remaining the winter through. The kestrel hunts the wide open marshes "from early morn to dewy eve," and among the rarer visitors may be numbered the little auk, red-throated diver and cormorant, all of which I have encountered on occasion inland. One evening, just before night-fall, I watched one of these cormorants in its endeavours to settle on the top of a 200-foot chimney stack in a cement works on the fringe of Cliffe Marshes. Failing to obtain a foothold on the crumbling flue dust accumulated on

(Concluded on page 51)



MOORHEN'S NEST AND EGGS IN AN OLD FIRE-BUCKET: NOTE THE CONVENIENT EXIT AT THE BACK
Photo: G. J. Scholey



Nippon Yusen Kaisha Golden Jubilee

That well-known Japanese shipping company, the Nippon Yusen Kaisha (N.Y.K.), celebrated its golden jubilee on October 1st, the organization having come into existence by the amalgamation of two separate concerns in 1885. At that time the N.Y.K. engaged principally in coastal trading, its first wider range being to Korea, North China and Vladivostok. In 1892 the N.Y.K. started a service to Bombay. Soon after the close of the Japan-China War in 1896, a passenger and freight line to London came into being.

The decade from 1895 to 1905 saw much expansion in Japan's foreign trade and the N.Y.K., too, grew as a result. The Company owned 86 steamers at the time of the outbreak of the Great War in 1914. In June, 1916, the N.Y.K. started a regular freight service between the Far East and New York via the Panama Canal, and from that time additions to their fleet have been numerous and of increased size, while extensions of routes served have steadily continued. Construction has embraced nine motorships between 1927 and 1930, all having been built at Japanese shipyards.

One of the latest interesting additions to the N.Y.K. fleets is the *Palao Maru*, a motorship of 4,200 tons gross, built for the South Sea islands service.

The black funnels with two narrow red bands on broad white band are familiar in the Port of London at Royal Albert Dock. The words Nippon Yusen Kaisha stand for Japan Mail Steamship Company. (See photograph p. 51.)

Royal Research Ship "Discovery II" Departs

Once again the Royal research ship *Discovery II* has been in St. Katharine Dock after refit and overhaul and has quietly departed for the South Pole ice. Almost skittish in light-blue paint, she formed a distinct contrast with the severely classical background of the old warehouses. It is expected that the *Discovery II* will not be in London again before the summer of 1937.

Shrimping in Tilbury Docks

Writing in "Lloyd's List" for October 3rd, a contributor who uses the pen name "Rob o' the Reaches," said:—

"On a summer Sunday morning I came across a trio of Lascars shrimping in the East

End Branch Dock. One was holding a long bamboo to which a T-end had been attached with sailcloth bag for the net; one was dragging a rope tied to the T-end, and the third carried a large bucket. They were steadily working their way along the edge of the south quay of the Dock and had their bucket two-thirds full of small shrimps. I was told that at certain seasons the Lascars regularly go shrimping and occasionally add a crab or two and even small eels to the catch."

New Blue Star Line Motorship "Empire Star"

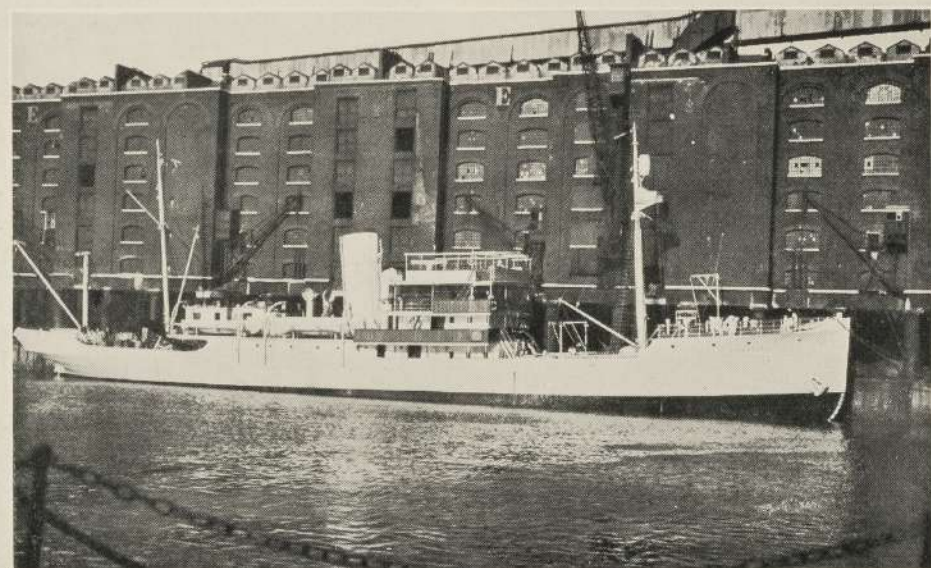
The naming ceremony for the new Blue Star Line motorship *Empire Star* was performed on September 26th at Belfast by Mrs. Ronald Vestey, the vessel being under construction at the yard of Messrs. Harland & Wolff, Ltd. By the close of this year the *Empire Star* will have been followed by another ship

for this Company, making the fifth liner built for them in Belfast within a comparatively short time.

The gross tonnage of the *Empire Star* will be about 10,800 tons, and the machinery installation is identical with that of the *Australia Star*, launched in January of this year.

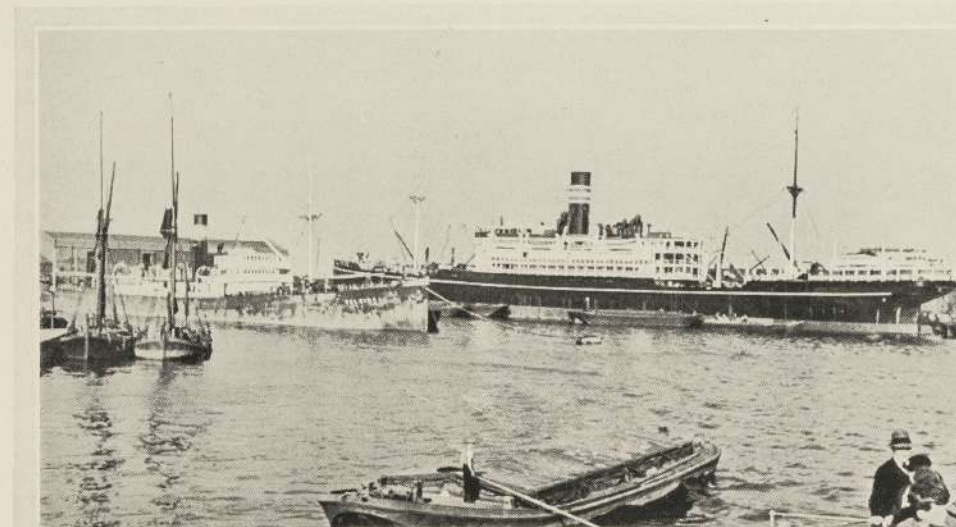
Busy Days for G.P.O. Cables Ship "Monarch"

The month of September proved an uncommonly busy one for the Post Office cables ship *Monarch*, whose home port is London and whose home berth is in Woolwich Reach, south side. She had to do repeated repair work on Anglo-Irish cables, encountered very rough weather in doing these jobs, and experienced severe gales while working on the Channel Islands cable.



ROYAL RESEARCH SHIP "DISCOVERY II" IN ST. KATHARINE DOCK PRIOR TO HER DEPARTURE FOR THE ANTARCTIC

Photo: A. G. Linney



THE "HAKUSAN MARU," 10,380 TONS, OF THE N.Y.K. LINE, BERTHED AT B JETTY, ROYAL VICTORIA DOCK, FOR DISCHARGE. THIS COMPANY HAS JUST CELEBRATED ITS GOLDEN JUBILEE

P.L.A. Photo

BIRDS OF SOUTH BANK MARSHES

(Concluded from page 48.)

the top of the shaft, the big, black, clumsy-looking bird apparently caught the exit gases from the chimney then toppled and fell. When halfway to earth it recovered somewhat and double-somersaulting, floundered once more into the marshes before making a bee-line for the Thames Estuary.

During the early Autumn these marshes are invaded by large flocks of fieldfares and redwings, leaving their Scandinavian breeding-haunts to enjoy more hospitable winter-quarters where they are joined by a few pied wagtails which have also travelled south for the winter months. These latter birds keep the close company of the marshland sheep, being conspicuous in comparison with the summer wagtails through being much lighter in colour and a trifle larger.

Recent years have seen the appearance on these marshes of the dainty little whinchat, a bird perhaps whose time-honoured breeding-haunts farther inland have, more than any other, been wiped out by the incursions of the erectors of modern bungalows. The marshes appear to be their only refuge nowadays, and I know at least three spots on the Cliffe Marshes where these birds are fairly well established.

The ducks form a most interesting group, shoveller, mallard, teal, shel-drake and widgeon perhaps being seen most frequently and being augmented later by gadwall, tufted, pochard, and pintail according to variations in weather, a factor which also dominates the appearance of the bean, pink-footed, and grey lag goose.

TRADE OF THE PORT OF LONDON—AUGUST 1935

SHIPPING

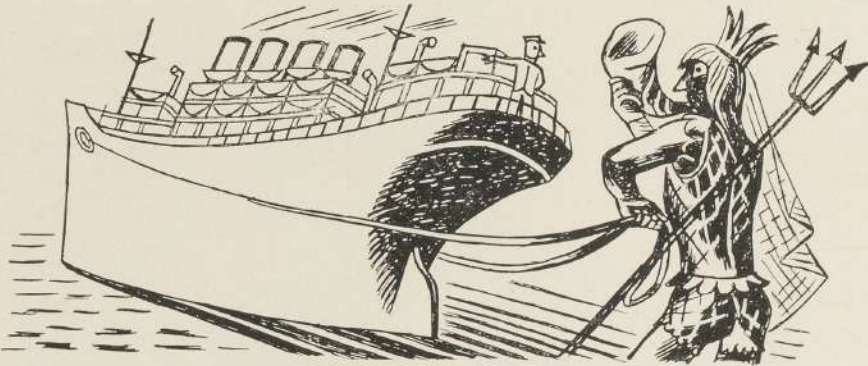
Comparative statement showing tonnage of vessels with cargoes and in ballast which arrived at and departed from the Port of London during August 1934 and 1935.

From and to	1934	1935	+ Increase or —Decrease	Total for 12 months ended August 1935	Percentage of United Kingdom
	Net reg. tons	Net reg. tons	Net reg. tons	Net reg. tons	
Foreign Ports	3,812,230	3,770,501	—41,729	40,889,018	17·9
Coastwise Ports	1,557,910	1,532,580	—25,330	18,148,380	15·2
Total	5,370,140	5,303,081	—67,059	59,037,398	17·0
United Kingdom (Foreign and Coastwise) ...	34,339,472	35,076,581	+ 737,109	347,295,438	

GOODS

Comparative statement showing tonnage of certain commodities imported into the Port of London during August 1934 and 1935.

Commodity	Imported into London		Commodity	Imported into London	
	1934 (Net Weights)	1935		1934 (Net Weights)	1935
	Tons	Tons		Tons	Tons
Arrowroot, Sago, Tapioca and Sago and Tapioca Flour ...	701	1,265	Meat—Chilled	24,023	23,415
Bark—Medicinal and Tanners' ...	126	179	„ —Frozen	36,475	28,351
Carpets and Rugs	453	423	Metals—Copper	2,845	5,415
Cocoa	932	961	„ —Lead	19,697	14,009
Coffee	642	157	„ —Tin	885	1,867
Coir Yarn and Cordage	418	751	Millboards, Woodpulp, etc. —		
Cork, Corks and Cork Shavings ...	890	786	Boards and Woodpulp ...	95,676	79,697
Flour	19,915	13,019	Molasses	1,512	27,136
Fruit—Dried	6,343	6,242	Nuts	12,521	6,021
„ —Green and Vegetables ...	35,372	40,087	Oil (excluding Petroleum) ...	50,998	26,904
Glue, Size and Gelatine	425	463	Oil-seed Cake	15,724	15,468
Grain and Seeds:—			Paper	34,789	38,884
Wheat	92,311	82,891	Pepper and Spices	884	454
Barley	13,610	11,442	Plumbago	610	508
Oats	9,333	4,866	Provisions:—		
Maize	38,683	30,128	Bacon and Hams	11,485	12,287
Peas and Beans	4,239	2,608	Butter and Margarine ...	20,416	22,409
Other Grain and Seed (exclud- ing Rice)	14,378	4,618	Cheese	8,533	6,221
Offals	21,250	28,130	Canned Goods	20,610	18,543
Gums (including Lacs and Resins) ...	6,491	3,971	Rice and Rice Flour	6,451	1,836
Gutta Percha and Balata	21	18	Saltpetre and Nitrate of Soda ...	505	220
Hemp, Flax and Tow, etc.	2,935	3,195	Skins (with wool on)	1,080	584
Hides and Leather	3,595	4,266	Spirits—Brandy and Rum ...	550	233
Hops	37	90	Staves	2,473	4,267
India Rubber (excluding Pontia- nac)	11,702	10,465	Sugar—Beet and Cane	100,446	87,971
Indigo	—	—	Tallow and Stearine	2,712	1,637
Iron and Steel	18,415	14,166	Tea	21,415	18,220
Jute	3,225	4,072	Tobacco and Cigars	1,604	2,269
Jute Manufacturers	1,252	890	Wax	1,221	1,869
			Wines	2,680	3,391
			Wood—Hard and Soft	316,614	285,537
			Wool	6,845	9,175




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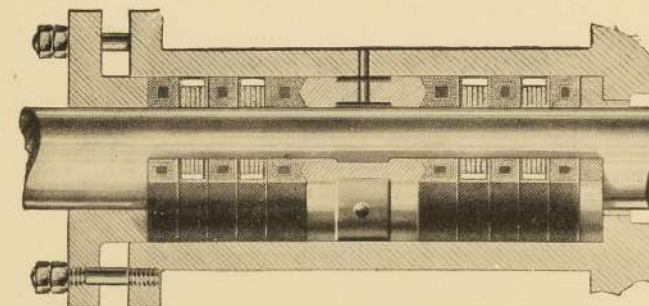
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