

SPECIFY

WRIGHT'S TIPTON ANCHORS & CABLES

Phone: Tipton 1881 & 1882

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41,099

LONDON: WEDNESDAY, AUGUST 28, 1946

PRICE TWOPENCE

LOYD'S LIST

AND SHIPPING GAZETTE

ESTABLISHED 1734

M. WAWN & SON SUNDERLAND



for SLIP CORRECTOR PROPELLERS THESE ARE AN OUTSTANDING SUCCESS

P & O BRITISH INDIA FREIGHT & PASSENGER SERVICES

P. & O. SAILINGS

FAR EAST

Closing M'bro Closing London GLENIFFER ... Aug 30 (K.G.V.) For Straits and Hongkong

AUSTRALIA

PERIM ... Sept. 24 (K.G.V. Berth 8) Fremantle, Adelaide, Melbourne, Sydney

P. & O. AND B.I. JOINT SERVICE TO COLOMBO, MADRAS, CALCUTTA, BOMBAY & KARACHI

BRITISH INDIA SAILINGS

PORT SUDAN, ADEN and EAST AFRICAN PORTS

NOTE.—Cargo for shipment to India and East Africa must be registered with the appropriate conference.

P. & O. SAILINGS APPLY:

122, Leadenhall Street, E.C.3 (AVENUE 8000); or ESCOMBE, McGRATH & CO., 4, Lloyds Avenue, E.C.3 (ROYAL 8211)

B.I. SAILINGS APPLY:

GRAY DAWES & CO. (Agents), 122, Leadenhall Street, E.C.3 (AVENUE 4680) or GELATLY, HANKEY & CO., LTD., Dixon House, 1, Lloyds Av., E.C.3 (ROYAL 7364)

PASSENGER OFFICES:

14, Cockspur Street, S.W.1 (WHITEHALL 4444) 122, Leadenhall Street, E.C.3 (AVENUE 8000)

NEW ZEALAND LINE

Closing for cargo in London 25 Shed, R.A.D.K. NORTHUMBERLAND ... Aug. 30 For Wellington and Auckland. All vessels may call at any ports on or off the route, and all sailings are subject to change, deviation or cancellation with or without notice.

Agents:

J. B. WESTRAY & CO., LTD., 122, Leadenhall St., LONDON, E.C.3 Telephone No.—Avenue 5220

THE BANK LINE, LTD. SERVICES—

AMERICAN & INDIAN LINE To and from India, BRANCH LINE SERVICES to the U.S.A. & Canada. AMERICAN & ORIENTAL LINE.—To and from Far East and U.S.A. CALCUTTA TO RIVER PLATE PORTS.—To River Plate Ports, calling at Rio de Janeiro when required. INDIAN OCEAN LINE.—To Chilian and Peruvian Ports. U.S. GULF TO AUSTRALASIA.—Regular service from all U.S. Gulf Ports to all ports in Australia & New Zealand calling at Trinidad en route when sufficient inducement offers. INDIAN AFRICAN LINE.—Carrying passengers and cargo to and from India and East Africa. (Vessels of India Natal Line calling at Madagascar when opportunity offers). ORIENTAL AFRICAN LINE.—Carrying passengers and cargo between Far East, Mauritius, Réunion and South African Ports. PERKIAN GULF.—General Merchants Export and Import.

For Freight and Particulars apply to— ANDREW WEIR & CO. BALTIC EXCHANGE BUILDINGS, 19-21, BURY STREET, LONDON, E.C.3.

AUSTRALIA

By ABERDEEN & COMMONWEALTH LINE To FREMANTLE (PERTH), ADELAIDE, MELBOURNE, SYDNEY and BRISBANE. Also sailings direct for GEEBONG, GLADSTONE, TOWNVILLE and CAIRNS. All enquiries to— 88, Leadenhall St., LONDON, E.C.3. Ave 4232 (15 lines)

SHAW SAVILL LINE

SOUTH AFRICA AUSTRALIA NEW ZEALAND All enquiries to— 88, Leadenhall St., LONDON, E.C.3 Telephone—Avenue 4232 (15 lines)

HARRISON LINE

CAPTOWN, PORT ELIZABETH, EAST LONDON, DURBAN, LOURENCO MARQUES & BEIRA STEAMER ... London For freight apply to THOS. & JAS. HARRISON, Liverpool & London, or to JOHN T. RENNIE, SON & CO., 1, Bury Court, St. Mary Axe, London, E.C.3. Middlebrook, JOHN M. LEINARD & SONS, Ltd., Yorkshire & N.E. Consign: R. THOMAS & CO., Bradford & Sheffield, Glasgow: PRENTICE, SERVICE & HENDERSON.

CLAN LINE

CARGO SERVICES Between the UNITED KINGDOM AND SOUTH & EAST AFRICA CEYLON & INDIA For all information apply to— CAYZER IRVINE & CO., LTD., The Managers of The Clan Line Steamers Ltd. LONDON: 2, St. Mary Axe, E.C.3. LIVERPOOL: Royal Liver Building, GLASGOW: 109, Hope Street. Or to— CLAN LINE (Agencies) Ltd., MANCHESTER, BIRMINGHAM.

ELLERMAN CARGO & PASSENGER SERVICES

INDIA

HALL LINE: CITY LINE

SOUTH WALES, GLASGOW & BIRKENHEAD TO BOMBAY & KARACHI MARMAGAO & MALABAR COAST PORT OKHA & BEDI BUNDER (other Kathiawar Ports if inducement) QALOUTTA (Vizagapatam if inducement) Marmagao Service, in conjunction with F. C. STRICK & Co., Ltd. Loading Berths: Princes Dock, Glasgow; Alexandra Dock, Newport; King's Dock, Swansea; East and West Float, Birkenhead.

PORTUGAL & MEDITERRANEAN ELLERMAN LINE

Glasgow, Liverpool and South Wales to GIBRALTAR, MALTA, EGYPT, PALESTINE, SYRIA, CYPRUS, ITALY, ADRIATIC, GREECE, LEVANT, TURKISH AND BLACK SEA PORTS. Liverpool and South Wales to LISBON & OPORTO. London to OPORTO.\*

PAPAYANNI LINE

From Glasgow, Liverpool and South Wales to GIBRALTAR, MALTA, EGYPT, PALESTINE, SYRIA, CYPRUS, GREECE, LEVANT, TURKISH AND BLACK SEA PORTS.

Liverpool Loading Berth

No. 1 Branch—Alexandra Dock. WESTCOAST & LAURANCE LINE

From LONDON and EAST COAST PORTS of UNITED KINGDOM also ANTWERP to GIBRALTAR, MALTA, EGYPT, PALESTINE, SYRIA and GREEK, TURKISH, BULGARIAN, ROMANIAN and RUSSIAN BLACK SEA PORTS. London Loading Berth: West India Dock.

SOUTH & EAST AFRICA ELLERMAN & BUCKNALL LINE

From MIDDLESBROUGH & LONDON to CAPE TOWN, MOSSEL BAY, PORT ELIZABETH, EAST LONDON, DURBAN, LOURENCO MARQUEZ, BEIRA & MAURITIUS. London Loading Berth: Royal Albert Dock.

MALAYA, PHILIPPINES, CHINA ELLERMAN & BUCKNALL LINE

From MIDDLESBROUGH & CONTINENT to FAR EAST PORTS as opportunity offers. Brokers: KILICK, MARTIN & CO., Fenton House, Fenchurch St., London, E.C.3.

Head Offices of the Companies:

104-107, Leadenhall St., LONDON, E.C.3 Telephone: AVENUE 1011.

Tower Building, LIVERPOOL

75, Bothwell St., GLASGOW, C.2

JOHNSTON LINE

LONDON TO BOSTON

For Freight or other particulars apply to— JOHNSTON WARREN LINES, LIMITED

Furness House, Leadenhall St., London, E.C.3 55, King Street, Manchester; Royal Liver Building, Liverpool.

BEN LINE STEAMERS

TO EAST

Steamer Pham M'bro A'werp London \*TRENORIAN ... 11 Sept 21 Sept 21 Sept 21 Sept 21

\*Calling Port Said, Suez, Port Swettenham, Singapore, Hongkong and Manila. (Calling Port Said, Suez, Penang, Singapore, Port Swettenham, Hongkong and Shanghai). (Special arrangement, optional delivery Cebu, Port Said and Suez cargo only accepted when taken off the respective registers. London Loading Berth: No. 9/11, King George V. Dock. Cargo should not be despatched to Docks without reference to Brokers.

KILICK MARTIN & CO. (Brokers), 112/114, Fenchurch Street, London, E.C.3 Royal 8121 (8 lines). Kilmart Fen, London. MIDDLESBROUGH—T. A. BULMER & CO., LTD. W.M. THOMSON & CO., EDINBURGH & LEITH (Managers).

YEOWARD LINE

REGULAR SERVICE FROM LIVERPOOL TO LISBON, MADEIRA & CANARY ISLANDS

For further particulars and rates of freight, apply to— YEOWARD BROTHERS, 33/5, Victoria Street, LIVERPOOL, 1.

FURNESS LINE

LONDON TO NEW YORK LONDON TO HALIFAX and MONTREAL. LIVERPOOL TO ST. JOHN'S, N.F., HALIFAX, N.S.

LIVERPOOL TO BOSTON GLASGOW TO BOSTON MANCHESTER TO LOS ANGELES, SAN FRANCISCO, VICTORIA, B.C. VANCOUVER, B.C., NEW WESTMINSTER and SEATTLE

JOHNSTON LINE

From LIVERPOOL Closing Swansea Closing L'pool STEAMER ...

For HADAR PASHA and ISTANBUL PIRUS YOLO, THESSALONIKI, BOURGAS, CONSTANTZA and GALATZ. Loading Berth—Liverpool, South Hornby Dock. JOHNSTON WARREN LINES, LTD., Furness House, Leadenhall St., London, E.C.3; 55, King St., Manchester.

FURNESS, WITBY & CO., LTD. LONDON, LIVERPOOL GLASGOW, etc.

MOSS HUTCHISON LINE

From Liverpool CASABLANCA, GIBRALTAR, ALGIERS, MALTA, ALEXANDRIA, CYPRUS, PALESTINE and SYRIAN COAST PORTS DIRECT. PIREUS, THESSALONIKI (Salonika), IZMIR, ISTANBUL, BOURGAS, VARNNA and CONSTANTZA. Also from Glasgow, Swansea and Newport. Above Services temporarily suspended.

To and From BORDEAUX, NANTES and ROUEN. Sailings temporarily suspended. OPORTO and Glasgow and Dublin. CADIZ and Glasgow, Liverpool and Dublin. SAILINGS BY ARRANGEMENT UNTIL FURTHER NOTICE.

For Freight apply to MOSS HUTCHISON LINE LTD., 30, James Street, LIVERPOOL, 2 GLASGOW AND MANCHESTER

GLEN & SHIRE

JOINT SERVICE FROM ANTWERP, MIDDLESBROUGH and LONDON to

FAR EAST

Closing M'bro London (No. 11 K.G.V.Dk.) \*STEAMER ... Aug 27 Sept 30

\*Port Said, Penang, Singapore, Hong Kong and Shanghai (proceeds via Rotterdam). \*For Straits and China

Cargo can only be accepted by arrangement through the Company's Brokers.

For Inward Freight: GLEN LINE, LTD., 20, Billiter St., London, E.C.3 (ROYAL 8171)

For Outward Freight, Passage or Insurance MCGREGOR, GOW & HOLLAND, LTD., 20, Billiter St., London, E.C.3 (ROYAL 5600)

And at Hull, Bradford, Grimsby, Immingham, Middlesbrough, Southampton and Hamburg, or MCGREGOR, GOW & ROBINSON LTD., Liverpool

ELDER DEMPSTER LINES

Head Office: 3, Linnet Lane, Liverpool 17 City Office: India Building, Water St., Liverpool 2. London: 112-114, Fenchurch St., E.C.3. Manchester: 76, Cross St., Cardiff Agents: Elder Dempster (Cardiff) Ltd., Rompney House, Mount Stuart Sq., Glasgow Agents: Roxburgh Colin Scott & Co., Ltd., 69, Buchanan St., C.1. London Freight Agents: Killick Martin & Co., Fenton House, 122/114, Fenchurch St., E.C.3.

MAIL, PASSENGER AND CARGO SERVICES BETWEEN U.K., CONTINENT, U.S.A., CANADA AND WEST AFRICA.

(All cargo must be registered). Coastal Service between West and South Africa, Calcutta, Bombay and Madras to West Africa (as cargo offers). CANADA TO SOUTH AFRICA.

Liverpool Agents for THE UNION-CASTLE MAIL S.S. CO., LTD.

Cunard

MEDITERRANEAN

GIBRALTAR, CASABLANCA, MALTA PATRAS, PIRAEUS, THESSALONIKI, IZMIR, HAIDAR PASHA, ISTANBUL, BOURGAS, VARNNA, CONSTANZA.

WEST ITALIAN & ADRIATIC PORTS. Sailings for all above will be announced as arranged.

CHANNEL ISLANDS

STEAMER ... Closing for Cargo August Loading Berth: Huskisson Dk. South No. 1, Liverpool.

NORTH FRENCH PORTS

STEAMER ... Closing for Cargo August Loading Berth: E. Toxteth Dock

Freight rates quoted on application.

Cunard Line, CUNARD BUILDING, LIVERPOOL. (TEL. CENTRAL 9201) OR LOCAL AGENTS.

THE SOUTH AMERICAN SAINT LINE

REGULAR SERVICE

From Hull and Antwerp to ARGENTINE & BRAZILS

Closing Hull Antwerp 28th Sept

\*STEAMER ... 9th Sept. \*EMPIRE SHEARWATER 8th Sept. \*ST. ELWYN 8th Oct. \*For Brazils and Argentine.

For full particulars apply to— THE SOUTH AMERICAN SAINT LINE, LTD. Head Office—Temporary Address: Powell Duffryn House, CARDIFF or LONDON—Bevis Marks House, E.C.3 (Telephone: AVENUE 1901) BIRMINGHAM—Manrice Cooke & Co., 13, Corporation St. GLASGOW—Andrew Crawford & Co., Ltd. HULL—Wm. Brown Atkinson & Co., Ltd. LIVERPOOL—Canada S.S. Lines (Overseas) Ltd., 10, Victoria St. ANTWERP—A.M. de Keyser Thornton, S.A. Also at Bristol, Bradford, Sheffield, Leeds, Newcastle, Middlesbrough, Southampton.

MACANDREW LINE

SPAIN AND MOROCCO

LONDON, LIVERPOOL & PRINCIPAL U.K. PORTS EXPRESS SERVICE

By Fast Motorships LONDON and LIVERPOOL TO BARCELONA

HALL'S LINE

LONDON TO LISBON Express Service by Fast Motorships

GLYNN LINE

LIVERPOOL TO ITALY and SICILY

FOR FULL PARTICULARS OF CLOSING DATES and FREIGHT RATES APPLY TO— MAC ANDREWS & CO., LTD., 19, LEADENHALL ST., LONDON, E.C.3 \*Phone: MANston House 1543 \*Tels.: "Macandrew Stock London" CUNARD BUILDING, WATER ST., LIVERPOOL \*Phone: CENTRAL 3922 \*Tels.: "Iberia, Liverpool" LLOYD'S AGENTS at Madrid, Barcelona, Tarragona, Castellon, Burriana, Valencia, Denia, Cartagena, Almeria, Malaga and Seville, with Branch Houses also at Bilbao and Gandia

AGENCIES IN ALL OTHER PRINCIPAL PORTS JOHN HALL Junr. & CO., LTD., 19, LEADENHALL STREET, LONDON, E.C.3 \*Phone: MANston House 1543 \*Grams: "Juanal Stock London"

JOHN GLYNN & SON, LIMITED

CUNARD BUILDING, WATER ST., LIVERPOOL \*Tels.: "Glynn Liverpool" \*Phone: CENTRAL 3929

Cunard White Star UNITED STATES AND CANADA

SOUTHAMPTON TO NEW YORK

QUEEN ELIZABETH 1st Sailing Oct. 16 QUEEN ELIZABETH 2nd Sailing Nov. 6

LIVERPOOL TO NEW YORK

Receiving Cargo SIBLEY PARK (via Belfast) Aug. 17 to Aug. 31

PORT MUSQUARRO (via Belfast) Sept. 2 to Sept. 9

LIVERPOOL TO MONTREAL

Receiving Cargo LORD GLENTORAN (via Port Alfred) Aug. 22 to Aug. 31

SALACIA ... Sept. 2 to Sept. 9 VALACIA ... Sept. 10 to Sept. 19

Loading Berth: Huskisson Dock LONDON TO NEW YORK

Receiving Cargo PORT PHILLIP ... Aug. 28 to Sept. 3

Loading Berth: Shed 7, King George V Dock LONDON TO MONTREAL

Receiving Cargo BAYANO ... Aug. 28 to Aug. 31

Loading Berth: Surrey Commercial Dock

CUNARD WHITE STAR, LTD.

Cunard Building, L'pool, 3. (Tel. CENTRAL 9201). Offices also at— London, Southampton, Manchester, Birmingham, Bradford, Bristol, Plymouth, Glasgow, Cobh, Belfast, Dublin.

LAMPOR & HOLT LINE

To RIVER PLATE (Monte Video, Buenos Aires and Rosario) and, if sufficient inducement offers, Bahia Blanca (without transhipment)

To BRAZIL (Bahia, Rio de Janeiro, Santos, Rio Grande do Sul)

Cargo for Pelotas and Porto Alegre by transhipment at Rio Grande do Sul.

First Class Passenger Accommodation on all Vessels.

From NEW YORK TO NORTH BRAZIL

REGULAR FREIGHT SERVICE

Full particulars of sailings and closing dates, freight and insurance, can be obtained from any of the addresses given below— LAMPOR & HOLT LINE Ltd. Royal Liver Building, Liverpool 85, Gracechurch Street, London, E.C.3 64, Cross Street, Manchester Briksiana House, Leeds Road, Bradford and 24, State Street, New York

BLUE STAR LINES

EXPRESS LINER SERVICES WEST INDIES and SPANISH MAIN SOUTH AFRICA AUSTRALIA BRAZIL & ARGENTINA

Sailings, Freight, Insurance and Passages, apply— BLUE STAR LINE LONDON, 31-33, LIME ST. E.C.3 BIRMINGHAM and MANCHESTER LIVERPOOL—LAMPOR & HOLT LINE LTD., GLASGOW: J. B. NOWERY & CO. Chief Passenger Office: 3, Lower Regent St., S.W.1

ELLERMAN LINE HARRISON LINE

JOINT SERVICE NEWPORT, GLASGOW & BIRKENHEAD TO CAPETOWN, MOSSEL BAY, PORT ELIZABETH, EAST LONDON, MAURITIUS, DURBAN, LOURENCO MARQUES and BEIRA

Particulars of Sailings, etc., from the Agents— Staveley Taylor & Co., Messy Chambers, Liverpool (Loading Brokers), Gellatly, Hankey & Co., Ltd., London, Jones, Heard & Co., Ltd., Newport, Mon. H. Spencer Yates, Birmingham, J. W. Jones & Sons, Manchester, E. Thomas & Co., Bradford, C. Shaw Lovell & Sons, Ltd., Sheffield, Morison, Folletton & Blair, Ltd., Preston and Bradford, Burgess & Co., Ltd., Swansea. Or the Owners: Thos. & Jas. Harrison, Liverpool & London, Hall Lines, Limited, Liverpool, The City Line, Ltd., Glasgow, C.2

Cargo bookings are only made conditional upon the vessel named herein, or if no vessel is named a suitable vessel being available for the voyage and is subject to any direction or control by the British Government.

DENE SHIPPING CO., LTD.

Shipowners Regular Line— RIVER PLATE/AVONMOUTH Head Office— 25, ST. MARY AXE, LONDON, E.C.3 AVENUE 4410 Also at PORTFIELD HOUSE CARDIFF DOCKS

P.S.N.C.

To WEST COAST SOUTH AMERICA via HAVANA

NEW FAST SERVICE CUBA, COLOMBIA, ECUADOR, PERU & CHILE M.V. SALAVERRY Receiving Aug. 12 to Aug. 26 M.V. SANTANDER Receiving Aug 26 to Sept 9 Loading Berth: No. 1, North Canada Dock, provided with full haulage facilities.

THE PACIFIC STEAM NAVIGATION COMPANY

LIVERPOOL—Pacific Building, James Street (2) LONDON AGENTS—Royal Mail Lines, Leadenhall St., E.C.3; FREIGHT—MCGREGOR, GOW & HOLLAND, LTD., 20, Billiter St., E.C.3

PORT LINE

SERVICES from UNITED KINGDOM & NEW YORK AUSTRALIA & NEW ZEALAND

For further information apply to— PORT LINE, LIMITED CUNARD HOUSE, 88, LEADENHALL ST., LONDON, E.C.3 Telephone: AVENUE 1270

UNITED STATES LINES

AMERICA FRANCE LINE, ORIOLE LINE, AMERICAN MERCHANT LINES, AMERICAN HAMPTON ROADS LINE.

REGULAR FREQUENT FREIGHT SERVICE TO NEW YORK & BOSTON

From LONDON Receiving Cargo \*STEAMER ... Aug 25—Sept. 4

\*PAUL BUNYAN ... Sept 12—Sept 18 Loading Berth: No. 22 Shed, Royal Albert Dock

From MANCHESTER

\*AMERICAN FORWARDER Aug 22—Aug 30 Loading Berth: No. 2 Shed, No. 9 Dock, Salford

From LIVERPOOL

\*KROSNO Aug 22—Aug 29 \*AMERICAN FORWARDER Aug 30—Sept 5

\*PAUL BUNYAN ... Sept 7—Sept 12 Loading Berth—N.E. No. 2 Gladstone Dock

From BELFAST

\*AMERICAN FORWARDER Sept 2—Sept 6

\*STEAMER ... Sept 16—Sept 20 Loading Berth: No. 3 Dufferin

From GLASGOW

\*STEAMER ... Sept 5—Sept 10

\*STEAMER ... Sept 26—Oct 1 Loading Berth: 6 Yorkhill \*New York only \*Boston and New York \*Via Belfast \*Via Manchester, Liverpool and Belfast

Also from SOUTHAMPTON, HULL, BRISTOL CHANNEL, and EAST COAST PORTS

CONTINENTAL SAILINGS

For New York only Closing GEORGE M. VERITY from Havre Sept 1

CHARGES from Havre Sept 9 BELFAST—Henry Gowan & Co., Scottish Provident Bldgs., 7, Donegal Square West, Belfast (Tel. No. Belfast 2581) MANCHESTER—Herbert Watson & Co., Ltd., 2 Bank Street, (Tel. No. Blackfriars 588) ROTTERDAM—Rotterdamse Oceaan Scheepvaart Maatschappij, Westzijdijk, 104. Agents at ALL Principal Ports

For full particulars, apply to:— LONDON—38, Leadenhall Street, E.C.3 (Tel. No. Royal 5677) LIVERPOOL—Wellington Bldgs., 7, The Strand (Tel. No. CEN. 1931-6) PARIS—10, Rue Auber ANTWERP—61, Rempart St. Catherine GLASGOW—W. B. Woolley & Co., Ltd., 172, West George Street, G2 (Tel. No. Cent. 0554) BELFAST—Henry Gowan & Co., Scottish Provident Bldgs., 7, Donegal Square West, Belfast (Tel. No. Belfast 2581) MANCHESTER—Herbert Watson & Co., Ltd., 2 Bank Street, (Tel. No. Blackfriars 588) ROTTERDAM—Rotterdamse Oceaan Scheepvaart Maatschappij, Westzijdijk, 104. Agents at ALL Principal Ports

UNION-CASTLE LINE

SOUTH AFRICA WEST & EAST AFRICA MAIL SERVICE to Capetown, Port Elizabeth, East London and Durban

INTERMEDIATE SAILINGS TO WEST, SOUTH AND EAST AFRICA

Lofto, Walvis Bay, South African Ports (including Mossel Bay), Lourenco Marques, Beira, Mauritius and East African Ports to Mombasa Direct Cargo Service—New York—S.



BRAZIL, URUGUAY AND ARGENTINA

From Liverpool Bahia, Rio de Janeiro, Santos & Rio Grande 1st-half Sept.

From London Buenos Aires; (also Rosario with transhipment) Early Sept.

m.v. DURANGO (Rio de Janeiro, Santos, Montevideo & Buenos Aires) (also Rosario with transhipment at Buenos Aires) 1st-half Sept.

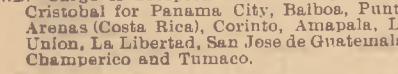
m.v. DRINA (Buenos Aires) 2nd-half Sept.

WEST INDIES From London S.S. SAMAKRON Bermuda, Nassau & Kingston (Jamaica) 1st-half Sept.

SPANISH MAIN, CENTRAL AMERICA AND NORTH PACIFIC From London La Guaira, Curacao (also Maracaibo with transhipment at Curacao), Barranquilla, Cristobal, Los Angeles Harbour, San Francisco, Victoria and Vancouver, via Panama Canal

VESEL N.B.—Cargo is accepted with transhipment at Cristobal for Panama City, Balboa, Punta Arenas (Costa Rica), Corinto, Amapala, La Union, La Libertad, San Jose de Guatemala, Champerico and Tucumac.

Approximate closing dates on application to ROYAL MAIL LINES, LTD. LONDON: Royal Mail House, Leadenhall St., E.C. 3 LIVERPOOL: The Pacific Steam Navigation Co., Agents, Pacific Building, James Street (2)



ArdenT LOUD HAILER (ELECTRIC MEGAPHONE) SPEECH RANGE - 1 MILE WRITE ARDENTE GUILDFORD

OFFICIAL NOTICES

PRIZE COURTS

IN THE HIGH COURT OF JUSTICE PROBATE, DIVORCE AND ADMIRALTY DIVISION

Take notice that WRITS which have been issued and served in ACTIONS which have been instituted in the PRIZE COURT, namely, in the High Court of Justice, Probate, Divorce and Admiralty Division, by His Majesty's Procurator-General, against the Owners and Parties interested in the SHIPS specified below.

August 19th, 1946 S.S. "WESERBRUCK" Ship only (2220)

August 21st, 1946 S.S. "DR. HEINRICH WEGAND" Ship only (2195)

August 22nd, 1946 S.S. "TIMANDRA" Ship only (2221)

Appearances to the above Writs should be entered in 30 days from the dates specified.

L. F. C. DARBY, Registrar Registry of the Prize Court, Royal Courts of Justice.

PROPOSAL TO CHANGE A SHIP'S NAME

WE, THE HOME LINE, LIMITED, of Exchange Buildings, Quayside, Newcastle-on-Tyne, HEREBY GIVE NOTICE that, in consequence of change of ownership, we have applied to the Ministry of Transport, under Sect. 47 of the Merchant Shipping Act, 1894, in respect of our ship "EMPIRE GULF," of Newcastle, official number 149446, of gross tonnage 6401 tons, of register tonnage 3863 tons, heretofore owned by Ministry of Transport, of Berkeley Square House, W. 1, for permission to change her name to "LARISTAN," to be registered in the said new name at the Port of Newcastle, as owned by The Home Line, Limited.

Any objections to the proposed change of name must be sent to the Registrar-General of Shipping and Seamen, Llantrisant Road, Cardiff, within seven days from the appearance of this advertisement. Dated at Newcastle this 26th day of August, 1946.

COMMON BROTHERS, LTD., Managers.

PROPOSAL TO CHANGE A SHIP'S NAME

I, WILLIAM SCOTT, of Oriol Chambers, 27, High Street, Hull, HEREBY GIVE NOTICE that, in consequence of a condition of sale agreement, I have applied to the Ministry of Transport, under Section 47 of the Merchant Shipping Act, 1894, in respect of my ship "EMPIRE FATHOM," of Hull, official number 180934, of gross tonnage 411 tons, of register tonnage 190 tons, heretofore owned by the Ministry of Transport, Berkeley Square House, Berkeley Square, London, for permission to change her name to "FOSDYKE TRADER," to be registered in the said new name at the Port of Hull, as owned by the B. W. Steamship, Tug & Lighter Co., Ltd., and William Scott.

Any objections to the proposed change of name must be sent to the Registrar-General of Shipping and Seamen, Llantrisant Road, Cardiff, within seven days from the appearance of this advertisement. Dated at Hull this 26th day of August, 1946.

WILLIAM SCOTT.

OFFICIAL NOTICES

[Folio 76] 1946 C. No. 1083

NOTICE TO APPEAR

IN THE HIGH COURT OF JUSTICE ADMIRALTY DIVISION SHIPS "ANTENOR" AND "LLANGIBBY CASTLE"

WHEREAS in an Action of Limitation of Liability instituted in the High Court of Justice on behalf of China Mutual Steam Navigation Company, Limited, against Union-Castle Mail Steamship Company, Limited, the Judge of the Admiralty Division of the said High Court did on the 29th July, 1946, amongst other things, pronounce that in respect of loss or damage to Ships, Goods, Merchandise, or other things caused by reason of the improper navigation of the s.s. "ANTENOR" on the occasion of the collision between that vessel and the motor vessel "LLANGIBBY CASTLE," on the 27th day of March, 1945, the Owners of the said s.s. "ANTENOR" are answerable in Damages to an amount not exceeding £83,078 16s. 0d. (such sum being at the rate of £8 for each ton of the registered tonnage of the s.s. "ANTENOR" with the addition of engine-room space) and such further sum as may be found to be due by the Registrar at the rate of £8 a ton after the remeasurement of the s.s. "ANTENOR"

THIS IS THEREFORE TO GIVE NOTICE to all persons having any Claim in respect of the loss or damage caused as aforesaid, that if they do not come in and enter their claims on or before the 30th September, 1946, they will be excluded from sharing in the aforesaid amount. Dated the 31st day of July, 1946.

Taken out by BENTLEYS STOKES & LOWLESS, 32, Bishopsgate, London, E.C. 2, Solicitors.

LLOYD'S LIST AND SHIPPING GAZETTE

(Established 1734) The Editorial, Advertisement and Publishing Offices of "Lloyd's List and Shipping Gazette" are at LLOYD'S, LONDON, E.C. 3 Telephone: Avenue 7644 (Private Exchange)

LIVERPOOL Office: Mr. A. C. DOUGLASS, 15, Tithebarn Street, Liverpool, 2 Telephone: Central 2034

The Committee of Lloyd's do not guarantee the accuracy of the information contained in LLOYD'S LIST AND SHIPPING GAZETTE, nor do they accept responsibility for errors or omissions or their consequences

WEDNESDAY, AUGUST 28, 1946

High Water, London Bridge ... 03 48 16 02 High Water, Liverpool ... 00 49 13 14 Sun Rises ... 06 04 Sun Sets ... 19 58 Moon Rises ... 07 35 Moon Sets ... 21 04 The above times are B.S.T.

TO-DAY'S WEATHER

Meteorological Office Forecast Advance forecast for the 18 hours ending midnight to-night:—

General inference: A depression is centred South of Iceland and another depression is approaching our S.W. districts from the Atlantic. There will be rain at first in Southern districts followed by local showers. There will be fair periods and showers in the North and in Ireland.

Further outlook for the British Isles: Unsettled conditions persisting with occasional rain or showers in many districts.

MINESWEEPING OFF ICELAND

40th & 42nd Flotillas' Arduous Task

Sixteen minesweepers of the Royal Navy—comprising the 40th and 42nd Flotillas—will shortly be returning from Icelandic waters after completing one of the most protracted and arduous of post-war clearance operations. This work of rendering safe the fishing grounds off the eastern and northern coasts of Iceland has been carried out in all types of weather, while the area covered in the sweeps has extended almost to the limits of the northern ice peak off North Cape.

The flotillas, consisting of H.M. ships Catherine, Elfreda, Galle, Tatbo, Gorgon, Pique, Chance, Fairy, Cynthia, Frolic, Jasper, Combatant, Tourmaline, Steadfast, Foam and Florizel, sailed from their base in North-West Scotland on June 15, formed up off North Rona and began independent sweeps, linking up minefields between North Rona and the Faroes, and thence to Seydisfjord, on the east coast of Iceland. Sweeps were steamed for as long as 36 hours at one time during this first operation.

The next operation was in the notorious Denmark Strait, separating Iceland from Greenland. Here the ships operated in perpetual daylight, but after one fine spell the weather broke up and during their 17 days at sea before returning to Reykjavik the work of the sweepers was much hindered by fogs and gales. The flotillas finally moved to the east coast of Iceland, where further successful sweeps have been carried out. From there they will return to the United Kingdom after a spell of two months in far northern waters.

REDUCING COST OF SHIPS

Sir F. Rebbeck on the Only Way

EMPTY SLIPS & UNEMPLOYMENT

From Our Own Correspondent BELFAST, Tuesday

Speaking at the launch of the motor cargo liner Calchas, which Harland & Wolff, Ltd., Belfast, are building for Messrs. Alfred Holt & Co., Liverpool, Sir Frederick Rebbeck gave his opinion that there was no way of getting the prices of new ships down until there was some evidence of empty slips and men unemployed. Mr. Lawrence D. Holt, replying for the owners, spoke critically of the time vessels were now forced to spend in port.

The vessel was launched from the Musgrave yard of Harland & Wolff, Ltd. The naming ceremony was performed by Mrs. Lawrence D. Holt, who was accompanied by her husband, Mr. Lawrence D. Holt. The owners were also represented by Mr. W. H. Dickie, manager; Mr. H. Flett, naval architect; and Mr. W. N. Harrison, resident engineer. The builders were represented by Sir Frederick Rebbeck, chairman and managing director, Lady Rebbeck, and a number of directors and senior officials.

The fact that the Calchas was the first ship built for Alfred Holt & Co. by Harland & Wolff was referred to by Sir FREDERICK REBBECK when he proposed the toast of the new ship and her owners at a luncheon following the launch. "My only regret," said Sir Frederick, "is that we are not building more ships for them, but I believe we can get more ships if we can satisfy them and at the prices they want to pay."

Speaking of the shipbuilding outlook, Sir Frederick said at the moment ships were being bought because needs must, but once that phase was over they could only get ships if they could offer the prices to attract good shipowners. "I have real concern and anxiety," he declared "over what is going to happen once the position changes from a sellers' to a buyers' market. We must continue to convince owners that we are trying all we can to keep down prices. Our men must also be prepared to believe that we are really trying to keep the cost down in their own interest but I do not think there is any way of getting them down until there is some evidence of empty slips and men unemployed."

Responding Mr. Holt recalled the association between the company and Belfast. The first Calchas, of 6748 tons, he said, was built in 1899 at a cost of £8383 and the second in 1921 by Workman Clark at a cost of £632,000. The Calchas launched that day was of 8250 tons and 153 knots and he did not dare to speak of the cost in her case. "We have immense respect for what you in Belfast can do in the way of building ships," he added, "and we want to feel linked with all the sources of strength in the country."

TIME WASTED IN PORT

Mr. Holt went on to describe the difficulties of shipowners. Before the war, he said, the Nestor averaged 116 days for each voyage from Liverpool to Australia and back, but since the end of the war the average was 204 days. The pre-war average for days at sea was 95 days, now it was 105 days, while the average in port abroad which was once 21 days was now 99 days. During the war it was never less than 41 days. "That is a good picture of what is happening throughout the fleet," he said. "It is scandalous, and the Government ships are worst of all. What we want is a committee of the best people in the land to see what is wasted."

"Why should we be short of anything? There is any number of ships to bring goods here, but they are just being kept idle. Ships are kept a fortnight at Singapore doing nothing but growing weeds on their bottoms, and then they have to be put in dock to get them off. We must make it a priority job to stop waste wherever we can and make everyone join in production before we can possibly hope for better consumption."

Mrs. Holt was presented with a gift to mark the occasion.

The Calchas is a single-screw motorship 485 ft. in length overall, 450 ft. b.p., 62 ft. in breadth, and 35 ft. in depth. Her gross tonnage, though not given in the official description, is understood to be about 9000. Of a high-class cargo-liner type, with accommodation for 12 passengers, she has two masts and a single funnel and four large main cargo holds. The accommodation for officers and European crew is amidships and for native crew aft. The propelling machinery consists of a double-acting eight-cylinder two-cycle Harland-B. & W. diesel engine of the builders' latest type, having exhaust pistons of the same diameter as the main working pistons. The diameter of the main and exhaust cylinders is 550 mm., the stroke of the main pistons being 1200 mm. and the stroke of the exhaust pistons 400 mm., the latter being attained by eccentrics.

CRACKED ASPHALT AS FUEL

Another Anglo-Saxon Experiment

From Our Own Correspondent

JARROW, Tuesday

When the turbo-electric tanker Helicina leaves the Wallsend yard of Swan, Hunter, & Wigham Richardson, Ltd., for trials in October her boilers will be fired with a fuel consisting of a cracked asphalt, which has hitherto been a waste product. The Helicina will be the second vessel in which experimental use has been made of a low-grade fuel by the Anglo-Saxon Petroleum Company, Ltd., with the object of securing economy in running costs. With the economies achieved, the company intend to carry out all possible improvements in crew accommodation. In the Helicina, for example, each member of the crew will have a cabin for himself.

The work of adapting an oil-burning unit for the more viscous fuel is being carried out on behalf of the Anglo-Saxon Petroleum Company, Ltd., by Swinney Brothers, Ltd., of Morpeth and North Shields, who are suppliers of the standard units normally used in the company's steamers. A boiler of the type to be used in the Helicina is in Messrs. Swinney's hands, and it is understood that the problems inherent in the use of a highly viscous fuel for steam-raising have been overcome.

The Helicina, which was launched on Apr. 4, will have a carrying capacity of 17,600 t.d.w. Her turbo-electric propelling machinery will be of 13,000 h.p., and will give her a speed of 17 knots.

THE "AURICULA'S" PROGRESS

Experimenting with a Reduced Air Supply

By Our Shipbuilding Correspondent

Reports received from the motor tanker Auricula, which has now been at sea for 11 days on her maiden voyage to Curacao, continue to show that her modified diesel machinery, in which a low-grade boiler oil is being used as fuel, is running without trouble. During the last few days the experiment of "starving" the engine by cutting down the supercharger air supply has been carried out to obtain data of her performance under bad conditions. In the course of this experiment first one, then two, and finally three, of the four supercharger air intakes were blanked off. Mr. John Lamb, marine superintendent of the Anglo-Saxon Petroleum Company, Ltd., has expressed himself satisfied with the record of her performance.

The Auricula's present voyage is being made on a boiler fuel of Venezuelan origin colloquially known as "Ordoil," having a maximum viscosity of 1500 sec. Red. I at 100 deg. F. On her next voyage she will use a much coarser oil, of a variety known as "Transoil," which has a maximum viscosity of 3000 sec. Red. I at 100 deg. F.

NEW SUBMARINE CABLE TO GERMANY

Longest Laid Since the War

The longest submarine telephone cable between this country and Europe has been laid, since the end of the war, by the British Post Office. The cable, which goes direct to Germany, is 200 nautical miles in length and provides five telephone circuits, or four telephone and 18 telegraph circuits. As originally laid it provided only one telephone and six telegraph circuits, but the additional circuits have been made possible by the inclusion in the cable of a special submarine repeater, which has been developed by the Post Office engineers.

RECENT WILLS

Mr. Charles Harry St. John Hornby, of Chantmarle, Cattistock, Dorchester, Dorset, formerly of Shelley House, Chelsea Embankment, London, S.W., a managing director of W. H. Smith & Son, Ltd., and an underwriting member of Lloyd's, who died on Apr. 26 last, left £1,005,725 gross, with net personalty £956,237, on which estate duty of £632,761 has been paid.

Mr. James Henry Catlow, J.P., of 84, Cambridge Road, Southport, Lancs., shipper and cotton manufacturer, and of Lloyd's, formerly of Darwin, who died on Feb. 19th last, aged 80 years, left £32,362 gross, with net personalty £22,324.

Mr. Alexander Kenneth Sowter, of 37, Leigh Gardens, Leigh-on-Sea, Essex, engineer and marine surveyor, a member of the Society of Consulting Marine Engineers and Ship Surveyors, who died on Apr. 16 last, aged 66 years, left £1993 gross, with net personalty nil.

AUSTRIAN TRADE DELEGATION

Following the recent signature of a Payments Agreement with Austria and the relaxation of the Trading with the Enemy restrictions so as to permit resumption of current trade, an official Trade Delegation from Austria is on a visit to this country for general discussions with the Board of Trade about the possibilities of developing trade between the two countries. A further statement will be issued on the conclusion of the talks.

FREE PORT IN U.K. PROJECT

Liverpool's Opposition

From Our Own Correspondent

LIVERPOOL, Tuesday

At a meeting of the Liverpool Chamber of Commerce to-day consideration was given to the suggested creation of a free port in the United Kingdom. The Chamber voiced its opposition to the scheme, which was described as "highly fantastic."

Mr. H. ALLAN, chairman of the Transport Committee, said the suggestion was originally brought to light when the Chamber was asked by the Association of British Chambers of Commerce to be represented at a meeting in London with Government officials, following a Press campaign in South Wales. The whole matter had been fully and ably discussed from every possible angle, and the conclusions of the sub-committee were unanimous. The only point which found any favour whatever was the claim that it would provide employment.

"We in Liverpool," he said, "would be the last people in the world to vote against any project that would find jobs for the unemployed but the whole thing is so problematical and suggests such a terrific gamble that your sub-committee decided that the head must overrule the heart and common sense not give way to sentiment. I would suggest to the President of the Board of Trade that his department would be better occupied in clearing up the mess which they claim to have inherited from the previous Government in giving us a little less of "thou shalt not" and a few more of the luxuries, even necessities, of life, instead of producing still-born ideas such as the creation of a free port for Britain."

Mr. Allan added that a free port at the best could only be described as highly fantastic.

DIFFICULTIES OF CREATION

A report submitted to members of the Chamber stated that the difficulties of creation were concrete and easily expressed. Physical and police barriers round such a port must be complete and effective and it must have within its enclosure or readily available all the facilities of manufacture as well as of handling. Speed of creation was also essential. Post-war international trade would find its own channels and facilities from which only a heavily subsidised new free port could hope to divert it. Adequate facilities existed for transhipment or re-export in the ports of Great Britain under their present status.

The report added that a considerable part of the cost of creating and operating a free port so as to make it sufficiently attractive was certain to fall on the public, which would not reap any benefit for some time to come and would in any event be financing a gamble. Direct shipping services were essential to the success of any free port. Any diminution of such a service—very probably in the use of a British port for continental entrepot trade—was bound to result in increased freightage charges, with consequent higher general cost and greater risk in the entire project.

The Chamber passed a resolution to the effect that it was of opinion that the risks and difficulties involved did not justify the creation of a free port.

RAILWAYS TO BURN OIL

Conversion of 1200 Engines Authorised

The Minister of Transport has authorised the main line railway companies to proceed as quickly as possible with the conversion of locomotives from coal to oil, the number involved being 1200. The programme, when completed, will give a saving of coal estimated at 20,000 tons per week or one million tons a year.

The number of engines to be converted, by the individual companies are: G.W.R. 172, L.N.E.R. 450, L.M.S. 485, and S.R. 110. Only heavy duty locomotives which consume the largest amount of fuel will be selected for conversion. It will be necessary to operate them from depots where fuel storage tanks will be installed.

The three main features of the scheme are the equipment to be fitted to the locomotives, storage installations in the locomotive depots and tank wagons required for transporting the oil from the ports to the depots. The Ministry of Supply is giving every possible assistance in the provision of the material necessary for equipment and storage tanks. A considerable tonnage of steel will be required, and complete standardisation of some of the parts is impossible owing to the fact that different types of engines are involved. Each of the main line railways will carry out its own work of conversion with the equipment supplied. No difficulty is expected in obtaining the required number of tank wagons for transporting the oil, but they will require to be fitted with steam heating coils to keep the fuel fluid.

For more than a year the G.W.R. has carried out valuable research work in the use of oil fuel for locomotives, and are now operating a number of oil-fired engines for both passenger and goods trains, with successful results. The experience gained will be invaluable to the engineers of other companies in their joint effort to save coal.

TERRITORIAL REUNION

53rd A.A. Regiment R.A.

It is proposed to hold a reunion of all past and present members of the 53rd A.A. Regiment R.A. at the unit's new drill hall at the White City during November next. As will be remembered the regiment was recruited in 1922-3 from insurance companies, banks and Lloyd's, each of which supplied a battery. This will be the first opportunity on which it has been possible to arrange a reunion since the cessation of hostilities and it is confidently expected that there will be a very large attendance of those who have been connected with the unit.

In order to assist in the satisfactory organisation of the reunion it is necessary that a reasonably accurate estimate be made of the numbers intending to be present, and it is requested that all past and present members of Lloyd's Battery who wish to attend should send an intimation to this effect, together with their present private and business address, to 159 (Lloyd's City of London) A.A. Battery R.A., Lloyd's, London, E.C. 3. Any action which ex-members of the battery can take to advise their ex-comrades of this gathering will be appreciated.

Obituary

MR. ALFRED RODGER

We regret to announce the death, at the age of 70, of Mr. Alfred Rodger, a former director of James Steele (Insurance), Ltd., and an annual subscriber to Lloyd's since 1920. Mr. Rodger was connected with Messrs. Fleming & Galbraith, insurance brokers for nine years, prior to joining Messrs. James Steele (Insurance) in 1903, and was a director of the latter firm at the time of his election as an annual subscriber. Mr. Rodger, who retired in March, leaves two daughters. The funeral will be held at Christ Church, Wanstead, to-morrow at 10 a.m.

MR. W. J. BLYTHE

Mr. William James Blythe, who was for 30 years a Tyneside marine engineer, died in Sunderland at the week-end. When he was 15 Mr. Blythe left his native St. Bees, Cumberland, to join the Wallsend Slipway & Engineering Company, Ltd. After serving his apprenticeship he went to sea as an engineer, leaving in 1914 to join a firm of consulting and marine engineers, of which he became a partner. Mr. Blythe retired from the firm, Messrs. Wilson & Blythe, of Newcastle, in 1943.

FISH IMPORT DUTIES REIMPOSED

At present the import duties on fresh fish and fresh shell fish are suspended by Import Duties Orders that expire on Aug. 31, 1946. It has been decided that these Orders will not be renewed on expiry. Therefore the duties will operate again from Sept. 1, 1946.

JAPANESE WHALING DECISION

Australia to Protest

CANBERRA, Tuesday

Mr. Chifley (Prime Minister of Australia) stated to-day that he had asked Mr. Ball (British Commonwealth representative on the Allied Control Council for Japan) to place before General MacArthur (Supreme Allied Commander in the Pacific) Australia's views on the proposal that the Japanese should resume whaling in the Antarctic. Mr. Chifley said that Australia felt she should have been consulted on the matter as a signatory of the International Whaling Agreement.—Reuter.

"AMERICAN RANGER'S" SERVICES TO SISTER SHIP

U.S. Lines Make Cash Awards

NEW YORK, Tuesday

Cash awards totalling 21,800 dollars (£5450) have been awarded to the master and crew of the American Ranger for their services to the American Farmer when the latter vessel was damaged by collision in the Atlantic early this month. The awards were made in New York by Mr. John Franklin, president of the United States Lines, owners of the two sister-ships.—British United Press.

The passenger motorship Princess Victoria, built by William Denny & Bros., Ltd., Dumbarton, for the L.M.S. Railway Company, and intended for the Larne-Stranraer service, was launched yesterday.

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FREIGHT MARKETS

No Contraction in Demand

By Our Own Correspondent THE BALTIC, Tuesday Although the amount of free tonnage available remains limited, a large number of orders continue to be circulated. On time charter a large steamer has been fixed for six months' Australian coastal trading at 19s. 6d., while there are reports of 17s. 6d. having been paid for the trip out from this country to the Eastern Mediterranean.

In the North American department an interesting development has been the announcement of the UNRRA heavy grain programme for September. Vessels of about 8500 tons 10 per cent. are required from Albany to Bremen at \$12.70, from Houston to Shanghai at \$26, from Port Arthur also to Shanghai at \$26, from Galveston to Trieste at \$17.10, from Galveston to Gdynia at \$16.40, from Galveston to Greece at \$17.80, and from New Orleans to Gdynia at \$16.40, all with free discharge. There is an active inquiry for September loading for coal from the Northern Range for various destinations, usually at the rates recently indicated, while an American steamer is reported to have been taken for coal from Portland (Oreg.) to New Zealand at \$15.75.

A vessel of any size is wanted for lawful merchandise from 1/2 ports Philippines to 1/2 ports West Italy for the first half of September, the rate indicated being \$175,000 to \$185,000 f.i.o. basis for about 450,000/500,000 cu. ft. bale, while a September vessel of 3000/5000 tons is wanted for Sept. 1-15 loading for copra from Manila to Antwerp at \$35 on berth terms.

Business in other directions remains quiet, despite the active inquiry. Many orders are quoting for phosphate from the Red Sea ports to Australia, and tonnage might be worked for a similar cargo from Bona. A handy-sized ship has been chartered for pyrites from Huelva to Antwerp or Rotterdam at the slightly lower rate of 29s., while a small timber carrier is reported fixed from Finland to Jersey at 220s. per standard. It is understood that a considerable volume of tonnage is being directed to lift timber cargoes from the Baltic and White Sea ports for this country at the schedule rates.

FIXTURES PORTLAND (Oreg.) TO NEW ZEALAND.—American str., about 8000 t., 10 per cent., \$15.75 per ton, coal, early Sept. HUELVA TO ANTWERP OR ROTTERDAM.—Str., 5600 t., 29s. per ton, pyrites, option Hamburg or Bremen 31s. 6d., early Sept. FINLAND TO JERSEY.—Str., 185/200 stds., 220s. per std., d.b.b. TIME CHARTER.—Empire Mauritius, 5094 t.a.r., 19s. 6d. per t.d.w., delivery New Zealand re-delivery Australia, six months' coastal trading, Sept. 2-20.

PROVINCIAL REPORTS

LIVERPOOL, Tuesday Limited tonnage availability with numerous cross-sea requirements give the market steady conditions. A steamer has been fixed for 40,000 qrs. Montreal grain to United Kingdom at 10s. 9d. for September, and timber cargoes are moving from Eastern Canada to United Kingdom at schedule rates. Northern Range coal shows continued interest to Europe and South America and coal offers Portland (Oregon) to Auckland at \$16 for September. Fixtures:— ISTANBUL TO ITALY.—Str., 4800 t., 40s., f.i.o., Turkish rye, spot, SPAX TO SETE.—4000 t., 22s. 3d., phosphate, late Sept. ANTWERP TO ORAN.—Str., 3000 t., 21s. 6d., coal, early Sept.

CARDIFF, Tuesday New business includes an order for Freetown, but foreign demand generally is slow. Very little home coasting trade offers.

SWANSEA, Tuesday Very few new orders are quoted for the nearer foreign trades and business for more distant destinations is extremely restricted. Coastwise operations are also affected.

NEWCASTLE, Tuesday North European inquiries circulate freely but transactions are severely checked by the paucity of cargoes released; tonnage offers sparingly.

HULL, Tuesday Outward coal cargoes continue to be extremely limited for all destinations. However, tonnage is not pressing and the nominal tone of the market is firm. The local representative of the Control Commission requires handy-size tonnage for Portugal and Sweden as well as large tonnage for Italy. Fixtures:— TARRAGONA (ldg. Humber).—2000 t., 28s. 6d., Sept. 7. WEST ITALY (ldg. Humber).—2000 t., 26s. 3d., Sept.

GLASGOW, Tuesday Scandinavian and African operators are engaged "facilitating" the shipment of the allocations—for that is all their work now amounts to, and otherwise the market is very dull in these sections. Coastal traffic remains a trickle, Eire and the dockyards taking their usual quotas. A good offtake of bunkers has been of some assistance recently.

MONEY MARKET

A Large Turnover

There was quite a good turnover in Lombard Street yesterday, with the result that credit supplies were by no means plentiful, due to T.D.R. and Treasury bill payments. In addition one of the banks was calling in. Nevertheless overnight loans were arranged at 1/2 per cent., and no further assistance from the special buyer was necessary. In the discount market there was a fair inquiry for Treasury bills on the part of the banks. Foreign exchange rates and silver prices were unaltered.

STOCK EXCHANGE

Uncertain Tendency

The Stock Markets remained quiet, and prices continued to display irregularity. Oil shares were supported at the outset, but failed to maintain the whole of their early advance, and there were a few bright spots in the mining markets.

In the gilt-edged section movements among British Government stocks were again small. The 3 per cent. War Loan at 106 9-16 and the 4 per cent. Funding at 118 7-16 were each 1-16 down, but gains of 1-16 were shown in the 3 1/2 per cent. Conversion to 110 15-16 and Local Loans to 100 1/2. Home railway Ordinary stocks were in quiet demand and closed with a firm appearance, Great Western at 56 1/2 and Southern Preferred at 71 1/2 were each 1/4 up, while the Deferred put on 1/4 to 20 1/2 and North Eastern Preferred a like amount to 5 1/2.

Shipping issues were fairly active, but usually prices fluctuated within narrow limits, and on balance the only quotable change was a rise of 3d. to 4s. 6d. in Aviation and Shipping. Cunard changed hands several times at 34s. to 34s. 6d., Elder Dempster at 43s. to 43s. 6d. and P. & O. Deferred either side of 58s.

Quieter conditions ruled in the market for commercial and industrial issues. Cable and Wireless receded 1/2 to 1 1/2, while Dunlop weakened 9d. to 74s. 6d., Imperial Chemicals 4 1/2 d. to 44s. 7 1/2 d., Imperial Tobacco 1-32 to 7 27-32, Leyland 1-16 to 5 3-16, Marks & Spencer 3d. to 81s. 6d. and Woolworth 9d. to 94s. 3d. Dennis advanced 1s. 6d. to 35s.

Oils closed firmer on balance. Shells improved 1-16 to 4 31-32, Trinidad Leaseholds 1-32 to 6 1-32, British Borneo 2s. to 33s. 9d., United British 1s. to 31s. 9d., Anglo-Ecuadorian 9d. to 39s. 3d., and Canadian Eagle 10 1/2 d. to 35s., but Anglo-Iranian weakened 1-32 to 5.

REPORTS AND DIVIDENDS

GENERAL AIRCRAFT LIMITED.—Dividend of 7 1/2 per cent., actual, less tax, for the year 1945, against 5 per cent. for the previous year. The profits amounted, before taxation, to £52,275 (£91,189). The net available profit after taxation was £32,275 (£48,189).

MERCANTILE BANK OF INDIA, LTD.—An interim dividend of 4 per cent. actual, less tax, has been declared on the "A," "B" and "C" shares for the year ending Dec. 31, payable on Sept. 24, compared with interim payments of 3 per cent. actual, less tax, for each of the two previous years.

COMMODITIES

GRAIN

LONDON (Baltic Exchange), Tuesday WHEAT.—Small offers of Canadian grades were submitted to the Control at unchanged prices. Quotations: No. 1 Northern Manitobas for Aug. shipment from St. Lawrence, 174c.; from West St. John-Halifax, 175 1/2 c.; from Baltimore or Philadelphia, 178 1/2 c.; from New York, 179 1/2 c. per bushel, f.o.b. No. 2 grade, 3 cents less in each case. Australian, Aug. Sept. in bulk, 71s. per 480 lb., f.o.b. MAIZE.—Argentine firmer but quiet. Nov. shipment from up-River 78s. and Dec. 77s. per 480 lb., f.o.b. From down-River 1s. 6d. more in both cases.

OILS AND OILSEEDS

LONDON (Baltic Exchange), Tuesday OILS.—LINSEED.—Raw 66s. RAPE. Crude 491. COTTON.—Crude 52 2s. 6d. CASTOR.—First 82s.; seconds 80s. GROUNDNUTS and SUNFLOWER.—Crude 56 10s. per ton. ROBIN.—American grades F to M, 47s.; WG, 48s. 6d.; WW, 52s. 6d. per cwt. OILSEEDS.—For shipment, CASTOR-SEED.—Bombay 448 per ton. Other oilseeds and groundnuts all unquoted.

FOREIGN PRODUCE

LONDON (Mincing Lane), Tuesday SPICES.—CLOVES.—Zanzibar spot 11 1/2 d. per lb. sellers, c.i.f., Aug./Sept. 10 1/2 d. (buyers' licence), afloat 10 1/2 d. per lb. sellers. PIMENTO.—Spot 1s. 1 1/2 d. per lb. sellers. CHILLIES.—Mombasa spot, 155s. per cwt. sellers. MACE.—West Indian pale spot, 6s. per lb., nominal. JUTE.—Offers withdrawn and prices are unquoted. SHELLAC.—Open market quotations steady but idle on the basis of 375s. sellers per cwt. ex warehouse for F.O.T.N. Pure.

METALS

LONDON (Metal Exchange), Tuesday TIN.—The Directorate of Non-Ferrous Metals supplies tin of 99 per cent. to under 99.75 per cent. at £300 per ton, delivered sellers, plus prices and charges, if any, for grades, sizes of ingots, bars and strip, granulated and small lots; export £357 per ton f.o.b. United Kingdom. TINPLATES.—Home delivery 34s. 3d. basis IC 14 by 20 t.o.t. makers' works; export 38s. to 42s. basis f.o.b. South Wales. COPPER.—Electrolytic and wire bars 484 per ton delivered. COPPER SULPHATE.—98/100 per cent. £33 10s. per ton (less 2 per cent.) in 2 cwt. bags (free f.o.b.). ANTIMONY.—English 99 per cent. £125, and crude 70 per cent. £105 per ton delivered. PIG IRON.—No. 3 Cleveland 169s. 3d. per ton delivered Middlesbrough area.

LAUNCH OF THE "TINTO"

Leith Yard's Work in Hand for Wilson Line

From Our Own Correspondent

LEITH, Tuesday The cargo steamer Tinto was launched this afternoon by Henry Robb, Ltd., Leith, from their Victoria Shipyards, the naming ceremony being performed by Mrs. J. W. Bayley, wife of the managing director of Ellerman's Wilson Line, Ltd., Hull. The Tinto, which will be principally employed on the Wilson Line's Baltic service, is 280 ft. long, 42 ft. in breadth, and 25 ft. 3 in. in depth. She is of the shelter deck type, with four cargo hatches, and has a carrying capacity of about 2050 tons d.w. Accommodation will be provided for a limited number of passengers. Special consideration has been given to the accommodation in the seamen's and firemen's quarters. The propelling machinery will consist of steam engines which will give a speed of 13 knots.

In proposing the toast of "The Owners," Mr. HENRY ROBB said that the Tinto was the first of a number of vessels his firm had in hand for the Ellerman's Wilson Line. Mr. Robb declared that his firm was very gratified that these ships had been entrusted to them, for they continued a long association of the Ellerman interests with the old Ramage and Ferguson yard which occupied the site where the Tinto was laid down. Mr. Robb said he had many memories of that association, for he was at one time in charge of the Ramage and Ferguson yard.

The Tinto was originally designed to burn coal, but the owners later decided to change to oil fuel and this change is now being made.

RESUMPTION OF TRADE WITH HUNGARY

Relaxation of Controls

The Trading with the Enemy Department (Treasury and Board of Trade) draw attention to three Orders made under the Trading with the Enemy Act which came into force on Monday, (S.R. and O.'s 1946 Nos. 1432, 1433 and 1434.) Their general effect is to permit trade with the Hungarian State and persons carrying on business in Hungary, and to remove Board of Trade and Custodian control over money or property accruing in consequence of this authorisation. (Hungarian property in the United Kingdom at the date of the Orders and income arising therefrom continue under control.) Further particulars of the arrangements for the resumption of trade relations with Hungary will appear in the "Board of Trade Journal" of Aug. 31, 1946.

The Treasury announce that the text of the Payments Agreement, which was signed with Hungary on Aug. 6 and which came into force on Aug. 26, will shortly be published as a White Paper. Payments in respect of imports from, and exports to, Hungary are to be made in sterling through banking channels. Out payments in Hungary in respect of sterling remittances from the United Kingdom will be effected at the National Bank of Hungary's current rate for sterling, which will be the subject of a further announcement. For the time being, banking relations are restricted to an account of the Hungarian National Bank with the Bank of England, through which all permitted payments will be made, but it is hoped at an early date to permit the resumption of wider banking relations. Further inquiries regarding the Payments Agreement and the application of United Kingdom exchange control to Hungary should be addressed to bankers.

UNDRESSED HIDES AND LEATHER

Transshipment Licences no Longer Required

The Board of Trade announce that as from yesterday transshipment licences are no longer required for undressed hides and skins, and dressed and undressed leather, including scrap and waste. This concession is subject to such conditions as to security for the re-exportation of the goods as the Commissioners of Customs and Excise may impose.

TURKEY TO BUY 21 SHIPS

Purchases from Canada and U.S.A.

CALGARY, ALBERTA, Tuesday Mr. CHEFIK GOCEN, marine superintendent for the Turkish State Shipping Lines, who is now in North America as a member of a Turkish purchasing mission, said that the Turkish Government plans to buy a fleet of 21 vessels from Canada and the United States. The Turkish purchasing mission is concerned with the direct purchase or construction of ships and railroad equipment.—Reuter.

TANKER SOLD TO NORWAY

A new shipping company has been formed at Christiansand under the name A/S. Excelsior (Mr. Einar Rasmussen), with a capital of 800,000k. According to the "Kristiansands Tidende," the company has bought the British tank steamer Moose Mountain Park, 9800 tons d.w., built in 1944. The vessel is being taken over about the end of August and will be renamed Benoit.

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THE COAL TRADE

Special Market Reports

From Our Own Correspondents

CARDIFF Conditions in the steam coal trade are very difficult, sellers being extremely short of free supplies. Home demand alone is exceedingly heavy. Foreign export is very small and is to be further restricted for September, while outlook for later months is very uncertain.

SWANSEA

Trading has not expanded to any appreciable extent as supplies of anthracites generally are very limited. Demand is still circulating freely for popular domestic nuts without, however, much new business being possible, while washed grains are becoming increasingly difficult to procure. Cheaper machine-made cobbles receive good support from home consumers, and the higher classes maintain stable levels. Superior steam smalls are scarce.

NEWCASTLE

Now that collier annual holidays in Northumberland and Durham are practically over, there are hopes of improving output to the end of the year. Long experience has shown that best yield figures usually come in September and onwards; this would make up for the decreases in July, although it should be remembered that over the eight months of this year both counties are up on the corresponding period of last year. Over 1000 more miners are employed in Durham and 700 more in Northumberland than a year ago.

HULL

Outputs continue on a steady basis, but pressure is maintained for every class of coal so that fresh negotiations are difficult. The export section remains quiet, with no prospects of improvement. Only Government orders and a few special cargoes are permitted for bunkers at all docks, and coastwise shipments are up to late average.

PHILADELPHIA TOWING RATES

Harwin Shipping Agency, Ltd., inform us that they have received advice from the Curtis Bay Towing Company, of Baltimore and Philadelphia, that as from Sept. 15 the addendum attached to the present Philadelphia contract is cancelled, the discount changed from 15 per cent. to 10 per cent., and the regular work day established as from 8 a.m. to 4 p.m.

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## MARINE CORROSION

### Under-Water Paints and the Fouling of Ships

#### RECENT INVESTIGATIONS

"Under-Water Paints and the Fouling of Ships, With Reference to the Work of the Marine Corrosion Sub-Committee of the Iron and Steel Institute and the Admiralty Corrosion Committee" forms the subject of a paper read before the Institution of Naval Architects by Dr. J. E. Harris, Professor of Zoology, University of Bristol, and Chairman of the Marine Corrosion Sub-Committee, and Mr. W. A. D. Forbes, Assistant Director of Naval Construction, Admiralty, and Chairman of the Admiralty Corrosion Committee. The authors explained that their paper could be regarded as a sequel to the earlier account, "The Corrosion and Fouling of Ships," by Bengough and Shephard ("Transactions" I.N.A., 1943), in that it traced the development of the work carried out by the Marine Corrosion Sub-Committee and the Admiralty Corrosion Committee since the period covered by the previous statement. They hoped that the substitution of an exact scientific study of the fundamentals involved in the mode of action of anti-fouling coatings would enable rapid progress to be made in the immediate future, without recourse to the empirical methods on which so much of the earlier published work was based. An abstract of the paper is given below.

The Admiralty Corrosion Committee has given active support to the work of the Marine Corrosion Sub-Committee on under-water paints, and has sought to supplement this work also by conducting research and experiment work on kindred problems. Further, the policy of the Committee has been to favour concentration on problems of immediate importance to the Admiralty, and in particular it has sought to promote the development of superior anti-fouling paints by the elaboration of tools which would assist the paint formulator to devise better paints and provide means of readily checking the results. Thus, the Admiralty Corrosion Committee has pressed for the standardisation of leaching rate test methods, and for the development of accelerated methods of carrying out such tests, and has itself conducted both panel exposure trials and, so far as war conditions would permit, full-scale trials of paints in ships. The Committee has also carried out experiments directed towards the development of better means for cleaning the hulls of ships, such as the use of the wet sandblasting method.

The published data on the effect of fouling on the speed and fuel consumption of ships is not very extensive, and exact records are hard to come by. Dr. Bengough and Mr. Shephard, in their 1943 paper, called attention to the importance of maintaining a low fouling rate in warships, pointing out that the skin-frictional resistance of a ship increases rapidly with fouling.

The general account of the fouling process given in the earlier paper of Bengough and Shephard provided a description of the most important fouling forms and of the manner in which they settled on a submerged surface. This account may be supplemented by the Sub-Committee's paper of 1944, which provides a detailed description of the organisms so that they can be recognised when encountered in practice.

Investigations on the biology of these fouling organisms have been concerned with three main lines of study:—

- (a) The seasonal occurrence of the different organisms.
- (b) The sequence of settlement on a fouled surface.
- (c) The sensitivity of the different organisms to anti-fouling poisons.

#### Fouling on a Surface

From the point of view of the shipowner the most important aspect of the fouling problem is the resistance it provides to the propulsion of the ship, which will depend on the volume and type of fouling growths—which determine the irregularity of surface offered to the smooth flow of the water past the plates. A quantitative measure of the amount of fouling on a ship would be very desirable as a means of estimating the propulsive losses involved. The most suitable terms in which such an assessment could be expressed from the biological point of view would be by describing the density of population (i.e. number per unit area), its size and type. Clearly a barnacle which projects outwards from the surface will produce more skin friction than a tube-worm of the same volume, which lies flat, and so on.

Without accurate experiments on the skin friction of colonies of such organisms, however, it would be impossible to convert the observed data into any form useful for the shipowner, and a

different approach to the problem of assessment has therefore been made in the present work.

The purpose of an anti-fouling composition is to reduce or prevent the growth of fouling organisms on the surface to which it is applied. Experiments demonstrate clearly that even such highly sensitive forms as mussels, if they become attached when full-grown, as occasionally happens in raft exposures, can successfully maintain themselves on highly toxic surfaces. Similarly, barnacles which commence to develop on a "holiday" uncoated with anti-fouling paint may, as they grow, cross the toxic boundary and continue successful development even though almost surrounded by the poisonous coating. The only successful method of reducing or preventing growth is therefore by reducing or preventing settlement, and the practical assessment of fouling becomes the much easier problem of assessing the ability of the composition to prevent settlement. Once settlement can occur, growth will proceed at a rate determined by the environmental conditions in the neighbourhood—not to any appreciable extent by the toxicity of the surface—and the surface can be said to be "fouled."

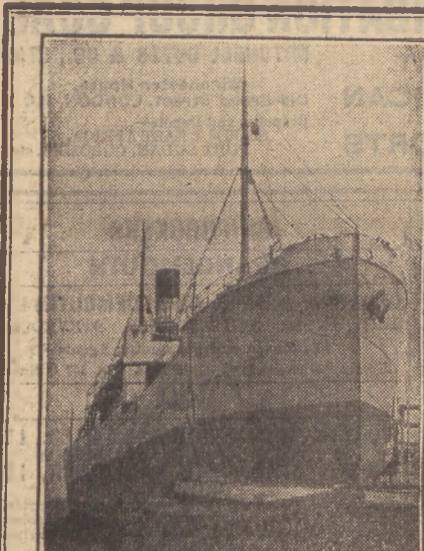
This qualitative criterion of assessment is of the utmost importance, since it permits of easy description and can be applied to any type of fouling organism at any season of the year—it is the composition which is being assessed, not the fouling. The value of the qualitative assessment can, however, be increased by reference to the types of organisms present, which indicate the extent to which the performance of the paint falls short of complete anti-fouling action. A paint which, in a raft test, allows bacterial slime and diatoms alone to grow upon it may be regarded as an ideal anti-fouling composition for a ship, since these forms do not occur to any appreciable extent on ships, and the fact that bacteria and diatoms can grow is an indication that the toxic properties of the paint are not being wasted.

Notwithstanding the remarks made in the foregoing paragraphs, a detailed study of the fouling growths on a ship bottom can yield information of a different type which is of great value. Dr. M. F. Spooner has taken careful records of the sizes, relative frequency and condition of the organisms in samples collected from several hundreds of ships for which the routes and periods of stay in port were known. If the species and approximate growth rate of the fouling organisms is known, and the order of settlement can be established by overgrowth of one form by another, a careful analysis of the data can reveal the approximate history of the fouling of the vessel at intermediate ports of call. These data make it possible to estimate the service life of the anti-fouling composition up to the time when it first failed to prevent settlement of fouling. As this service life may be much shorter than the life of the composition in a raft exposure test, such data provide additional information of great practical importance.

#### Other Factors

We have seen that the main factors governing the settlement of a fouling organism on a test plate are the season of the year (which determines the presence or absence of the settling stage of the organism) and the toxicity of

(Continued on page 5, column 3)



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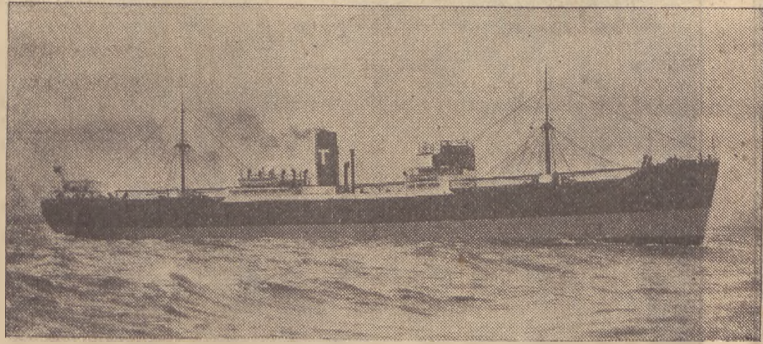
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## Shipbuilding & Engineering Section

### MARINE CORROSION

(Continued from page 4, column 4)

the surface (which may limit the settlement to a few highly resistant species or may eliminate it altogether). There are one or two other features of the settlement which are also of interest.

The colour and texture of the surface is of little or no importance in limiting fouling. A few of the fouling forms have a preference for certain types of surface—pomatoceros, the tubeworm, prefers a relatively smooth surface, the barnacle a relatively rough or even corrugated one. But a heavy fouling settlement will usually cover any kind of surface within a short time. Colour is similarly of little value; many of the organisms settle in darkness—the area below the turn of the bilge is almost in darkness at all times—and only near the waterline would any appreciable effect be anticipated. Here, as might be expected, plant growths predominate, since they are dependent for their existence on relatively high light intensities; the animals (barnacles, etc.) tend to be excluded by the abundance of seaweed in this zone. Even here, however, settlement is very little different on a light or dark coloured surface.

One effect of light (as opposed to the colour of the painted surface) should here be noted. The seaweed growths, particularly that of the green grass-like form, enteromorpha, are much more susceptible to poisons at low light intensities where their growth is less rapid, and a paint which may prevent growth at a few feet below the waterline will permit a luxuriant growth of the weed above this level. The almost invariable fouling of ships by "grass" at the water-line, even when the anti-fouling composition has been carried up to this level, may readily be explained by the above observations, and also by the more rapid breakdown of the anti-fouling coating in and near the wind-and-water zone.

An interesting factor in settlement about which very little has been known is the water velocity at which settlement can occur. It is well known that fouling occurs almost entirely, if not entirely, while the vessel is at anchor or in dock, but this is partly connected with the fact that fouling organisms, since they are essentially colonisers of rock surfaces, only occur in coastal regions. Their free-swimming larval stages are comparatively short-lived and could hardly be expected to occur very far offshore. Nevertheless, evidence from various types of raft tests, including intermittent exposures of extremely short duration, suggests very strongly that not only are most forms like barnacles and tubeworms incapable of settlement at the cruising speed of a ship, but that they cannot settle readily even at speeds as low as those of the tidal current in an estuary. Settlement appears to be almost entirely confined to the period of slack water.

#### Leaching Rate Tests

Realising that the leaching rate test constitutes a most convenient way of ascertaining how methods of manufacture and variations in the ingredients of a paint, both in quality and quantity, affect the anti-fouling qualities, and that the test provides a powerful tool to assist the paint formulator, the Admiralty Corrosion Committee pressed for the standardisation of the method of conducting such tests. It was felt that if the results of such tests were to be comparable, the various organisations and paint-manufacturing firms who would use this method must carry out the test on a similar basis, and the Marine Corrosion Sub-Committee was therefore requested to set up a panel to investigate this question. Dr. Slater was asked to act as convener of the panel and to co-ordinate the work being done on this subject at the Central Metallurgical Laboratory, Emsworth, at the Chemical Department, Portsmouth Dockyard, and at Millport.

An interim descriptive statement of the methods recommended for the determination of both copper and mercury leaching rates has been prepared by the panel and is about to be published. While much further work remains to be done, this statement should afford valuable guidance to manufacturers of anti-fouling compositions in this country. The leaching rate test is independent of location, season of the year, or the existence of fouling organisms, and thus enables preliminary laboratory work in checking the results of paint formulations to proceed without the inevitable delays associated with panel exposures. While no claims are made that the leaching rate test affords an infallible guide to the complete ascertainment of the anti-fouling qualities of a composition when used on a ship, there can be little doubt that the method does provide an indication of the probable effectiveness of a paint. The method is thus a most valuable adjunct to supplement panel exposure tests, but must not be regarded as a complete substitute for such tests. Moreover, the ultimate effectiveness of an anti-fouling paint must continue to be assessed from the results of full-scale trials on ships in service, operating under a variety of circumstances.

It will have been noted that the system used for the leaching test does not employ an anti-corrosive undercoat, since the composition is applied to ground glass, and objections have been raised that such a test is not representative of the behaviour of the complete paint system. It has, however,

been shown that the leaching rate over an anti-corrosive undercoat is not appreciably different from that obtained with the anti-fouling coat alone, when both systems are applied to a ground-glass surface. The use of steel specimens for leaching tests is impracticable; however, with very few exceptions (cases in which rapid corrosion and undercoat failure have broken up the anti-fouling coating sufficiently to render it temporarily "effective"), compositions which fail to attain and maintain the critical leaching value foul rapidly when used in service.

The shape of the curve which results when the leaching rate is plotted against the duration of immersion is of some significance. Most leaching curves show an initial rise or fall and only later attain a more or less steady value. Compositions with slowly rising leaching rates are often found to foul in the early stages immediately after immersion; under such circumstances the fouling will persist, since it can only be poisoned at, and shortly after, the time of settlement. The effect of poisons other than copper cannot yet be fully estimated by leaching tests. Mercury leaching rates, measured by the dithizone technique, do not give a true picture of the rate of loss of mercury from a composition.

The sub-committee is at present working on methods for the analysis of the copper and mercury content of coatings, with particular reference to coatings under actual service conditions. Methods are being developed for taking samples of such coatings while the vessel is still afloat, so that a continuous history of the paint film can be obtained throughout its service life.

An instructive example of the use of the leaching test in investigating the constituents of an anti-fouling composition which are responsible for its successful performance, is provided by a study of 150 experimental paints carried out by the Marine Corrosion Sub-Committee. Using a single type of varnish, composed of a hinder fraction (a rosin-modified phenolic: linseed stand oil with suitable driers), a rosin fraction and naphtha, the effect on the leaching curve was studied on varying:

- (1) The grinding time.
- (2) The total pigment/rosin/binder ratios (with a constant content of cuprous oxide).
- (3) The cuprous oxide and mercuric oxide contents of a composition in which the total pigment/rosin/binder ratio was held constant.
- (4) The secondary (non-toxic) pigment fraction.
- (5) The varnish, by varying the thinner and by the use of a selection of different plasticisers.

(To be continued)

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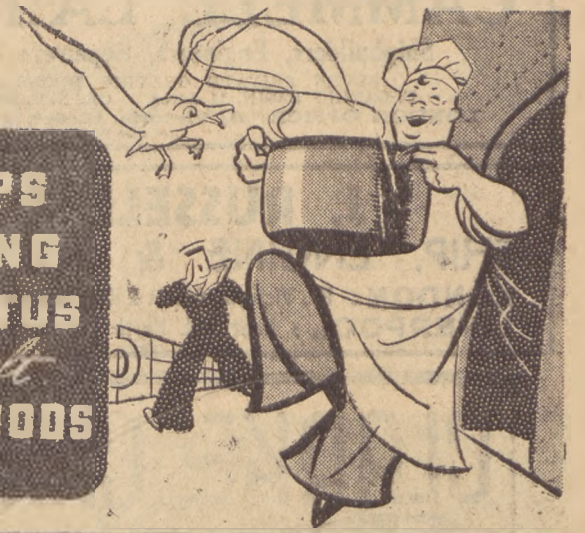
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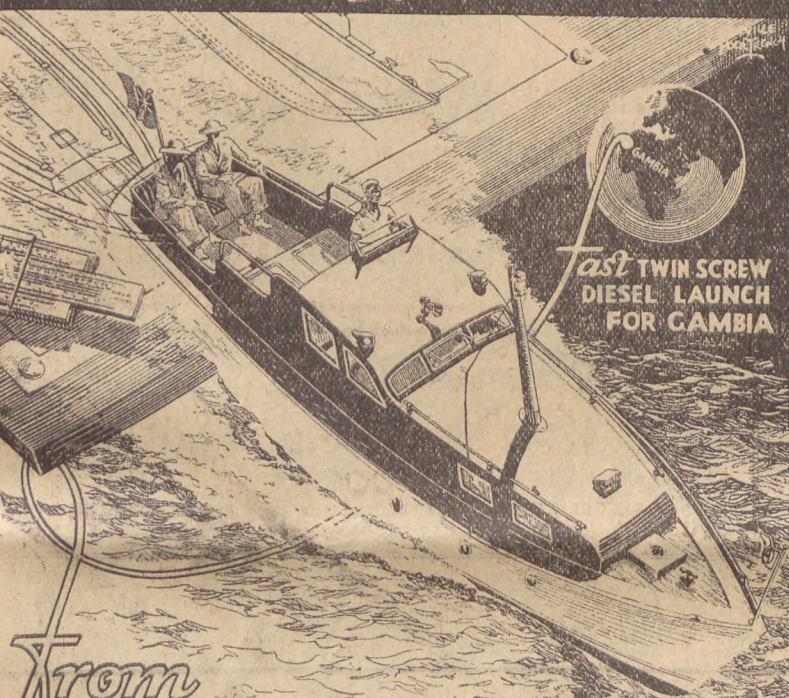
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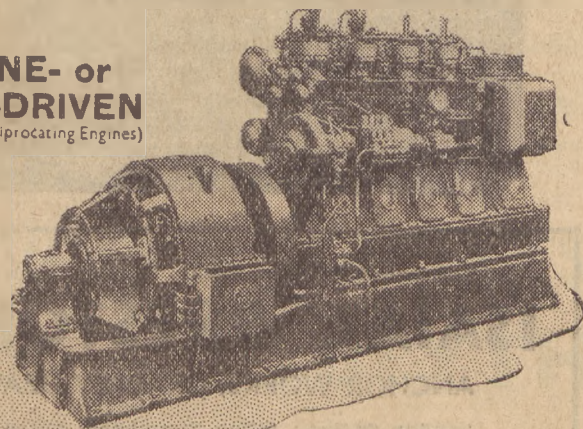
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**Round the Shipyards**

Survey of Work and Prospects

By Our Own Correspondents

**THE CLYDE**

**Yard Conditions after De-scheduling**

GLASGOW, Tuesday

The strike of platers' helpers employed by John Brown & Co., Ltd., Clydebank, continued until late in the week, but was then settled by negotiation, and the stoppage threatened in a number of other yards was averted. The point at issue was settled by the reinstatement of a shop steward, but there was some attempt to challenge the right to reduce squads by dismissals, and this has certainly not been conceded.

A grievance over dismissals at the yard of Scotts' Shipbuilding & Engineering Company, Ltd., was voiced during the week by the shop stewards, but the dismissals had no connection with the transfer to Messrs. John Brown's yard of the cruiser H.M.S. *Defence*, and were, as far as female workers were concerned, in accordance with the request of the Electrical Trades Union. This matter was regarded as but "flag wagging" on the part of the shop stewards, for it is conceded that Scotts' Shipbuilding Company has always been among the most considerate of employers.

Of more importance are the discussions now understood to be proceeding on the conditions to obtain when the Essential Work Order is lifted from the industry. It is expected that this may occur towards the end of the year, for which notice would have to be issued in the course of the next month. Some movement of personnel may result from the "freeing" of the industry, especially, perhaps, in the finishing trades of joiners, plumbers and electricians—which are also urgently needed in house-building—but the negotiations at present in progress are doubtless aimed at limiting such movement. The guaranteed week may be introduced on the lines agreed in the engineering trades, i.e. wages for 34 hours in weeks when the worker is available for employment and no work is to hand, for certain reasons. These latter do not include strikes in other sections, so that the employers hope that a high sense of responsibility may result among operatives, who in addition to the wages guarantee will be assured of seven days' notice of dismissal.

At present the labour supply position is fairly well balanced, with the finishing trades mentioned inclined to persist as a "bottle-neck," but owing to the changed nature of ship repair work since the end of the war a number of ironworkers have been dispensed with. It is expected, however, that with the retirement of workers who continued working beyond the normal age these will soon be re-absorbed.

An interesting launch to-day was that from the yard of William Denny & Brothers, Ltd., Dumbarton, of the 2300-ton motorship *Princess Victoria* for the Larne-Stranraer service of the L.M.S. Railway Company. This vessel will have a speed of 19 knots and accommodation for 1500 passengers and about 40 motor cars. Charles Connell

& Co., Ltd., Scotstoun, have put into the water the cargo motorship *Marjata* built for James Nourse, Ltd., London. The propelling machinery for this vessel will be supplied by Barclay, Curle & Co., Ltd. A completion during the week was that of the *Cape Ortegale*, a cargo motorship built by Lithgows, Ltd., for the Lyle Shipping Company, Ltd.

Work continues actively in the repair yards. Barclay, Curle & Co., Ltd., were engaged on 24 vessels during the week, eight of these being in dry dock. At Govan the Fairfield Shipbuilding & Engineering Company, Ltd., have on hand the *Duchess of Richmond* and the *Tlanstephan Castle* for reconditioning. Alexander Stephen & Sons, Ltd., have four large reconversion jobs on hand, and in addition last week continued repairs on a number of other vessels. Reconversion of the *Canton* will not be completed until well into next year. Efforts are being made to complete the whale-oil refinery *Empire Victory* next month. Of 16 vessels receiving attention by D. & W. Henderson, Ltd., six were drydocked. James Lamont & Co., Ltd., were engaged on repairs to a number of smaller craft.

**THE TYNE**

**Flow of Reconversion Work Continues**

JARROW, Tuesday

Orders continue to be received on Tyneside for the reconversion of big vessels. Those to come include two of the most famous vessels built on the river, the *Monarch of Bermuda* and the *Dominion Monarch*. Building yards as well as repairing yards are now engaged on this class of work which is probably employing more men than shipbuilding. Even more will be wanted in the closing months of the year. The recent agitation for overtime or a double shift has not been extended beyond the double shift put into effect by the Middle Docks & Engineering Company, Ltd., on the whale-oil refinery *Southern Venturer*.

The rise in the cost of steel has been accepted philosophically by shipbuilders and repairers who realise that the steel makers had little or no option in the matter. They appear to be more concerned by the shortage of paint and the tedious form-filling and waiting necessary before it can be obtained. Shipowners are also expressing dissatisfaction.

Among the vessels in the river for repair is the ferro-concrete motorship *Lady Kathleen* which is at the South Shields yard of John Readhead & Sons, Ltd. The *Lady Kathleen* which is 277 ft. in length overall and 42 ft. in beam was built at Newport in 1943 and is a big advance on the concrete ships built in the war of 1914-18. In addition to the hull, the decks, hatch coamings and bulkheads are also constructed of concrete. The *Lady Kathleen* has been running between the Tyne and London and carries both coal and cement.

The Tyne saw the last of the *Berengaria* this week, when the stern section, weighing 3000 tons, was towed from Jarro to Rosyth for final demolition. Its removal will clear the way for any future shipbreaking developments.

Swan, Hunter, & Wigham Richardson, Ltd., have received the motorship *Coptic* (Shaw Savill & Albion Company, Ltd.), built at Wallsend in 1928, for overhaul and repairs. After being in dock for some months the *Beal* and *Wooler* have completed extensive overhaul and reconversion by the Mercantile Dry Dock Company, Ltd., Jarro. Both vessels were placed in one dock, and they have been succeeded by the *Matching*. The *Nikos T.*, which has occupied No. 1 dock for many weeks, will not be finished for about another month. Smith's Dock Company, Ltd., last week dealt with 25 vessels at their North Shields yard, 13 of which were in dock.

**BELFAST**

**Year's Output Likely to be Unusually Large**

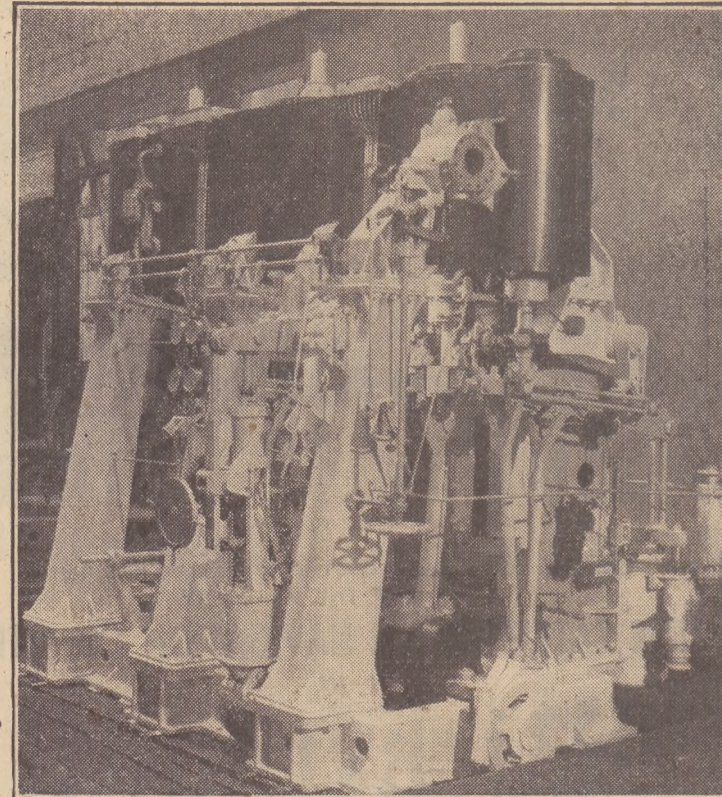
BELFAST, Tuesday

The launch of the *Calchas* for Messrs. Alfred Holt & Co., which took place from the Musgrave Yard to-day, was the 10th of the year from the Belfast establishment of Harland & Wolff, Ltd. The *Calchas* is a fast cargo liner of 9000 tons gross with diesel machinery built by the builders. She takes the name of a Holt liner which was sunk by torpedoes in 1940.

The latter was one of the numerous links between the Ocean Steamship Company, Ltd., and the China Mutual Steam Navigation Company, Ltd., and the former Belfast shipbuilders Workman, Clark & Co., Ltd., who built 16 of the vessels of these fleets existing at the outbreak of war. Most of these

(Continued on page 7, column 3)

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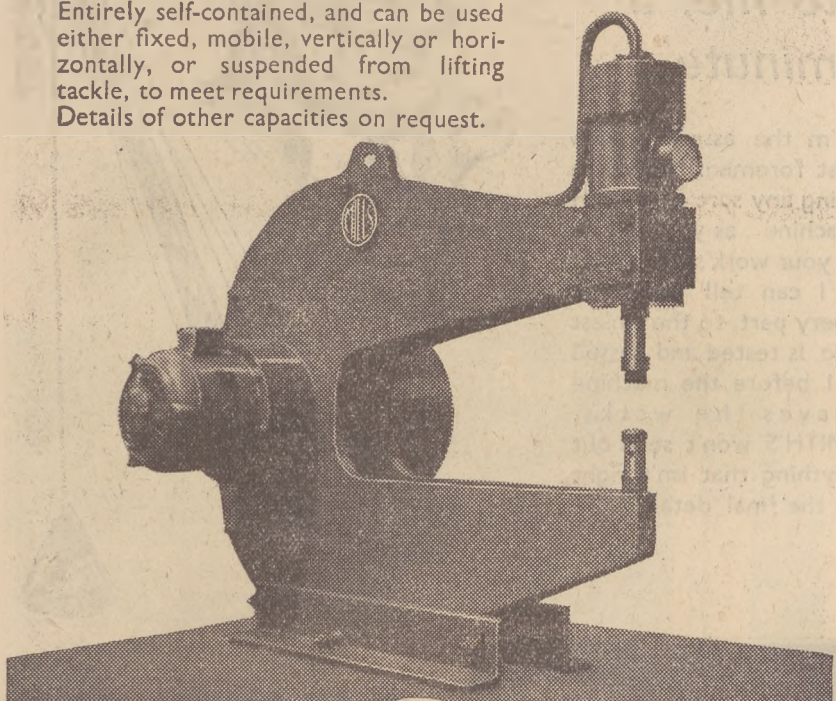
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**ROUND THE SHIPYARDS**  
(Continued from page 6, column 4)

dated back to before 1914, but the *Diomed*, *Orestes*, *Idomeneus* and *Agamemnon* came in the twenties when the association with Belfast was suspended until the placing of the order for the vessel launched to-day. During the war, however, the Ocean Steamship Company took over the Belfast-built motorship *Empire Splendour* and she has since been purchased from the Ministry of Transport and renamed *Medon*. In all five of the Holt vessels from Belfast were lost.

The next launch from the Queen's Island, on Sept. 24, will be the *Loch Garth* (9200 tons gross), a partly refrigerated turbine steamer for the Royal Mail Lines, Ltd., and her sister ship *Loch Avon*, is due to be in the water in November. Other vessels, including the tankers *Lepton* and *Linguela* for the Anglo-Saxon Petroleum Company, Ltd., are to be launched in the next few months, and the aggregate for the year, which already exceeds 100,000 tons (including the aircraft carrier *Eagle*), will be unusually large.

The volume of repair and reconversion work has been increased by the arrival of several vessels during the past week. These include the tankers *Empire Tagalam*, *Esso Cheyenne* and *Nacella*. The latter has been docked and will have a quick overhaul. The conversion of the motorship *Pampas* (Royal Mail Lines, Ltd.) will be a longer job. Launched as the *Parra-matta* by Messrs. Harland & Wolff in 1943, she was renamed *Pampas* after an earlier vessel lost at Malta, but before delivery she was taken over by the Admiralty as a landing ship. In this role she was known as *H.M.S. Persimmon*. She has now been released and will be fitted out as a cargo liner. This class of Royal Mail cargo ship began in 1940 with the *Pardo*, which was followed by the *Potaro*, the first *Pampas*, *Palma* (a war loss), *Paraguay*, *Parima* and *Pilecomayo*, all being built by Harland & Wolff, Ltd., at Belfast or Govan.

With the completion of a new block of offices Harland & Wolff, Ltd., have been able to recall sections of the company's staff who had to be evacuated during the war. The new block adjoins the main offices in Queen's Road.

**THE WEAR**

**600 Years of Shipbuilding**

SUNDERLAND, Tuesday. A sub-committee set up by Sunderland Town Council has decided to organise a celebration of the 600th anniversary of the commencement of shipbuilding on the Wear at Sunderland. The sub-committee includes co-opted members, with representatives of the shipbuilders and trade unions. It was decided to hold an exhibition in the Art Gallery and Museum from Nov. 16 to Dec. 8 to illustrate something of the history of Wear shipbuilding and its notable achievements. Models and photographs will be shown and there may be examples of actual shipyard work on view. Shipbuilders, repairers and shipowners are being asked to co-operate, and prominent leaders in the industry are being invited to attend. Among other suggestions which are to be followed up is one for publishing a brochure on the history and achievements of shipbuilding at Sunderland.

The first of two Cunarders to be built at Sir James Laing & Sons' shipyard will be named *Asia* when she is launched on Sept. 12. The sister ship will be named *Arabia*. Some 40 years ago the firm built a passenger vessel, the *Yamuna*, which later was purchased by the Cunard Line from the British India Steam Navigation Company, Ltd., and renamed *Slavonia*.

**THE MERSEY**

**Problems of Wartime Concessions**

BIRKENHEAD, Tuesday. Employers in the shipbuilding and ship-repairing industry on Merseyside are endeavouring to remove certain concessions granted to workers during the war period, in the matter of time-keeping and booking on and off. At the time of the air raids, when transport was greatly disorganised, men were allowed to book on at various times during the morning and where there were long travelling distances to book off before the agreed finishing time. Employers now feel that there should be a return to the agreed pre-war conditions with only two booking-on times per day, at 7.30 a.m. and 1 p.m., with workers going on to the recognised finishing time of 5 p.m., except where overtime is required.

Another concession related to meal hours in overtime and the finishing time for overtime workers. During the war men used to work right through the overtime spell instead of ceasing work for a meal-time interval. The time allowed for the meal interval was booked in addition to the time actually worked. The employers are now proposing that men required to work more than two hours overtime shall cease work to take the meal

interval and then resume work for the full period of overtime. The majority of workmen are not anxious to return to these pre-war conditions, and workers are hoping that negotiations in process will result in a modification of employers' demands.

The question of extra allowances on certain jobs is also being raised by employers. As a result of the war many vessels are arriving in port in an abnormally bad state, and under the present agreement with employers extra allowances can be claimed where the conditions are regarded as abnormal. Employers now contend that, with war conditions no longer in existence, extra allowances should not be paid excepting under pre-war agreements. It is expected that their contention will lead to some developments in the next few weeks.

**SOUTH WALES**

**The Boilermakers' Strike**

CARDIFF, Tuesday. The strike of some 1200 boilermakers employed in Bristol Channel ship-repairing yards, with an additional 800 attendant workmen rendered idle, has occurred after a policy of non-co-operation by the union has been in effect for nearly six months. As a result of the employers' refusal to consider a claim for higher rates of pay, the union imposed restrictions on piecework and an embargo on overtime. More recently the boilermakers' chargehands withdrew their services on union provocation, and the employers were last week obliged to give notice under the Essential Work Order that they were unable to provide work for the men concerned, giving notice at the same time of the termination of any guarantee existing under the Order.

Boilermakers in the Bristol Channel are already among the best-paid men in the ship-repairing industry, and the employers consider that advances out of step with the country as a whole are not justified. During the past six months the customary despatch of ship-repairing in the district has been greatly retarded by the general policy adopted by the boilermakers of restricting piecework and refusing to work overtime. This has resulted in the loss of a large volume of work which could have been secured, much of which has been diverted to other parts of the country and to the Continent.

Mountstuart Dry Docks, Ltd., and associated companies had 13 vessels on the blocks at ports in the Bristol Channel last week. The firm continued with the heavy damage repairs on the *Citrine*, *William J. Tiddle* and *Aletta*, and made progress with the overhaul of the *Sata*, *Oku* and *Sirenes*. Repairs on the *Durenda* and *Empire Moon* were continued, and the *Port McPherson*, *Chiswick*, *Port Gaspereau* and *Pacific Exporter* were drydocked for voyage repairs and the *Ardenza* for overhaul. C. H. Bailey, Ltd., had 32 vessels in hand. In dry dock at Cardiff they had the *Maurice Rose*, *Jellicoe Rose*, *Kohistan* and *Fulham IV*. At Newport the *St. Andrew*, *Retriever* and *Milford Queen* were on the blocks and at Barry the *Joffre Rose*, *Beltoy* and *Poznan*.

Hodges & Co., Ltd., at Barry continued work on the trawler *Powis Castle* in dry dock and dealt with eight

(Continued on page 8, column 3)



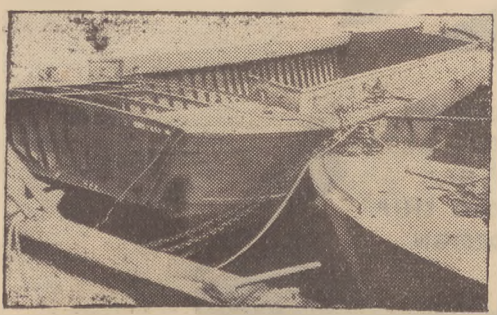
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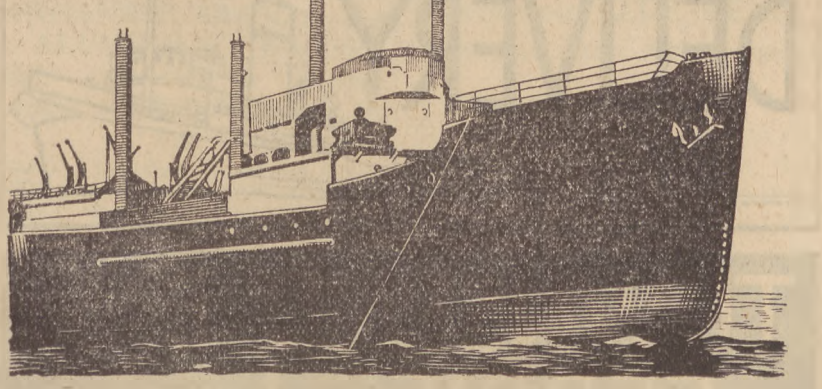
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**ROUND THE SHIPYARDS**

(Continued from page 7, column 4)

vessels alongside. The Prince of Wales Dry Dock Company, Ltd., completed repairs at Swansea on the *Glen Helen* and received the *Ukaside* in dry dock. The firm had 13 vessels in hand afloat. The Port Talbot Dry Dock Company, Ltd., continued work on the tug *William Poulson* and drydocked the *Dorsetbrook*.

**THE TEES**

MIDDLESBROUGH, Tuesday. Already handling the biggest volume of orders placed on Tees-side, Wm. Gray & Co., Ltd., West Hartlepool, have undertaken a further contract for the building of a cargo steamer of 8500 tons deadweight for the British India Steam Navigation Company, Ltd.

At South Bank repairs and reconversions figure conspicuously in the working programme of Smith's Dock Company, Ltd., while the Furness Shipbuilding Company, Ltd., are building a number of large tankers in addition to the third big whale-oil refinery now nearing completion. There have been relatively few irregularities in the deliveries of material from the steel works, and further improvement is promised as the result of the action of the Board of Trade in curtailing exports of steel in the interests of home consumers.

**THE FORTH**

**Repairers Busy on Reconversion Work**

LEITH, Tuesday. Although no fresh news has emanated from the Victoria shipbuilding yards of Henry Robb, Ltd., during the past few weeks and no mention has been made in these columns recently of the activities of these yards, it does not mean that business is slackening. At the present time Messrs. Robb have orders in hand for vessels ranging from tugs to 2300-ton gross motorships for home and Dominion owners, which will ensure active conditions for a very considerable time.

The ship-repairing section of the industry continued to be well employed last week, and while there was a continuation of several long-term contracts a large proportion of the work was centred on the reconversion of trawlers and specialised small craft. Most of the drydocks are occupied by these vessels, and each of the wet docks has a quota of trawlers in various stages of reconversion.

Last week Menzies & Co., Ltd., had 14 vessels in hand for repair, including merchant vessels, trawlers and

special purpose craft. Extensive refits are being carried out by Messrs. Menzies on two locally owned whale catchers; they also have the conversion of a landing craft to a depot repair ship for Kalis & Co., Ltd., and the conversion of the large Admiralty trawler *Sir Lancelot* to a fishery cruiser. Henry Robb, Ltd., had 14 vessels in hand for conversion, survey, general repairs, &c., including the *Ethiopian* and *Kaimanava* for conversion to peacetime requirements after war service. The latter vessel was built during the war by Messrs. Robb for New Zealand owners. Geo. Brown & Sons (Leith), Ltd., continued with the reconversion of a number of trawlers and carried out repairs on several merchant vessels.

**THE TAY**

**Messrs. Holt's Caledon-Built Tonnage**

DUNDEE, Tuesday. There have been few fresh developments this week. The keel of a passenger motorship for the Singapore Straits Steamship Company, Ltd., is being laid in the berth vacated recently by the motorship *Toward* (Clyde Shipping Company, Ltd.) in the yard of the Caledon Shipbuilding & Engineering Company, Ltd. Other vessels approaching the launching stage are the liner *Anchises* for Messrs. Alfred Holt & Co., and the *Beachy*, a sister ship of the *Toward*.

The *Anchises*, which will be put into the water towards the end of next month marks the real start of Messrs. Holt's post-war programme. The *Rheonor* and *Stentor* launched last year were Ministry of War Transport hulls adapted as far as possible to suit the owners' requirements. Messrs. Holt are also to take belated delivery of a ship laid down on their account early in the war. She was to have been the last of a series of five fast cargo liners, the others being the *Glenearn*, *Glengyle*, *Glenartney* and *Priam*. Taken over by the Admiralty on the stocks she was launched as the merchant aircraft carrier *Activity* and is now in process of conversion to a merchantman on the Tyne. The *Activity* (11,432 tons gross) holds the distinction of being the largest vessel in point of tonnage ever built on the Tay, but the removal of her flight deck superstructure will reduce her to approximately the 10,000-ton mark.

The motorship *Shetland* launched for the Currie Line, Ltd., some weeks ago and now approaching completion, is to be renamed *Scotland*. A sister ship laid down in the *Scotland's* berth is to be named *England*.

The *Empire Heywood*, which has figured prominently in the news as one of the vessels engaged in the transport of illegal Jewish immigrants from Haifa to Cyprus, was built at Dundee by the Caledon Company in 1941. All but two of the 11 "Empire" vessels launched on Tayside have now been sold to private owners, the exceptions being the *Empire Heywood* and her sister ship the *Empire Rhodes*, which was badly damaged by fire at Gdynia last December. Only one of the 11, the *Empire Bayd* (3114 tons) will retain her Dundee registry. She has been bought by the Dundee, Perth & London Shipping Company, Ltd., and will be renamed *Angusburn*. Another recent sale is the *Empire Favour*, last of the series, to C. T. Bowring & Co., Ltd.

**RADIO ENGINEERING IN WARTIME**

The story of a part of the wartime activities of the General Electric Company, Ltd., of England, is retailed in a booklet entitled "G.E.C. Radio Engineering and the War Effort." radio engineering constituting only one of many technical fields entered by the G.E.C. The scope of radio engineering is itself sufficiently wide, including communications, radar, navigational aids and mine detection apparatus, among many other applications; and an outline account only is possible within the space of the booklet's 48 pages, in which an interesting letterpress is generously supported by illustrations.

**NEW NORWEGIAN TANK STEAMER**

The tank steamer *Amica*, 7400 tons d.w., built at Fredrikstad mek. Vorksted, has run trials and has been taken over by her owners, Messrs. H. C. Sørensen & Sønner, Arendal. Built to Norske Veritas class, she is 385 ft. in length, 57 ft. in breadth and 28 ft. 3½ in. in depth, and her propelling machinery consists of an F.M.V. "steam-motor" developing 3300 i.h.p.; the boilers are "on deck."

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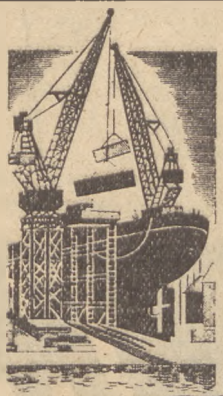
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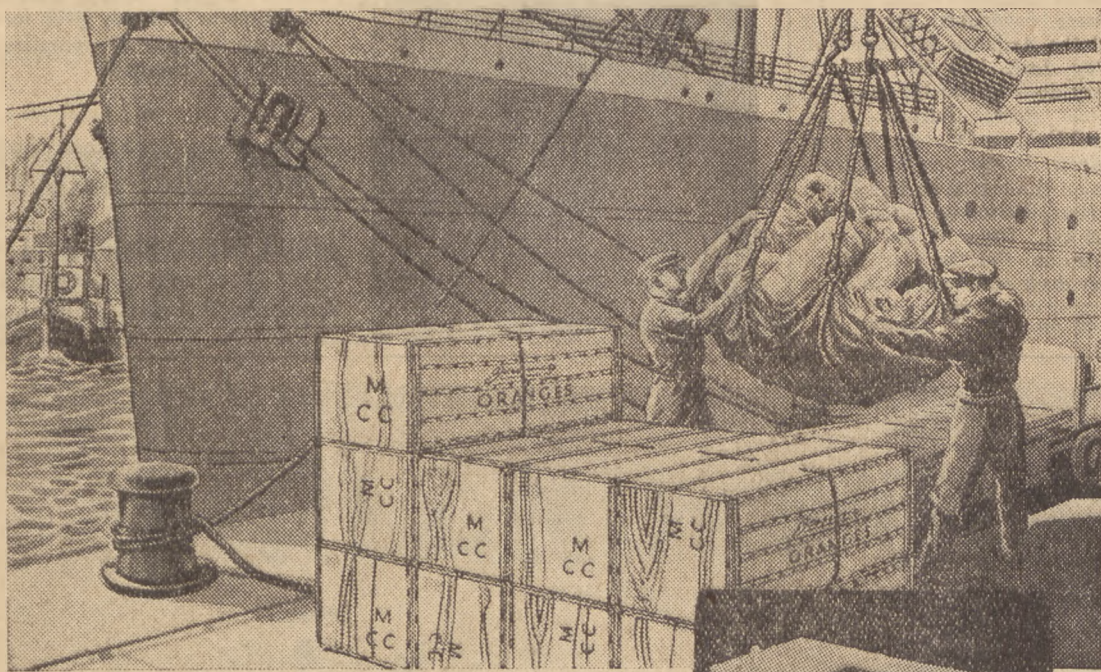
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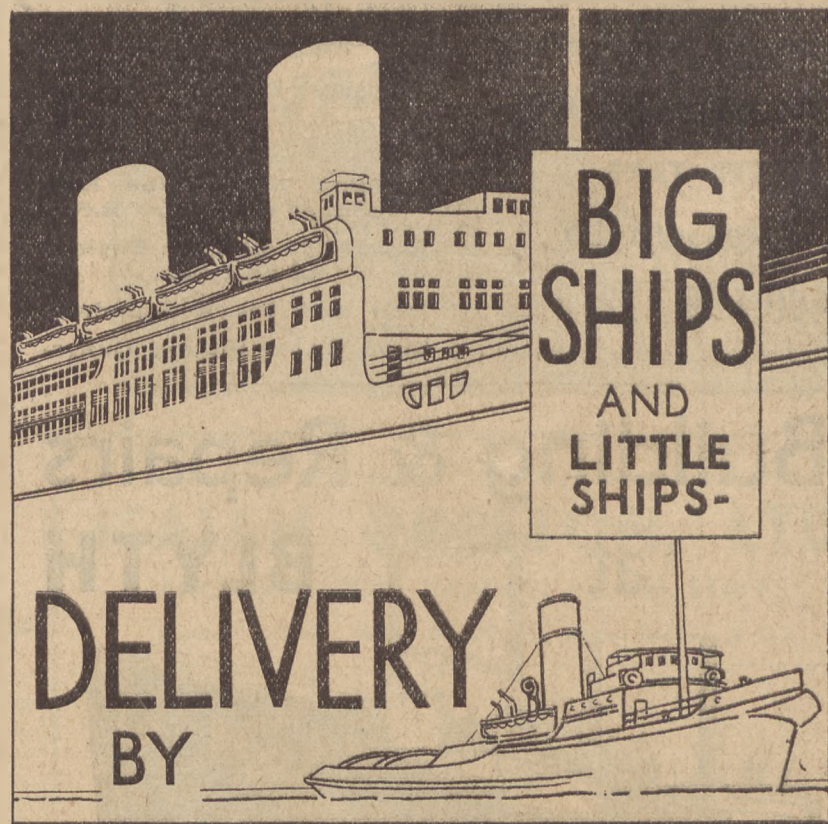
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## Motor Ships & Engines

### DIESEL SHIPS UNDER CONSTRUCTION

#### A General Review

By Our Special Correspondent

Though for many years past the quarterly shipbuilding returns of Lloyd's Register of Shipping have indicated more motorships than steamers under construction throughout the world, it has been invariably the case that as far as Great Britain is concerned the latter have far outnumbered the former. For the quarter ending June 30 steamers were still in the ascendancy, but only slightly so, for there were 190 motorships, of 842,444 tons gross building, as compared with 195 steamers, of 911,225 tons gross.

The motorship showing is an important one, for many ships which 10 years ago would undeniably have been diesel-driven are now to be fitted with geared turbines and water-tube boilers. This is particularly true of the cargo liner class. It is to be noted, however, that in the group of tonnage between 10,000 and 12,000 tons gross, whereas only four steamers were on the stocks, there were 17 motorships. This was balanced by the 12,000 to 15,000-ton group, which showed 10 steamers and two motorships. There were also five steamers, of between 25,000 and 30,000 tons gross, though there were two motorships, of between 15,000 and 20,000 tons.

diesel engine majority, for out of a total of 64 ships, of 190,170 tons gross under construction, only 10, of a mere 18,100 tons gross, are steam driven. Denmark, also, whose shipbuilding industry has rapidly returned to normal, is only building seven steamers, of 19,704 tons gross, out of a total of 31 ships, of 139,650 tons gross, on the stocks. Even Spain is constructing 35 motorships, of 70,216 tons gross, and has ambitious plans for the construction of some luxury vessels for the South American trade, which are to be fitted with geared diesels, it is believed.

As far as oil tankers are concerned, in spite of a tendency which has shown itself during the war years towards the construction of turbo-electric and geared turbine ships, there is still a large majority of diesel-engined ships of all types building, the total being 72, of 561,997 tons gross, of which 54, of 419,194 tons gross, are diesel-driven. In Great Britain alone the gross tonnage is 227,495 for motorships, as against 99,563 tons gross for steamers. Sweden is constructing five oil-engined tankers, of 53,400 tons gross, and no steamers; Holland has not yet reappeared in the tanker building field, though with a total of 56 ships, of 132,183 tons gross total on the stocks, it is clear that her shipbuilding industry is well on the way towards resuscitation.

So much for the general world picture, what now of the trend of propulsion? Generally speaking, loyalties are being kept. For example, those shipowners in the past who have preferred the double-acting two-cycle airless-injection engine, still seem to like it. Many tankers are building in which the single-acting four-cycle airless-injection engine with continuous under-piston supercharge is to be fitted. There is no doubt that this represents an excellent, simple and reliable method of obtaining a low fuel consumption, particularly when employed in association with exhaust gas boilers of Scotch type.

The growth of the opposed piston 2-cycle airless injection engine has been commented on above. This also represents a very sound fuel-saving method of driving a single-screw by direct propulsion. It is worth comment that the Norske Amerika Linje A/S, which before the war favoured geared diesels in its German-built *Ostfjord*, is to go to straight diesel drive in the new ship it has ordered from Amsterdam. On the other hand, the Rotterdam Lloyd Line, in completing at long last its *Willen Ruys*, a 35,000 h.p. twin-screw ship for the Indies trade, will use eight diesels geared in fours to two shafts.

If the geared diesel does not seem to be attaining that immediate post-war popularity which enthusiasts always predicted, it may be said that this is owing to no inherent fault of the geared diesel, but is rather a question of the types of engines available for delivery. Indeed, current manufacturing and economic conditions continue to dominate the whole of the marine engineering situation, so that it is not possible at the moment to give a plain answer to the question, what is the trend of marine diesel engineering to-day?

It can be said that there is certainly one trend—a desire by shipowners to use the diesel engine of every type in an increasing number of ships. The reasons for this are not far to seek and, as far as British shipowners are concerned, are almost entirely governed by uncertain conditions in the coal industry. The future is a bright one for the oil engine, though there will inevitably be a certain decrease in the number of proprietary makes as time goes on.



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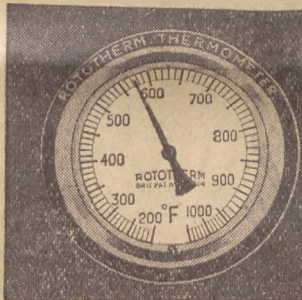
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### The Smaller Ships

In the smaller groups, normally including short sea traders and coasters, the number of steam and motorships was fairly evenly divided. This situation cannot be regarded as normal, because for coasting and short sea trading there has been an almost complete change round on the part of the owners from steam to diesel. This is particularly true of the fishing industry, where conditions of uncertainty as to delivery, coupled with high prices and the greater endurance which oil gives, even when burned under boilers, seem to have destroyed the last vestiges of the once strong loyalty to coal which all shipowners of this class of tonnage displayed.

It is perhaps also correct that the large motorship total is affected to some extent by the export shipbuilding now going on in this country. Most foreign owners made up their minds as to the value of the diesel engine some time before their British contemporaries. Motorships bulked large in such export orders, as eight ships, of 35,275 tons gross, were under construction for Holland at the end of the quarter; five, of 37,600 tons gross, for Norway; and six, of 37,220 tons gross, for Portugal. The largest individual customer is France, with 63,210 tons gross in 24 ships, a large proportion of which are oil-engine driven.

An interesting feature about the oil engine orders is the use of one particular type of opposed piston two-cycle engine, which although enjoying extreme popularity in Great Britain hitherto, has largely (owing to present world conditions) become an international type, of equal numerical standing, as that enjoyed by certain Continental types before the war.

As far as world figures, other than those of Great Britain are concerned, the motorship majority is a comfortable one where individual ships are concerned, though not so big in actual gross tonnage, being 700,423 tons gross for steamers, as against 811,959 tons gross for motorships. Sweden, as an individual country, shows an overwhelming

## POST-WAR SHIPBUILDING

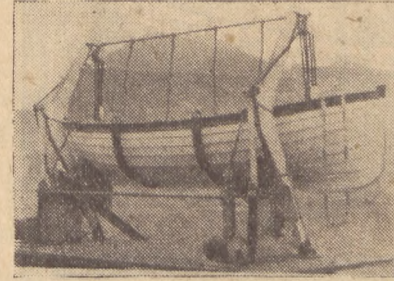
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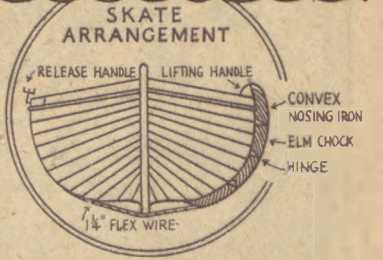
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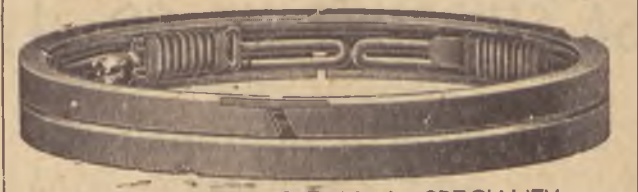
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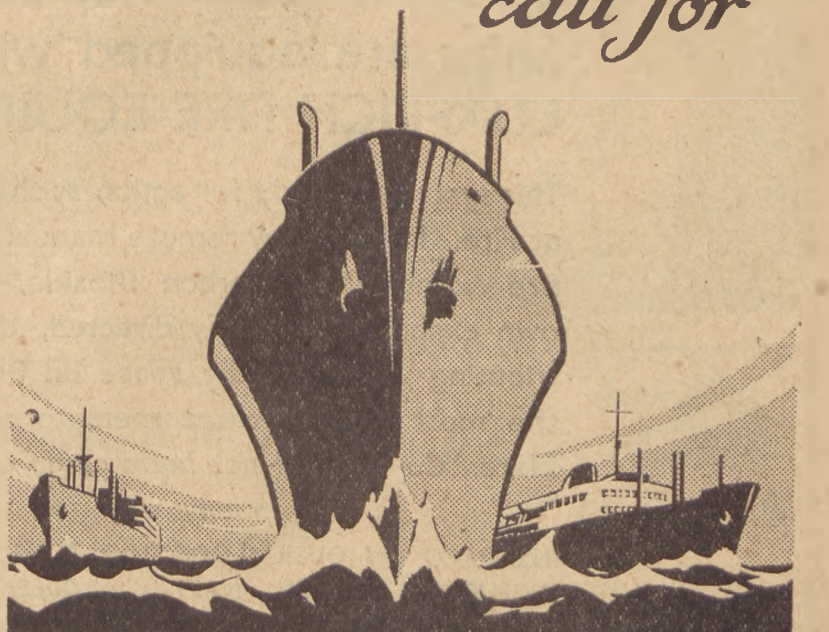
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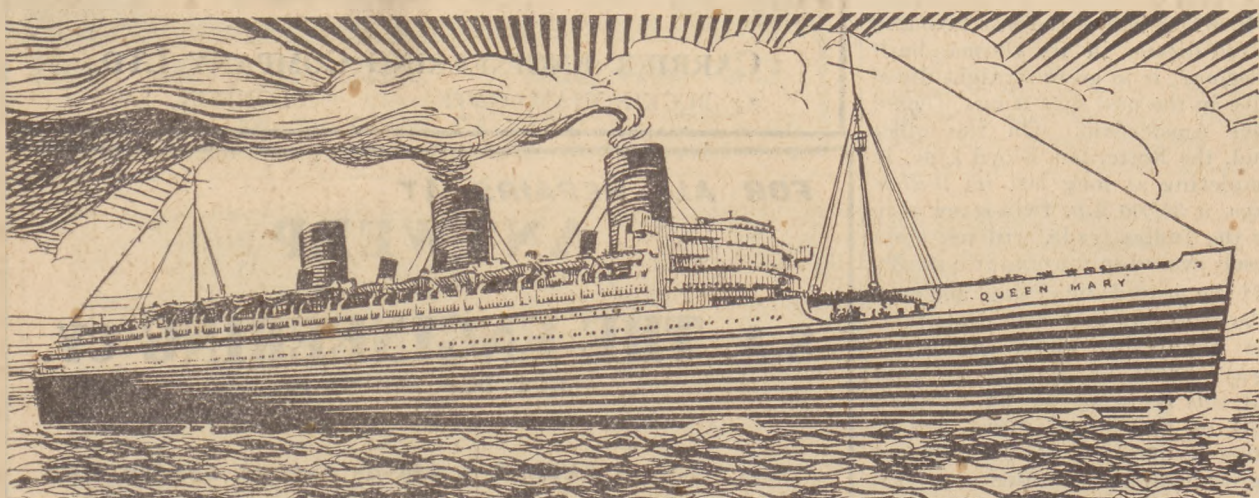
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As announced in LLOYD'S LIST of Aug. 16, A. C. Cossor, Ltd., have received an order from Cunard White Star, Ltd., to install radar equipment in the *Queen Elizabeth*, to be ready in time for the liner's maiden voyage on Oct. 16. The whole apparatus will embody the latest technique based on intensive research and experiment. It will be the prototype of a compact standardised equipment readily adaptable for general use in all classes of mercantile vessels and capable of operation by any officer without special training. The equipment will conform in all essential principles to the official recommendations laid down. In all, some 80 valves will be employed, including the most modern development of the famous cavity magnetron, in addition to other types.

The equipment will comprise four main units:—  
(1) The indicator or p.p.i. embodying display screen and all controls, which will be housed in a special radar room in the wheelhouse. This unit, which is 19 in. wide, 27 in. high, and 12½ in. deep, is supported in a tubular steel frame, and besides the cathode ray screen the panel accommodates a movable cursor, sealed off in miles, working in conjunction with a degree scale on the perimeter of the screen. It also carries the "on" and "off" press button; gain control; range switch giving scales of 4½, 1½ and ½ in. to the mile; test button; calibration button; brilliancy and focusing controls; and a small handwheel to adjust the display in relation to the ship's heading line.

(2) The main rack, contained in a hermetically sealed tank, 30 in. high, 25 in. long, and 25 in. wide. This rack comprises the transmitter and receiver working on a wavelength of 3 cms.; the modulator for driving the transmitter; the power pack for supplying and controlling the various voltages necessary, also delay and safety switches to ensure that the transmitting circuits, &c., are automatically switched on in the correct sequence; the lock unit generating the various voltage pulses required; and a blower and drier unit for dry air circulation.

### The Scanner

(3) The scanner, weighing some 150 lb., which is perhaps the most interesting of the units in general appearance. It consists of a long

curved reflector of true parabolic formation and substantial construction to withstand severe weather conditions. The reflector portion is made of special aluminium alloy as used for flying boat hulls, and is resistant to sea water. Immediately below the scanner, a watertight main casting encloses the gear train, a D.C. motor, and the mag-slip by means of which the time base line on the screen is caused to rotate in synchronism with the scanner. The hollow oblong-section waveguide and the conduit for cables serve also to circulate dry air from the main rack blower, in order to prevent the formation of ice on the scanner mechanism. The range of the scanning beam covers from about 50 yards up to 12 miles.

(4) The alternator, 30½ in. long, 30½ in. high, and 17 in. wide, which is for installation in the engine-room, and consists of a motor-alternator or converter with an input of either 100 or 220 volts D.C. and an output of 180 volts A.C. at 500 c.p.s.

Coincident with the installation of complete radar navigation equipment in the *Queen Elizabeth*, a second installation is also being fitted in the Norwegian whale-oil refinery *Sir James Clark Ross*, now undergoing refit at Gothenburg. While there is some possibility of "sighting" whales by means of the radar gear, its chief function will be to facilitate safe navigation in the iceberg-infested Antarctic, where fog and other conditions of bad visibility are frequently encountered. Radar will also maintain contact between the parent vessel and the whale-catchers. In bad weather the location of the small vessels will be under constant observation, and when necessary the whale-catchers will be guided back to the mother ship by radio-telephone instructions.

### REVERSIBLE PROPELLERS

#### Two Types Fitted to Swedish Sister Ships

The motorships *Höken* and *Ornen*, 750 tons d.w. each, built at Lindholmens Varv, Gothenburg, for the Hallsands Angbats A/B, Gothenburg, and launched on Apr. 1, were delivered on July 10 and 12 respectively. The vessels, which are of shelter-deck type with raked stem and cruiser stern, have been built to Lloyd's Register class, with hull strengthened for navigation in ice. They are 175 ft. in length b.p., 30 ft. 6 in. in breadth and 12 ft. in depth to main deck, the mean draught being 11 ft. 10 in. They have two holds, each served by a large hatch, and their cargo-handling equipment includes two 3-ton winches and derricks and two cranes; the winches, together with steering gear, capstan and windlass, are electrically driven. Wireless direction-finder and radio-telephony are fitted. The accommodation (single cabins for officers and two-berth cabins for crew) is aft.

The propelling machinery, which is situated aft, consists of a non-reversible single-acting two-cycle 5-cylinder Polar diesel engine developing 650 h.p. at about 200 r.p.m. The *Höken* is fitted with a Kamewa variable-pitch propeller, while the *Ornen* has a propeller with reversible blades, supplied by Jönköpings Motorfabrik. The Broström concern has ordered altogether 10 vessels fitted with propellers with hydraulically reversible blades, and seven of them have now been delivered. The advantages of such propellers were demonstrated during the trials of the *Höken*, when 48 manoeuvres were carried out in 6.3 minutes. A maximum mean speed of 12.27 knots was attained with the vessel in ballast; the contract speed is 11 knots in loaded condition.

### SHORT-SEA TRADER LAUNCHED AT BURNTISLAND

The cargo steamer *Merganser*, launched by the Burntisland Shipbuilding Company, Ltd., is the sixth vessel to be built at Burntisland for the British & Continental Steamship Company, Ltd., Liverpool. Built with an open shelter deck, extended fore-castle, raked stem, and cruiser stern, she is 296 ft. in length, 43 ft. 3 in. in breadth and 19 ft. 6 in. in depth to upper deck. She has a carrying capacity of about 3030 tons d.w. on a draught of 19 ft. 3 in.

The *Merganser* will be employed in her owners' services between United Kingdom ports and the near Continent, and is designed for the transport of general cargo. There are four cargo holds, with 'tween decks extending from the fore peak to the crew's quarters aft. The cargo-handling equipment includes one 20-ton derrick. The propelling machinery, supplied by David Rowan & Co., Ltd., Glasgow, will consist of triple-expansion engines with cylinders 20½ in., 34½ in. and 57 in. in diameter, working on a stroke of 42 in. Steam will be provided by three Scotch boilers working on forced draught and fitted with air heaters and smoke-tube superheaters.

A similar vessel, the *Lestrin*, built by Hall, Russell & Co., Ltd., Aberdeen, has already been handed over to the British & Continental Steamship Company.

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# ELECTRICITY AND THE SHIP

## Use of Alternating Current for Auxiliaries

By OUR SPECIAL CORRESPONDENT

A ship was recently completed which in the history of marine electricity will take an important place in the development of the use of alternating current for auxiliary purposes. She is a refrigerator motorship of about 600,000 cu. ft. capacity and is propelled by two diesel engines which give a service speed of about 15 knots.

All the auxiliary machinery is electrically operated, taking direct current from four generators, each with a capacity of 385 kilowatts, current being supplied at 220 volts. The total refrigerated capacity is divided into 78 compartments, 74 of which are air-cooled by independent screw fans. A separate cold air circulating fan is used in each chamber and each fan is driven by an A.C. motor of two speeds, forward and reverse, which are obtained by using a dual wound stator. The use of A.C. eliminates both brush gear and commutator. Each motor can be totally enclosed without any inspection opening. The switchgear is also much simpler.

The speeds at which the fans run are either 2930 or 1950 r.p.m. In order to obtain the lower speed a frequency of 100 cycles is used, the motor speeds available with this being 2930, 1950, 1450 r.p.m. with 4, 6 and 8 pole windings respectively.

### The Alternators

In order to supply alternating current to the fans, there are two alternators, each consisting of a 100 K.V.A. machine with an exciter coupled to a 114-h.p. motor, running at 1200 r.p.m., which takes current direct from the ship's D.C. mains. Each alternator supplies A.C. at 230 volts, and one machine can deal with conditions at sea in the tropics. Control gear is placed in three compartments, each serving two sets of refrigerator spacing.

It has been estimated that the use of alternating current for these fans results in a considerable economy. Not only is the demand for the D.C. generators less by using A.C., but also the equivalent heat input to the refrigerated space is greater. Figures have been quoted in a contemporary which suggest that while this is particularly true at low-speed operation, the cost is greater, though the wiring cost is reduced and expense of maintenance is considerably less.

It will be interesting to see whether the example set by the owners of this ship is copied by other shipowners in using alternating current for those auxiliary motors where constant duties are required. There is no doubt that when it is possible to use them many advantages in weight and space occur. The starting gear is simpler, more robust, lighter and cheaper than that for D.C. motors; they also have a higher efficiency.

Two or three speed steps suffice for a number of machines for which speed regulation is desirable. Three phase pole-changing motors can be used. Motor generators transforming from alternating to direct current can be fitted for the deck auxiliaries. When alternating current is used for lighting and cooking it is easily possible to reduce the voltage to an acceptable value by means of transformers and to confine the use of the higher voltages 220/440 to the engine-room proper. The paralleling of A.C. alternators by means of automatic synchronisers is an easy operation.

Apart from the United States, much of the development in the use of A.C. for the auxiliary machinery, as opposed to propulsion, took place prior to the outbreak of the last war, though the Swiss firm of Brown Boveri were responsible for the development of the first diesel-electric alternating current ship, through their Mannheim works. In Holland, alternating current has been employed in certain engine-room auxiliaries in passenger liners. In the triple-screw 37,500 s.h.p. motor liner *Oranje*, 3-phase current, which ran at a constant number of revolutions, was used for various motors in the engine-room, and in the ship generally for certain

pumps, separators, cooking stoves and washing machines, &c.

In addition, 3-phase current was employed for driving the ventilators to the engine-room, among which, apart from those with a normal number of revolutions, there were some which can work at half the number of revolutions or can change direction. This applies to suction fans, which can be converted into blowing fans for supplying fresh air. Three-phase current was also used for driving low pressure (i.e. 72 volt) fans in cabins, saloon and refrigerating chambers, and for lighting purposes in the cooling and freezing chambers, and for plug contacts in the engine-room, with the voltage brought down to 24 volts.

In the *Oranje* there were two small transformers in the transformer room, converting D.C. into single-phase A.C., which was used throughout the ship for communication purposes, and also for the engine-room telegraph, rudder indicators, light call system and bells for the passenger quarters. This current was also used for charging batteries and accumulators for the telephones. The main generator equipment comprised five units supplying 220 volts D.C.

### "La Marseillaise"

In France one of the largest alternating current generating equipments is now being fitted in the triple-screw motor liner *La Marseillaise*, which apparently is to be finished for the Par Eastern service of the Messageries Maritimes. This ship will have four diesel-driven alternators of 950 k.v.a. output each.

There is a trend in marine circles towards the use of alternating current for auxiliary purposes in new motorships. Undoubtedly certain advantages accrue, but there are also a few disadvantages. Alternating current systems have been subject to high short-circuit currents, causing faults and disturbances. Suitable circuit breakers, protective devices and operating relays may be necessary. If A.C. voltage is higher than 230, transformers are required for lighting and other low voltage application. Emergency and stand-by power from storage batteries which is suitable for direct current is not always suitable for alternating current. Direct current systems operate successfully without voltage regulators.

If, on the other hand, those in favour of the use of A.C. can produce a case for the consumption of less current, which will ultimately show itself in the tons per 24 hours of the ship, and if they can offer a more compact, robust and reliable motor, there is no reason why A.C. should not be universally acceptable. Above all, it seems to offer possibilities in the case of turbo-electric ships, in which the current for propulsion from the main generators is always on the A.C. system in any case.

### NEW ACCOMMODATION LADDER WINCH

A new type of hand winch recently produced by the Tyne Gangway Company, Wallsend-on-Tyne, enables two men to hoist or adjust the largest accommodation ladder. The small barrel type of winch hitherto fitted has necessitated the fitting of a special wire rope hoist, but the new twin Gypsy Head Winch hauls on the existing tackle fall and can therefore be fitted on any ship without interfering with tackle generally used on accommodation ladders. The winch is 33 in. high, 17 in. from front to back, and 20 1/2 in. wide with handle in position. It is of sturdy design and construction and is fitted with machine-cut gears.

### SVENSKA LLOYD'S NEW STEAMER

The cargo steamer *Anglia*, recently delivered to the Rederi-a.b. Svenska Lloyd, Gothenburg, by Gotaverken, is 258 ft. in length, and has a carrying capacity of 1715 tons d.w. on a draught of 16 ft. 5 in. Her propelling machinery consists of a Gotaverken quadruple-expansion reciprocating steam engine with a turbo-compressor. The cylinder diameters are 13 in., 22 in., 26 in. and 44 in., and the stroke 31 in. The engine develops 1050 h.p. at 105 r.p.m., giving a speed of 11 1/2 knots. Steam is supplied by two single-ended boilers working under forced draught, and having superheaters and preheaters.

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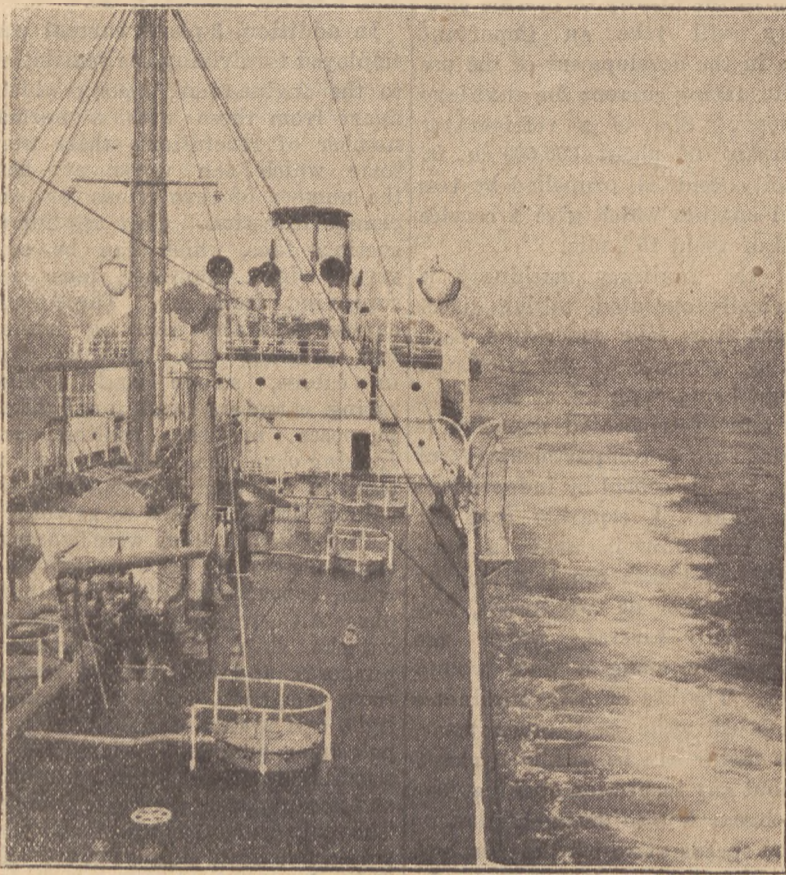
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Work for the Shipyards

Orders Reported in "Lloyd's List" during the Week Ended August 27, 1946

Yard	Number & Type	Size	Engines & Builders	Owners
Lithgows, Ltd., Port Glasgow	Two motor tankers	12,000 d.w.	Diesel John G. Kincaid & Co., Ltd., Greenock	British Tanker Co., Ltd., London
Gotaverken, Gothenburg	Tanker	23,000 d.w.	—	Onstad Shipping A/S, Oslo



The photograph of the motor tanker "Auricula," reproduced above, showing her undergoing trials off the Tyne, was taken after the fuel supply had been switched from normal diesel oil to the boiler oil colloquially known as "Ordoil," to the use of which the "Auricula's" Hawthorn-Werkspeer diesel machinery has been successfully adopted. The clearness of the exhaust is plainly indicated.

THE SHARE MARKET

Prices Again Higher

Active conditions have again ruled in the market for shipbuilding, iron, coal and steel issues during the past week. A little irregularity developed yesterday, but in spite of that fact on balance the majority of the changes have been in the upward direction. Beardmore advanced 9d. to 31s. 3d. and Babcock & Wilcox showed a similar alteration at 65s. 9d., while John Brown Ordinary and 7 per cent. Preference were each 3d. higher at 30s. and 8s. 6d. respectively. Cammell Laird were the turn harder at 13s. 1 1/2d., and the last recorded business in Duxford was at the unchanged price of 91s. 3d., but Clarke, Chapman were barely steady. Harland & Wolff rose 3d. to 28s. 3d., Richardsons, Westgarth 6d. to 11s. 1 1/2d. and Swan, Hunter 4 1/2d. to 63s., with a marking at 63s. 7 1/2d., while on Monday Thornycroft were dealt in at 76s. 10 1/2d. Vickers were fractionally dearer at 27s. 4 1/2d., but the Cumulative Preference weakened 6d. to 33s. Firth & John Brown recovered 2s. 6d. to 50s., while Whitehead Iron advanced 2s. 3d. to 86s. 3d., Weardale Deferred 1s. 3d. to 45s. and the Preferred 9d. to 32s. Thomas & Baldwins Preference improved 1s. 6d. to 32s. 9d., Dorman, Long Preferred 1s. to 48s. 3d., Stewarts & Lloyds Deferred 1s. 3d. to 53s. 9d. and Summers Preference 1s. to 26s. Numerous other shares were 3d. to 9d. firmer, the larger movement being shown in Colvilles to 25s. 9d., but Staveley lost 6d. to 49s. 6d.

Below will be found a table showing the highest and lowest prices recorded during 1945, together with a selection of the business arranged yesterday:—

Highest and Lowest 1945	Yesterday's range of Business
57/3 47/9 Allied Ironfoundry	60/0
1/10 1/0 Amalg Anthracite Ord	1/4, 1/3 1/2
61/3 50/7 Babcock & Wilcox Ord	65/6, 65/10 1/2
7/1 5/0 Baldwins (Holdings) Ord	6/0, 6/2 1/4
29/6 25/0 Beardmore Ord	31/9, 31/3
26/9 21/6 Beardmore 5 1/2% Pref	24/6
30/0, 24/9 Brown (J) Ord 10/0 pail	30/1 1/2, 29/9
22/1 20/9 Brown (J) 1st 22/6	22/6
11/9 8/6 Cammell Laird Ord	13 1/2, 13/2 1/4, 13/0 3/4
51/0 45/0 Clarke, Chapman Ord	61/3, 61/9
26/7 21/6 Colvilles Ord	26/0, 26/1 1/2, 25/7 1/2
27/6 21/3 Colvilles Pref	24/6
10/0 7/6 Consett Iron	9/3 3/4, 9/6 3/4, 9/5 1/2
53/2 41s 6d Coy (Wm) Ord	100/0, 100/9, 100/3
29/3 22/6 Dorman, Long Ord	27/7 1/2, 27/10 1/2, 27/16
56/0 43/1 Dorman, Long Pref Ord	48/6
80/7 52/6 Firth (Thos.) & John Brown, Ltd. "A" Ord	49/10 1/2, 50/0
43/6 34/6 Guest Keen Ord	41/6, 41/3
34/0 28/0 Hadfields Ord	25/3, 25/6
23/1 1/2 15/4 Harland & Wolff Ord	28/3, 28/6, 28/0, 28/4 1/2
22/0 17/1 Harland & Wolff 4 1/2% Cum Pf	23/4 1/2, 22/10 1/2
66/0 55/3 Lambert Bros Ord	78/0
4/0 2/10 Ocean Coal ... Ord	4 1/2, 4/2
12/3 9/0 Pease & Parturs Ord	17 1/2, 17/2 1/4, 16/10 1/2
24/4 19/9 Powell Duffryn Ord	24/3, 24/6, 24/0
23/10 19/9 Powell Duffryn Pref	21/10 1/2, 22/1 1/2
7/6 5/6 Richardsons, Waterth Ord	11/0, 11/2 1/4
54/6 40/3 Staveley Coal Ord	49/9, 49/3
58/9 46/3 Stewarts & Lloyds Delf	53/10 1/2, 54/0, 53/9

(Continued in next column)

IRON AND STEEL

High-Phosphorous Pig Very Scarce

A Middlesbrough correspondent telegraphed yesterday regarding the Tees iron and steel market:—  
Producers have heavy order books and buyers are eager to enter into new contracts for substantial forward supplies. Pig iron deliveries are insufficient for current needs; users of the high phosphorous qualities are calling persistently for bigger parcels and complain of great difficulty in securing any increase in their allocation. Consumption of the low and medium grades is increasing. Hematite distribution covers home requirements, and some additions to makers' stocks are reported, but efforts to obtain export licences are still unsuccessful. All basic iron output continues to be absorbed by the requirements of makers' own consuming plants. Refined iron manufacturers are dealing satisfactorily with customers' needs, and semi-finished and finished iron outputs are adequate.  
The demand for steel, however, far exceeds supplies, and the make of steel semis still falls considerably short of the heavy calls of re-rollers and substantial imports are much needed. The shortage of prime steel billets is acute and pressure for maximum supplies of sheet bars and slabs is unabated. The demand for finished steel is intense and plants producing plates and sheets are assured of full activity for several months. Manufacturers of railway requisites and of colliery equipment also have extensive commitments. The scrap market is active; supplies are plentiful, and large quantities of cast-iron scrap, machinery metal and good melting steel are reaching the foundries and steelworks.

"INDUSTRIAL TEN" CLOTHING COUPONS

The Board of Trade announce that the "Industrial Ten" supplement of the clothing coupons for the 1946/47 ration period will be issued before the end of this year. The opening date will be given wide publicity, and in the meantime employers and workers are asked not to send inquiries to the Board of Trade or to local offices of the Ministry of Labour. The schedule of qualifying occupations will be similar to that for 1945/46, except that workers in clothing factories where the machines are not driven by mechanical power or where less than ten work people are employed are now included. No further claims in respect of the 1945/46 period can be entertained.

(Continued from preceding column)

Highest and Lowest 1945	Yesterday's range of Business
57/6 41/9 Swan, Hunter Ord	63/7 1/2
13/7 10/3 Thomas (B.) and Baldwins	12/1 1/2, 12/4 1/2, 12/0
28/3 22/3 United Steel ...	26/4 1/2, 26/6
20/6 16/3 Vickers Ord ...	27/5 1/4, 27/7 1/2, 27/11 1/2, 27/4 1/2
33/6 27/3 Vickers Cum Pref	33/1 1/2
43/6 32/6 Ward (Thos) White (J.)	43/10 1/2, 43/3, 14/3
12/6 6/10 1/2 White (Samuel) Ord	—
91/3 78/1 1/2 Whitehead Iron	86/4 1/2, 86/3

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**LAUNCHES AND TRIALS**

**"Southern Harvester"**

The whale-oil refinery *Southern Harvester*, built by the Furness Shipbuilding Company, Ltd., Haverton Hill-on-Tees, for Messrs. Chr. Salvosen & Co., Leith, has run trials. The vessel is of the shelter-deck type with machinery aft, having poop, open bridge and forecastle, with an additional shelter 'tween-deck 22 ft. in height forward and two sets of 'tween-decks 7 ft. 6 in. and 14 ft. 6 in. in height aft to accommodate the whaling factory equipment. She has a carrying capacity of 20,100 tons d.w., and is 550 ft. in length, 74 ft. in breadth, and 57 ft. in depth. The nine oil cargo compartments are divided by three continuous longitudinal bulkheads into 36 tanks.

A heavy steel stem casting as well as an ice belt and intermediate framing are provided for protection against pack ice. The cruiser stern is constructed with an aperture leading to a skidway which is carried through the engine casing to the upper deck level to enable carcasses to be hauled up to the flensing deck. The extracting and refining machinery, situated in the main 'tween-decks, includes plants for the extraction of liver oil and for extracting the oil from and dehydrating the meat. Electric hoists, conveyors and elevators are provided for the discharge of whale meat-meal to transport vessels on the whaling grounds. For handling the carcasses a complement of steam winches is installed, including two of 40 tons and one of 15 tons; there are also nine 4-ton steam capstans on the meat deck.

The wireless installation is of sufficient power for direct communication to be made to the United Kingdom from the South Polar region and comprises wireless telephony apparatus for communicating with the whale catchers. Mechanical ventilation is provided for both living accommodation and the factory, and the vessel is equipped with gyro compasses, an echo sounder, and direction finding and radar equipment. A hospital and dispensary are sited aft. All accommodation is ventilated and heated on the Thermotank System, and has been designed to meet the severe Arctic conditions experienced on service.

Power for the electrical services is provided by generators developing 1790 kw. The propelling machinery, supplied by the North Eastern Marine Engineering Company (1938), Ltd., Walsend, and installed by Richardson, Westgarth & Co., Ltd., Hartlepool, is connected to two screws, and consists of a set of triple-expansion steam engines with cylinders 27 in., 44 in., and 76 in. in diameter and of 51-in. stroke. Steam is provided for the propelling machinery and for factory uses by eight large single-ended oil-burning boilers working at a pressure of 220 lb. per sq. in. under Howden's system of forced draught. A water-evaporating plant with a capacity of 500 tons per day has been installed, consisting of two triple-effect units each provided with its own pumps and distilling apparatus.

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hatches, with space for cargo of a total bale capacity of about 132,400 cu. ft. The cargo handling equipment will include two 10-ton derricks and six 5-ton. The generating plant is steam driven. Five double-berth and two single-berth state rooms for the accommodation of 12 passengers are on the boat deck, with the smoking room, the dining saloon being sited on the shelter deck.

The officers' accommodation, public rooms and crew's accommodation amidships, as well as the seamen's and firemen's accommodation aft, is heated and ventilated on the Thermotank punkah jouvre system. Three Thermotanks, housed near the funnel, are provided with a special filter to prevent the entry of impure air into the accommodation. Separate branch trunks delivering air at atmospheric temperature are led to the main galley, which is exhausted by means of a Thermotank propeller exhaust fan.

The propelling machinery, supplied by the builders, will consist of a set of triple-expansion engines, working in conjunction with a low-pressure exhaust turbine on the Bauer-Wach system.

**"Lunan"**

The motor coaster *Lunan*, built by Hall, Russell & Co., Ltd., Aberdeen, for the Dundee, Perth & London Shipping Co., Ltd., Dundee, has been launched. The *Lunan* is a self-trimming cargo vessel of 1300 tons d.w., with raised quarter deck and open forecastle, cruiser stern and raked stem, and is 216 ft. in length b.p., 34 ft. in breadth and 14 ft. 6 in. in moulded depth. Accommodation for the master and deck officers is provided in the bridge deckhouse. Engineers and seamen are accommodated in the deckhouse aft, separate cabins being provided for each of the seamen on the starboard side, with cabins for the engineers, the cook and others on the port side. There are two cargo holds, served by six electrically driven derricks, two 2-ton on the forecastle deck, two 5-ton amidships and two 2-ton on the after deckhouse. Electric hydraulic steering gear is controlled from the bridge by a telemotor system. The propelling machinery consists of a Polar diesel engine of 1000 h.p., supplied by British Polar Engines, Ltd., Govan.

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**"Empire Herald"**

The tank steamer *Empire Herald*, built by Sir James Laing & Sons, Ltd., Sunderland, for the Ministry of War Transport (Athelet Line, Ltd., managers), has run trials. She is 465 ft. in length b.p., 64 ft. in breadth and 35 ft. 6 in. in depth to upper deck, and carries about 11,600 tons d.w. on a draught of 28 ft. 6 in. She has been completed as a R.F.A. unit fitted with oiling-at-sea equipment to Admiralty specification. Her propelling machinery consists of a set of double-reduction geared turbines developing 6800 s.h.p. at 116 r.p.m. in service (speed 15 knots), and supplied with steam by two water-tube boilers; the machinery was installed by the North Eastern Marine Engineering Company (1938), Ltd., Walsend-on-Tyne.

**"Godetia"**

The steam trawler *Godetia*, built to the order of Irvin & Johnson (South Africa), Ltd., Cape Town, by Hall, Russell & Co., Ltd., Aberdeen, has been launched. She is 160 ft. in length, 28 ft. in breadth, and 15 ft. in depth to upper deck. The fishroom is specially insulated for service in South African waters, and has also an insulated room for offal. The deck equipment includes a steam windlass on the forecastle deck, and a large double-barrelled trawl winch. The steam steering gear, of the direct type, is controlled by telemotor. The vessel is fitted with a wireless telephone, an echo sounder and a direction finder. The propelling machinery consists of triple expansion steam engines of 900 i.h.p., constructed by the builders.

**"British Rose"**

The motor tanker *British Rose*, of 8400 tons d.w., built for the British Tanker Company, Ltd., London, by Joseph L. Thompson & Sons, Ltd., Sunderland, has been launched. She has eight centre and 16 wing oil tanks, and two main pump-rooms. The propelling machinery, situated aft, is to be supplied by the North Eastern Marine Engineering Company (1938), Ltd., and will consist of a Doxford opposed-piston oil engine, having three cylinders of 600 mm. bore, and 2320 mm. combined stroke, giving the vessel a service speed of 11 knots.

**"St. Matthew"**

The steam trawler *St. Matthew*, built by Cook, Welton & Gemmill, Ltd., to the order of the Boston Deep Sea Fishing & Ice Company, Ltd., Fleetwood, has been launched. Intended for White Sea and Bear Island fishing, she is 165 ft. in length. Boilers will be installed for processing livers, and the vessel will have storage tanks for liver oil and residue. The propelling machinery, to be supplied by Charles D. Holmes & Co., Ltd., Hull, will consist of reciprocating steam engines, giving the vessel a speed of 12 knots in loaded condition. Steam will be supplied by an oil-fired boiler.

**"Volo"**

The cargo steamer *Volo*, under construction by Swan, Hunter, & Wigham Richardson, Ltd., for Ellerman's Wilson Line, Ltd., Hull, has been launched. She is 297 ft. in length overall, 42 ft. in breadth, and 25 ft. 3 in. in depth to shelter deck, and has a carrying capacity of 2070 tons d.w. on a draught of 17 ft. Strengthened for navigation in ice, she has a raked stem, cruiser stern and streamline rudder. There are three cargo holds and 'tween decks with four cargo

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ADVISER	6348	T.	Shed	South-West	India, T & J. Harrison
ARABIAN PRINCE	1960	2	Shed	Victoria	Westcott & Laurance Line
ATT S.	466	Alhion Yd.	Surrey	Commercial	International Shippers
HANADEROS	2728	Canary Wl.	West	India	F. Dessen & Co.
BARON MURRAY	7631	23	Shed	Royal Albert	Hoxarth, Sons & Co.
BARONESIA	8663	Z	Shed	Victoria	Houlder Bros. & Co.
BAYANO	6815	Transit	Shed	W.	Surrey Commercial
BEACON	479	Blackwall	Ban.	West	India
BELOOSTROV	2916	N. Lay-Bye	Surrey	Commercial	T. W. Morland & Co.
BLACK PRINCE	(ex Empire Regent)	9904	O	Shed	South West India
BLAIRCLOVA	5083	Co-operative	Mills	Victoria	J. A. Finzi, Layman & Co.
BLISWORTH	739	14	Shed	Tilbury	Grand Union (Shipping)
BULLFINCH	433	R. Qy.	Regent's	Canal	G. S. N. Co.
BURMA	7821	5	Shed	Tilbury	P. Henderson
CARPIO	1847	3	Shed	Royal Albert	MacAndrews & Co.
CARTHAGE	14,182	34	Shed	Tilbury	P. & O. S. N. Co.
CERNY-BRYN	5164	Dry	Dk.	Millwall	Capper, Alexander & Co.
CHARLBURY	7069	11	Shed	Royal Albert	Capper, Alexander & Co.
CITY OF SWANSEA	9959	22	Shed	Tilbury	Montgomery & Workman
CLAN CAMPBELL	9545	33	Shed	Tilbury	Cayzer Irvine & Co.
COMEDIAN	5122	C	Shed	West India	T. & J. Harrison
CONDISA	10,367	15	Shed	Royal Albert	Houlder Bros. & Co.
CRANE	785	W. Dk.	Ldn. Dk.	G. S. N. Co.	DENBIGHSHIRE
DENBIGHSHIRE	8983	11	Shed	King George V.	Glen Line
DUNSTER GRANGE	9494	35	Shed	Royal Albert	Houlder Bros. & Co.
DURANGO	9806	D	Qy.	Victoria	Royal Mail Lines
EDDYSTONE	1452	W. Dk.	Ldn. Dk.	Clyde	Shipping Co.
EEMSHORN	199	C	Qy.	Regent's	Canal
EMPIRE ARUN	5490	Union	Dry	Bullard	King & Co.
EMPIRE ATHELSTAN	7800	26	Shed	Royal Albert	Killick, Martin & Co.
EMPIRE BALTIC	(ex LST 3519)	3578	26	Shed	Tilbury
EMPIRE CLARENDON	8577	14	Shed	Royal Albert	P. & O. S. N. Co.
EMPIRE COAST	299	A	Shed	Canada	Victoria
EMPIRE COMFORT	1333	9	& 10	Sheds	Tilbury
EMPIRE CONSEQUENCE	1998	H	Shed	West India	Shipping & Coal Co.
EMPIRE CONSISTENCE	1771	D	Whse.	Millwall	United Shipping Co.
EMPIRE EDEN	1923	13	Shed	Tilbury	Currie Line
EMPIRE GALBRAITH	1923	P	Whse.	Millwall	United Shipping Co.
EMPIRE KENT	4769	T & 2	Whses.	Millwall	T. & J. Harrison
EMPIRE RIDLEY	5838	B	Shed	West India	G. A. Tom & Co.
EMPIRE SEABRIGHT	522	Poplar	Dk.	West	India
EMPIRE SEABROOK	518	—	—	—	Tilbury
EMPIRE SHELTER	1336	1	Shed	Tilbury	G. S. N. Co. (Clemt)
EMPIRE TUGELA	6181	21	Shed	Royal Albert	Gray, Dawes & Co.
EMPIRE WHARFE	3072	K	Shed	South West India	Royal Mail Lines
FALCON	1025	18	Shed	Tilbury	G. S. N. Co. (Clemt)
FORELAND	1331	W. Dk.	Ldn. Dk.	Carrie	Line
FORT CARIBOU	7132	T & 2	Whses.	Millwall	E. H. Mundy & Co.
FRANK A. VANDERLIP	7219	17	& 19	Sheds	Royal Albert
GANNET	1336	11	Shed	Tilbury	Clemt
GENERAL IV.	50	Norway	Floating	Dry	Glen Line
GLENTPFER	9559	9	Shed	King George V.	Glen Line

GOLDEN EAGLE	793	2	Shed	Tilbury	G. S. N. Co. (Clemt)
GOTTFRID	152	Station	Yd.	Surrey	Commercial
HIGHLAND CHIETAIN	14135	King	George V.	Dry	Royal Mail Lines
HIGHLAND RINGERS	14133	3	Shed	King	George V.
IDOMENEUS	7792	F	Qy.	Victoria	Glen Line
JANS	295	W. Dk.	Ldn. Dk.	Transport	Exchange Co.
JOHN CHARLINGTON	1576	F	Jty.	Regent's	Canal
KIMBALL HARLOW	1793	Canada	Yd.	N.	Surrey Commercial
KING	152	Station	Yd.	Surrey	Commercial
KYLE CASTLE	845	A	Qy.	Regent's	Canal
LANGTON GRANGE	7043	E	Shed	Victoria	Houlder Bros. & Co.
LOCHEE	964	Canary	Wf.	West	India
MANIPUR	9233	24	Shed	Tilbury	Montgomery & Workman
MARIBETTA	(ex Empire Daring)	7058	2	Dolphin	Millwall
MARSWORTH	366	C	Qy.	Regent's	Canal
MEDWAY COAST	1012	W. Dk.	Ldn. Dk.	Coast	Lines
MEROE	3832	8	Shed	Tilbury	G. S. N. Co.
MOULTAN	20,952	13	Shed	King George V.	P. & O. S. N. Co.
MYTILUS	5693	London	Graving	Dk.	West India
NEW Saxon	—	Petroleum	Co.	—	—
NEW BROOKLYN	6546	12	Shed	King George V.	Port Line
NORTHUMBERLAND	11,559	25	& 27	Sheds	Royal Albert
OCEAN COAST	1175	W. Dk.	Ldn. Dk.	Coast	Lines
OTRANTO	20,026	Dry	Dk.	Tilbury	Anderson, Green & Co.
PALAU	1545	12	Shed	Tilbury	MacAndrews & Co. (Clemt)
PENCHATRAU	1129	W. Dk.	Ldn. Dk.	Cie	Nantaise
PERIM	9550	20	Shed	Royal Albert	P. & O. S. N. Co.
PLYOVER	352	B	Qy.	Regent's	Canal
PORT ADELAIDE	8515	Co-op.	Qy.	Victoria	Port Line
PORT ALMA	8400	5	Shed	King George V.	Port Line
PORT PHILIP	12,439	7	Shed	Royal Albert	Port Line
PRINCE'S CHANNEL	(hopper barge)	538	S.E.	Dry	Tilbury
QUEEN'S CHANNEL	(hopper barge)	583	Green's	Dry	No. 2
RAMAVA	2148	Centre	Yd.	N.	Surrey Commercial
RANCHI	16,738	4	Shed	King George V.	P. & O. S. N. Co.
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SAMARINDA	7219	K	Shed	South West India	F. C. Strick & Co.
SAMOS	7219	3	Shed	Tilbury	G. S. N. Co. (Clemt)
SAMPAN	7219	13	Shed	Royal Albert	Union-Castle
SHUNA	1575	Station	Yd.	Surrey	Commercial
SOMERSET COAST	1097	W. Dk.	Ldn. Dk.	Coast	Lines
SOUTHERN COAST	885	W. Dk.	Ldn. Dk.	Coast	Lines
STRAITHAID	22,281	32	Shed	Tilbury	P. & O. S. N. Co. (Clemt)
STRATHNAVER	22,283	31	Shed	Tilbury	P. & O. S. N. Co. (Clemt)
SUECIA	4216	G	Whse.	Millwall	British & Northern
SUFFOLK	11,142	33	Shed	Royal Albert	J. B. Westray & Co.
SYDNEY STAR	11,380	29	Shed	Royal Albert	Blue Star Line
TEIN	213	Shad.	Bsn.	Ldn. Dk.	Brussels S. Co.
THERMIS	553	D	Qy.	Regent's	Canal
THEMSTON	711	F	Qy.	Regent's	Canal
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URBINO	5198	16	& 18	Sheds	Royal Albert
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Berkefeld Filters Ltd. (Dept. 50), Sardinia House, Kingsway, London

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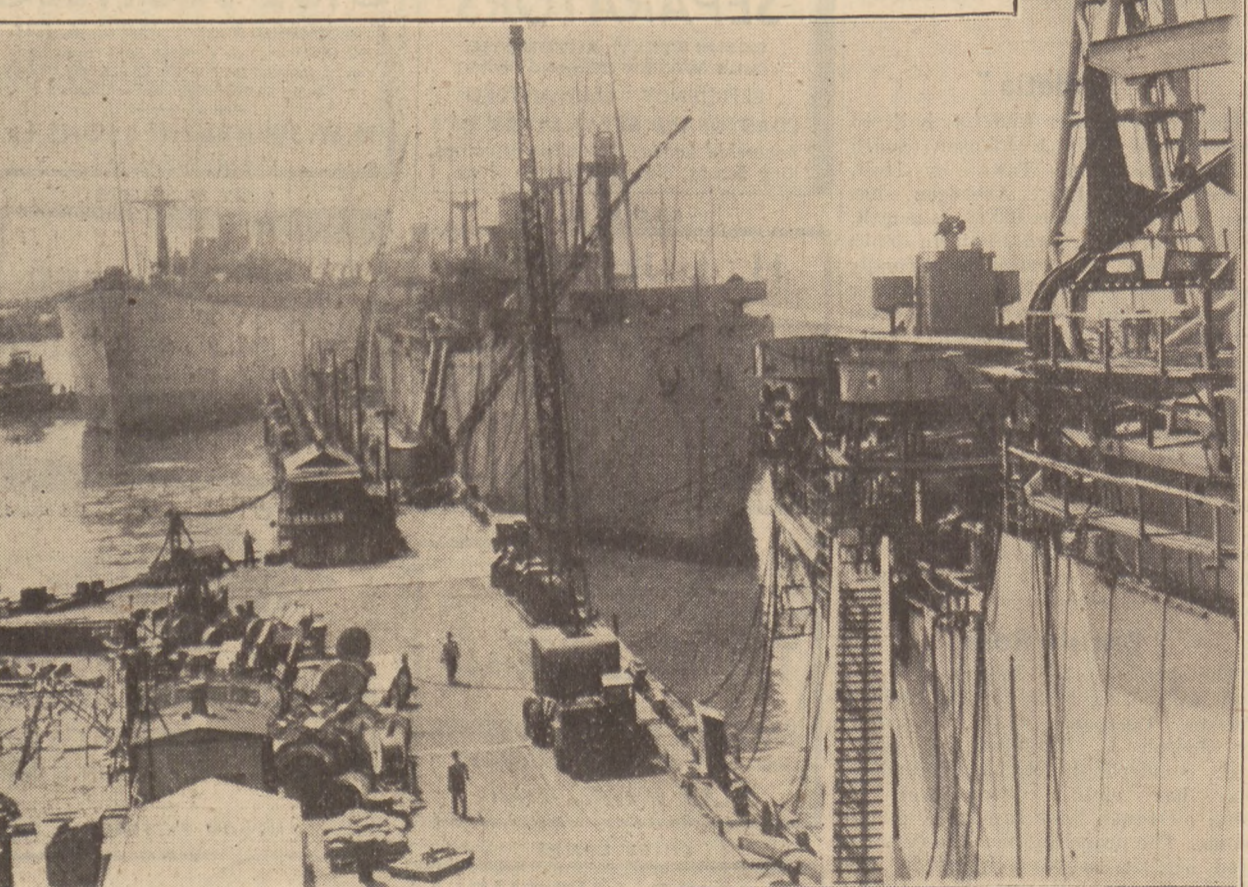
### WIRE ROPES

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For more than half a century, repairers, and builders of ships for all the world... facilities in New York Harbour for the largest ships afloat.

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## LONDON IN THE RIVER

Vessel	Station	Broker
ACOLIVITY	Everard's Bys.	Greenhithe, F. T. Everard & Sons
ACTIVITY	Everard's Jty.	Greenhithe, F. T. Everard & Sons
AFON GWILL	Durham Wf.	Charlton, T. Cook
AGILITY	Everard's Bys.	Greenhithe, F. T. Everard & Sons
APTITY	Everard's Bys.	Greenhithe, F. T. Everard & Sons
ASSIDUITY	Empire Paper Mills	Greenhithe, F. T. Everard & Sons
ASTERIA	Johnson's Jty.	Greenhithe, S. Cater & Co.
AUDACITY	Jurgen's Jty.	Purfleet, F. T. Everard & Sons
AVONWOOD	Bevan's Wf.	Northfleet, Temple Thomson & Clark
BALMORAL QUEEN	Chalk Jty.	W. Thurrock, British Channel Traders
BAITANNIC	Cotton's Wf.	Bermondsey, J. B. Westray & Co.
BEDALE H.	Ordnance Wf.	E. Greenwich
BELVINA	St. Clement's Reach	Temple Thomson & Clark
BIRKER FORCE	Tunnel Portland Cement Works	W. Thurrock, T. Cook
CAMEO	Lower Tr.	W. Woolwich
CEDARWOOD	Kent Portland Cement Works	Temple Thomson & Clark
CHANNEL QUEEN	Free Trade Wf.	Ratcliff, British Channel Islands Shipping Co.
COLDSTREAM	Upper Tr.	W. Woolwich, Coastwise Colliers
CORQUEST	Galton's Tr.	Woolwich, W. Cory & Son
CORFIRTH	Crowley's Wf.	E. Greenwich, W. Cory & Son
CORFLEET	Albert Dk.	Hoists, W. Cory & Son
CORMIST	S.S.O.C.A. Jty.	Purfleet, W. Cory & Son
CORMORANT	Carron Wf.	Wapping, G. S. N. Co.
COLNISHBROOK	Comben	Longstaff & Co.
CORSICA	Metropolitan Wf.	Wapping
CROHAM	Lower Tr.	Charlton, Harper, Petersen & Co.
DESPATCH	Allison's Wf.	Wandsworth, Freight Express
EAGLESCIFFE HALL	Common Bros.	—
EASTWICK	Anglo-American Oil Co.	—
EEMSHORN	Greenhithe Bys.	C. Hoffmann & Co.
ELECTRO	—	—
ELYSIAN COAST	Bell Wf.	Tr. Shadwell, Tyne-Tees Steam Shipping Co.
EMPIRE DAFODIL	Victoria Wf.	Limehouse, G. S. N. Co.
EMPIRE FABIAN	No. 1 Bys.	Charlton
EMPIRE FABRIC	Ward's Wf.	Grays, Matthews & Luff
EMPIRE FAIRPLAY	Charlton Bys.	S. Cater
EMPIRE FANFARE	Everard's Wf.	Greenhithe, F. T. Everard & Sons
EMPIRE FAVOURITE	Everard's Wf.	Greenhithe, F. T. Everard & Sons
EMPIRE FRIEDA	—	—
EMPIRE RAYMOND	(tnr)	—
EMPIRE SPINNEY	Stowage Wf.	Deptford Creek, G. S. N. Co.
EMPIRE WANDLE	Long Reach Collier Tr.	J. Constantine & Sons
EXPRESS	Chalk Jty.	W. Thurrock, W. H. Muller & Co.
FAUVETTE	St. Katharine's Wf.	Tower Bridge, G. S. N. Co.
FERRANTI	Upper Tr.	Deptford, Stephenson Clarke, Ltd.
FORTH	Carron Wf.	Wapping, Carron Co.
FREY	Ford's Jty.	Dagenham
FRIARGATE	—	—
GASTON MICARD	Stephenson Clarke, Ltd.	—
GERCO	Charlton Bys.	Cawood, Wharton & Co.
GRONINGEN	Stowage Wf.	Deptford Creek, G. S. N. Co.
HASKERLAND	Deadman's Bys.	Deptford, Shipping & Coal Co.
HELMOND	Power Station	Deptford, H. F. Berry

(Continued on page 18)

### VENTILATION AND HEATING OF SHIPS. AXIAL FLOW & CENTRIFUGAL FANS. SPECIAL

## OVERSEA MOVEMENTS: Latest Reports

### UNITED KINGDOM

**1 GRAVESEND AR**  
Comedian, Aug 26  
Trinidad for W India  
Dock  
Sydney Star Bnos Aires  
for Royal Albert Dk  
Navitas (Da), Aug 27  
Baron Murray, Aug 27  
Jucaro for Greenwich  
Buoy  
Bajamar Las Palmas  
for W India Dk  
Empire Halladale  
Glasgow for Tilbury  
Dock  
Gaston Micard Nantes  
Thornbury, Aug 27  
Kemi for Surrey Com  
Dock  
Belostrov Leningrad  
for Surrey Com Dock  
**GRAVESEND SD**  
Samderry, Aug 26  
Antwerp  
Badzo  
Frey  
Empire Garland, Aug 27  
Maretta (ex Empire  
Daring)  
Andoni  
Pollux, Aug 27  
Trondheim  
Kotka Finland  
Arabistan Abadan  
Lieutenant Lancelot  
Rouen  
**SOUTHEND Pd Down**  
Virgo, Aug 26  
Saphir  
Frey  
Samderry  
Maria (aux), Aug 27  
Maretta (ex Empire  
Daring), Aug 27  
Lieutenant Lancelot  
Pollux  
San Velino  
**ISLE OF GRAIN AR**  
Neocardia, Aug 24  
**ROCHESTER AR**  
Ulla, Aug 26  
Oulu  
Kirsten Mærsk, Aug 27  
Little Bay Is  
London  
Frederik  
**THE DOWNS Anch**  
Marathon, Aug 26  
Robert E. Clarkson  
Belgian Loyalty  
Robert Neighbors  
Frederick W. Taylor  
Coryda  
Creighton Victory  
Gerard Dou, Aug 27  
Prins Willem Van  
Oranje  
Comliebank  
Thomas J. Lyons  
**THE DOWNS SD**  
Kirsten Mærsk, Aug 26  
Marathon  
Belgian Loyalty  
Robert Neighbors  
Robert E. Clarkson  
Frontenac Victory  
Frederick W. Taylor  
Spanker  
Coryda  
Creighton Victory  
Thomas J. Lyons, Aug 27  
Gerard Dou  
Prins Willem Van  
Oranje  
**ELLESMEERE PT SD**  
Roy James Cole,  
Aug 26 Manchester  
**DOVER Pd E**  
Carbonia, Aug 26  
Knuud  
Kmicic  
Vilnius, Aug 27  
**DOVER Pd W**  
Skogaland, Aug 26  
John A. Donald  
Tankland  
**DUNGENESS Pd E**  
Zuiderburgh, Aug 27  
for Rotterdam  
Alexander White  
**DUNGENESS Pd W**  
Toms, Aug 27  
Empire Garland  
Spramex (Fr)  
Andoni  
**BEACHY HEAD Pd E**  
Agen, Aug 26  
for Boulogne  
Tully Crosby, Aug 27  
**LITTLEHAMPTON AR**  
Isolda (aux), Aug 26  
Gruvon  
**SPITHEAD Pd In**  
Confid, Aug 26  
**SPITHEAD Pd Out**  
Actina, Aug 26  
Robert Dundas, Aug 27  
**ST CATH'S PT Pd E**  
Beta, Aug 26  
Herakles, Aug 27  
Libelle  
Henry Gibbins  
**ST CATH'S PT Pd W**  
Velma Lykes, Aug 27  
**NEEDLES Pd W**  
Aba, Aug 26  
**SOUTHAMPTON AR**  
Sea Snipe, Aug 27  
**SOUTHAMPTON SD**  
Aba, Aug 26 Port Said  
(not for Hamburg as  
before reported)  
Arundel Castle, Aug 26  
Port Said & Singapore  
Queen Mary, Aug 27  
Halifax and New York  
Thomas J. Lyons  
**PORTLAND SD**  
British Glory, Aug 27  
Abadan  
**TEIGNMOUTH SD**  
Bernard V. (Du),  
Aug 26 Caen  
**PRAWLE PT Pd E**  
Gironde, Aug 27  
Ruth Lykes  
**PRAWLE PT Pd W**  
Luculus, Aug 26  
**PLYMOUTH AR**  
Kegums, Aug 26  
La Pallice  
Empire Barcohel (tug)  
(put in)  
**FOWEY**  
Devon, Aug 24 Cardiff  
**FALMOUTH AR**  
Nirumand (tug), Aug 26  
Newcastle (towing  
barges)  
Mewata Park, Aug 27  
London  
**FALMOUTH SD**  
Noreg, Aug 26 Abadan  
British Merchant  
Abadan  
Sea Snipe  
Naples  
via Southampton  
Ancylus, Aug 27  
Chacao  
Mewata Park Vancouver

### DUBLIN SD

Westlaan, Aug 26  
Liverpool  
**DUNNET HEAD Pd E**  
Hindsholm, Aug 26  
Cape Kildare, Aug 27  
**DUNNET HEAD Pd W**  
Bera, Aug 26  
Baron Graham  
Lowlander  
Kirkwall Bratt  
Kirkwall AR  
Cape Kildare, Aug 27  
Galveston  
**KIRKWALL SD**  
Cape Kildare, Aug 27  
Gothenburg  
**METHIL AR**  
Samuel V. Shreve,  
Aug 26 Karlsborg  
**GRANGEMOUTH AR**  
Ek, Aug 26  
Christiansand  
Empire Condorart  
Lubeck  
Empire Wensum  
Haukipudas  
Immo Ragnar Hamina  
Marieborg, Aug 27 Leith  
**GRANGEMOUTH SD**  
Nato, Aug 26 Rotterdam  
**BO'NESS AR**  
Marna, Aug 26  
Valdemarsvik  
**GRANTON AR**  
Penton, Aug 25 Sfax  
**LEITH AR**  
Saluta, Aug 25  
(put back)  
**LEITH SD**  
Saluta, Aug 24  
S Georgia  
Trondhjem, Aug 27  
London  
Marieborg Grangemouth  
**ST ABB'S HEAD Pd S**  
Tronia, Aug 27  
**ELYTH AR**  
Blyen Haezer, Aug 26  
Stockton  
**TYNE AR**  
Borgholm, Aug 27 Rouen  
**TYNE SD**  
Angeja, Aug 26  
Cornwall  
Berengaria (stern hulk)  
Rosyth (in tow of  
tugs Mustang, Hen-  
don and George V.)  
**SWANSEA AR**  
British Cavalier, Aug 26  
Abadan  
Cairnavon Montreal  
**FLAMBORO HD Pd N**  
Oleum, Aug 27  
Nottingham  
**FLAMBORO HD Pd S**  
Energi, Aug 26  
Nato, Aug 27  
Hildur  
**SPURN HEAD Pd In**  
William Howland, Aug 27  
Newcam Brewster  
Neocardia  
Lublin  
**SPURN HEAD Pd Out**  
Ketty, Aug 26  
Wasaborg  
Alexandra  
Empire Halberd  
Oranje  
Elisabeth Mærsk  
Empire Gavel  
Aug 27  
Willessden  
(ex Empire Canning)  
William Howland  
**SALT END AR**  
Kirkenes, Aug 26  
Lake Charles  
**HULL AR**  
Hebe, Aug 26  
Copenhagen  
Empire Gaffer, Aug 27  
Kotka  
Odense  
Spero  
Empire Rapier  
Empire Gunfleet  
Vancouver  
**HULL SD**  
Empire Lance, Aug 25  
Cuxhaven  
Empire Gavel, Aug 26  
Piraeus  
Elisabeth Mærsk  
Emden  
Willessden (ex Empire  
Canning), Aug 27  
Gothenburg  
Empire Cutlass  
Cuxhaven  
**GOOLE AR**  
Ifelela, Aug 26  
Hull  
Java  
Delftzyl  
Tubo, Aug 27 Brussels  
**GOOLE SD**  
Nottingham, Aug 26  
Blyth  
Gruno (Du) Rotterdam  
Constant  
Polruan  
Helena, Aug 27 Exmouth  
**IMMINGHAM AR**  
Frida, Aug 24 London  
Osbur, Aug 24  
Ridham Dk  
Glaunt, Aug 25 London  
Wasaborg  
Dieppe  
Rane  
Dieppe  
**IMMINGHAM SD**  
Hast IV, Aug 24  
Stockholm  
Mari II, Wajia  
Wasaborg, Aug 26  
Menstad  
Menstad  
Sundsvall  
Iggessund  
**GRIMSBY AR**  
Empire Congo, Aug 24  
Mo  
Alexandra London  
Rota, Aug 25 Esbjerg  
Leoville, Aug 26 Dieppe  
Hondsrug, Aug 26  
Holland  
**GRIMSBY SD**  
Alexandra, Aug 26  
Ramsgate  
Copenhagen  
Oxelosund  
**GR YARMOUTH RDS Pd S**  
Constant, Aug 27  
**HARWICH AR**  
Oranje Nassau, Aug 24  
Hook of Holland  
Prinses Beatrix Rdam  
Batavier II Rotterdam  
Kromprins Frederik,  
Aug 25 Esbjerg  
**HARWICH SD**  
Batavier II, Aug 24  
Lisbon  
Irish Hazel, Aug 26  
New York  
Lanahrone, Aug 26  
Casablanca

### ARCTIC SEA TO USHANT

**MESANE SD**  
Sisto, Aug 19 Kirkenes  
**ARCHANGEL AR**  
Vesla, Aug 20  
Gdansk/Gdynia  
**KIRKENES SD**  
Polarlys, Aug 23  
Bergen  
**NARVIK AR**  
Mahlmal, Aug 24  
Antwerp  
**NARVIK SD**  
Lysaker IV, Aug 26  
Antwerp  
**BODO SD**  
Lysaker IV, Aug 19  
Narvik and Antwerp  
**THAMSHAVN SD**  
Dixie, Aug 20 Hamburg  
**BERGEN SD**  
Nordstjernen, Aug 23  
Kirkenes  
Nova  
Antwerp  
**STAVANGER SD**  
Deneb, Aug 21 Oslo  
**CHRISTIANSUND AR**  
Gransoff, Aug 16  
Trondheim  
**PORSGRUNN AR**  
Jan (No), Aug 22 Oslo  
Kong Bjorn, Aug 23  
Oslo  
**PORSGRUNN SD**  
Finn (Sw), Aug 23  
Aarhus  
**SKIEN AR**  
Doggersbank, Aug 20  
Porsgrunn  
**SKIEN SD**  
Doggersbank, Aug 20  
Roskilde  
**TONSBERG AR**  
Rapid II, Aug 21  
Gothenburg  
Fantoft, Aug 23 Emden  
**TONSBERG SD**  
Rapid II, Aug 22  
foreign via Brevik  
**OSLO AR**  
Akershus, Aug 17  
Corona, Aug 23  
**HALDEN AR**  
Facto, Aug 20  
**VINGA PD**  
Iris (Fi), Aug 18  
Argentina, Aug 20  
Karskar  
Maj (aux), Aug 21  
Fowey  
Fennia  
Kotka  
Innamo, Aug 22  
Wanda  
Kotka  
**HELSINKI SD**  
Marina, Aug 20 Pernaja  
Froste, Aug 21  
Kotka  
Alden, Aug 23  
Lulea  
Innamo, Aug 23 Rouen  
and London  
**WALKO SD**  
Carella (Fi), Aug 22  
Hull  
**STROMFORS SD**  
Fryken, Aug 21 Antwerp  
**KOTKA AR**  
Lapponia, Aug 18  
Ceres (Fi), Aug 22  
Empire Galena, Aug 22  
Froste  
**KOTKA SD**  
Empire Gaffer, Aug 22  
Hull and London  
**GDYNIA AR**  
Wajia, Aug 22  
Klaipeda  
Jutlandia  
Copenhagen  
Lida (Ph), Aug 23  
Lulea  
Pelle  
Lulea  
Visby  
Aarhus  
Dalton Victory Pdelphia  
Banana  
Landskrona  
Themis (Sw) Helsingborg  
Svenske Oskarshamn  
Blue Island Victory  
Newport News  
Polesia (ttr) Copenhagen  
**GDYNIA SD**  
Verna H., Aug 22  
Stockholm  
Polcirkeln  
Lulea  
Iwan  
Gothenburg  
Jaderen  
Stavanger  
Ewald, Aug 23 Leningrad  
foreign  
Sally  
Liepaja  
Dothan Victory Helsinki  
Rudolf  
Kalmar  
Lulea  
Phenix  
Kolding  
Fuglen II, (aux)  
Kotka  
Joseph Weydemeyer  
New York  
**KIEL CANAL AR**  
Aldo, Aug 22 Stockholm  
Trudo  
Stockholm  
Tovell  
Lulea  
Fiat, Aug 23 Nakkov  
for Rotterdam  
**KIEL CANAL SD**  
Resnova, Aug 22 Assens  
Akademik Karpinsky  
(1122 gross)  
Stettin  
Gruno (Du) (126)  
Denmark  
Fortuna (aux)  
Kotka  
Elizabete  
Cape, Aug 23 Helsinki  
Duiveland  
Yxpila  
**KOGE AR**  
Hafnia (Da), Aug 24  
Emden  
**KOGE SD**  
Laura Dan, Aug 18  
Gdansk  
Hervor Bratt, Aug 25  
Gothenburg  
**COPENHAGEN AR**  
Hebe (Fi), Aug 24  
Mantyluoto  
Bolivia  
Oran M. Roberts  
Oslo  
Arusa  
Skive  
Thyra (Da) Newcastle  
Arid (aux)  
Raiso  
Thorfinnur (ttr),  
Aug 25 Svalbard  
Valborg (Da) Hernosand  
Gothland  
Leith  
Lund  
Svendborg  
Trio (Da)  
Aarhus  
Tomas  
Kotka  
Aalborg  
River Swift  
Methyl  
Orion (Da)  
Emden  
Deo Gloria  
Rotterdam  
Lagarfoss  
Leith  
Walborg  
Methyl  
A. P. Bernstorff,  
Aug 26 Helsinki  
**COPENHAGEN SD**  
Asia, Aug 24  
Oslo  
Margrete  
Newcastle  
Falken (Sw)  
Gdynia  
Norruna  
Landskrona  
Lulea  
Danig  
Lulea  
Lillebaelt (aux)  
Gdynia  
Arcturus (Fi)  
Helsinki

### LULEA SD

Kjell, Aug 21  
Gdansk/Gdynia  
Belgieu  
Hamburg  
Glitt  
Gdansk/Gdynia  
Nils Sture  
Gdansk/Gdynia  
Noord Stad  
Kemi  
Rites, Aug 24  
Irlam  
Alfa, Aug 24  
Gdansk/Gdynia  
**BATSKARNSA SD**  
Karin, Aug 23  
Hartlepool  
**KEMI AR**  
Lelie, Aug 18  
Pitea  
Liberty, Aug 20  
Kalix  
Jesse G. Cotting, Aug 20  
Hull  
Japos, Aug 24  
Bristol  
**NORRESUNDBY AR**  
Heemskerk, Aug 23  
Aalborg  
**LAPALUOTO AR**  
Elin S. (aux) Bandholm  
Alabama  
Randers  
Nerma Lau, Aug 24  
Gdansk  
**NORRESUNDBY SD**  
Dina Wal (aux), Aug 22  
Avonmouth  
Copenhagen  
W. R. Lundgren  
Texas City  
**HAMBURG AR**  
Spes, Aug 23  
Kotka  
Fano  
Gdansk  
Cimbria  
Emden  
Bremerhaven  
**CUXHAVEN PD**  
Frem (Du), Aug 22  
Avenir  
Hague  
Mikhail Franze  
Cimbria, Aug 23  
Bontamia H. Bristow,  
W. R. Lundgren  
Johanna (Sw)  
Vestria  
Viking (Du)  
Deo Gloria  
Clio (Fi)  
Mercur (Da)  
Lewant  
Twee Gebroeders (241),  
Dollie  
Drabant  
Sabbat  
Norden (Sw), Aug 22  
Argentina, Aug 20  
Karskar  
Maj (aux), Aug 21  
Fowey  
Fennia  
Kotka  
Innamo, Aug 22  
Wanda  
Kotka  
**HELSINKI SD**  
Marina, Aug 20 Pernaja  
Froste, Aug 21  
Kotka  
Alden, Aug 23  
Lulea  
Innamo, Aug 23 Rouen  
and London  
**WALKO SD**  
Carella (Fi), Aug 22  
Hull  
**STROMFORS SD**  
Fryken, Aug 21 Antwerp  
**KOTKA AR**  
Lapponia, Aug 18  
Ceres (Fi), Aug 22  
Empire Galena, Aug 22  
Froste  
**KOTKA SD**  
Empire Gaffer, Aug 22  
Hull and London  
**GDYNIA AR**  
Wajia, Aug 22  
Klaipeda  
Jutlandia  
Copenhagen  
Lida (Ph), Aug 23  
Lulea  
Pelle  
Lulea  
Visby  
Aarhus  
Dalton Victory Pdelphia  
Banana  
Landskrona  
Themis (Sw) Helsingborg  
Svenske Oskarshamn  
Blue Island Victory  
Newport News  
Polesia (ttr) Copenhagen  
**GDYNIA SD**  
Verna H., Aug 22  
Stockholm  
Polcirkeln  
Lulea  
Iwan  
Gothenburg  
Jaderen  
Stavanger  
Ewald, Aug 23 Leningrad  
foreign  
Sally  
Liepaja  
Dothan Victory Helsinki  
Rudolf  
Kalmar  
Lulea  
Phenix  
Kolding  
Fuglen II, (aux)  
Kotka  
Joseph Weydemeyer  
New York  
**KIEL CANAL AR**  
Aldo, Aug 22 Stockholm  
Trudo  
Stockholm  
Tovell  
Lulea  
Fiat, Aug 23 Nakkov  
for Rotterdam  
**KIEL CANAL SD**  
Resnova, Aug 22 Assens  
Akademik Karpinsky  
(1122 gross)  
Stettin  
Gruno (Du) (126)  
Denmark  
Fortuna (aux)  
Kotka  
Elizabete  
Cape, Aug 23 Helsinki  
Duiveland  
Yxpila  
**KOGE AR**  
Hafnia (Da), Aug 24  
Emden  
**KOGE SD**  
Laura Dan, Aug 18  
Gdansk  
Hervor Bratt, Aug 25  
Gothenburg  
**COPENHAGEN AR**  
Hebe (Fi), Aug 24  
Mantyluoto  
Bolivia  
Oran M. Roberts  
Oslo  
Arusa  
Skive  
Thyra (Da) Newcastle  
Arid (aux)  
Raiso  
Thorfinnur (ttr),  
Aug 25 Svalbard  
Valborg (Da) Hernosand  
Gothland  
Leith  
Lund  
Svendborg  
Trio (Da)  
Aarhus  
Tomas  
Kotka  
Aalborg  
River Swift  
Methyl  
Orion (Da)  
Emden  
Deo Gloria  
Rotterdam  
Lagarfoss  
Leith  
Walborg  
Methyl  
A. P. Bernstorff,  
Aug 26 Helsinki  
**COPENHAGEN SD**  
Asia, Aug 24  
Oslo  
Margrete  
Newcastle  
Falken (Sw)  
Gdynia  
Norruna  
Landskrona  
Lulea  
Danig  
Lulea  
Lillebaelt (aux)  
Gdynia  
Arcturus (Fi)  
Helsinki

### GLASHAVEN, Aug 25

Rotterdam  
Tim  
Amsterdam  
Wm. Th. Malling  
Elsinore  
Hallstavik  
Hoganas  
Pd N  
Elsinore  
Pd S  
Banana, Aug 25  
Selma Thorden  
Walborg  
Bjork  
John W. Arey, Aug 26  
North Down  
Brynild  
Kong Trygve  
AALBORG AR  
Scandia, Aug 22 Gdansk  
Gundvor Mærsk Gdansk  
Deneb, Aug 23  
Nykobing (Mors)  
Japos, Aug 24  
Frederikshavn  
AALBORG SD  
Scandia, Aug 23 Gdansk  
Deneb, Aug 24  
Copenhagen  
Japos Gdynia  
**NORRESUNDBY AR**  
Heemskerk, Aug 23  
Aalborg  
Elin S. (aux) Bandholm  
Alabama  
Randers  
Nerma Lau, Aug 24  
Gdansk  
**NORRESUNDBY SD**  
Dina Wal (aux), Aug 22  
Avonmouth  
Copenhagen  
W. R. Lundgren  
Texas City  
**HAMBURG AR**  
Spes, Aug 23  
Kotka  
Fano  
Gdansk  
Cimbria  
Emden  
Bremerhaven  
**CUXHAVEN PD**  
Frem (Du), Aug 22  
Avenir  
Hague  
Mikhail Franze  
Cimbria, Aug 23  
Bontamia H. Bristow,  
W. R. Lundgren  
Johanna (Sw)  
Vestria  
Viking (Du)  
Deo Gloria  
Clio (Fi)  
Mercur (Da)  
Lewant  
Twee Gebroeders (241),  
Dollie  
Drabant  
Sabbat  
Norden (Sw), Aug 22  
Argentina, Aug 20  
Karskar  
Maj (aux), Aug 21  
Fowey  
Fennia  
Kotka  
Innamo, Aug 22  
Wanda  
Kotka  
**HELSINKI SD**  
Marina, Aug 20 Pernaja  
Froste, Aug 21  
Kotka  
Alden, Aug 23  
Lulea  
Innamo, Aug 23 Rouen  
and London  
**WALKO SD**  
Carella (Fi), Aug 22  
Hull  
**STROMFORS SD**  
Fryken, Aug 21 Antwerp  
**KOTKA AR**  
Lapponia, Aug 18  
Ceres (Fi), Aug 22  
Empire Galena, Aug 22  
Froste  
**KOTKA SD**  
Empire Gaffer, Aug 22  
Hull and London  
**GDYNIA AR**  
Wajia, Aug 22  
Klaipeda  
Jutlandia  
Copenhagen  
Lida (Ph), Aug 23  
Lulea  
Pelle  
Lulea  
Visby  
Aarhus  
Dalton Victory Pdelphia  
Banana  
Landskrona  
Themis (Sw) Helsingborg  
Svenske Oskarshamn  
Blue Island Victory  
Newport News  
Polesia (ttr) Copenhagen  
**GDYNIA SD**  
Verna H., Aug 22  
Stockholm  
Polcirkeln  
Lulea  
Iwan  
Gothenburg  
Jaderen  
Stavanger  
Ewald, Aug 23 Leningrad  
foreign  
Sally  
Liepaja  
Dothan Victory Helsinki  
Rudolf  
Kalmar  
Lulea  
Phenix  
Kolding  
Fuglen II, (aux)  
Kotka  
Joseph Weydemeyer  
New York  
**KIEL CANAL AR**  
Aldo, Aug 22 Stockholm  
Trudo  
Stockholm  
Tovell  
Lulea  
Fiat, Aug 23 Nakkov  
for Rotterdam  
**KIEL CANAL SD**  
Resnova, Aug 22 Assens  
Akademik Karpinsky  
(1122 gross)  
Stettin  
Gruno (Du) (126)  
Denmark  
Fortuna (aux)  
Kotka  
Elizabete  
Cape, Aug 23 Helsinki  
Duiveland  
Yxpila  
**KOGE AR**  
Hafnia (Da), Aug 24  
Emden  
**KOGE SD**  
Laura Dan, Aug 18  
Gdansk  
Hervor Bratt, Aug 25  
Gothenburg  
**COPENHAGEN AR**  
Hebe (Fi), Aug 24  
Mantyluoto  
Bolivia  
Oran M. Roberts  
Oslo  
Arusa  
Skive  
Thyra (Da) Newcastle  
Arid (aux)  
Raiso  
Thorfinnur (ttr),  
Aug 25 Svalbard  
Valborg (Da) Hernosand  
Gothland  
Leith  
Lund  
Svendborg  
Trio (Da)  
Aarhus  
Tomas  
Kotka  
Aalborg  
River Swift  
Methyl  
Orion (Da)  
Emden  
Deo Gloria  
Rotterdam  
Lagarfoss  
Leith  
Walborg  
Methyl  
A. P. Bernstorff,  
Aug 26 Helsinki  
**COPENHAGEN SD**  
Asia, Aug 24  
Oslo  
Margrete  
Newcastle  
Falken (Sw)  
Gdynia  
Norruna  
Landskrona  
Lulea  
Danig  
Lulea  
Lillebaelt (aux)  
Gdynia  
Arcturus (Fi)  
Helsinki

### FRANK E. SPENCER

Charleston  
Omlandia, Aug 24  
Vianna  
Samuel McIntyre  
Savannah  
Phoenix (Du) London  
Gladan  
London  
Bestum  
Stordo  
Walenburgh, Aug 25  
Antwerp  
Nakkov  
Batavier II, Harwich  
Prinses Beatrix Harwich  
Trompenburg London  
Bloemfontein Brisbane  
Anna Odland Oslo  
Bonn Oslo  
I. S. Groen (tug) Brest  
(with tow)  
Zeehond Swaneae  
Sandhamn Armuelles  
Gaasterland, Aug 26  
Grangemouth  
Mies Norrkoping  
Tyro Lisbon  
Sandenburgh Setubal  
Leerdam Philadelphia  
**ROTTERDAM SD**  
Prinses Beatrix, Aug 23  
Harwich  
Batavier II, Harwich  
Edera, Aug 24 Venice  
Carl Zachary Webb  
New York  
Rutgers Victory  
Hampton Roads  
June, Aug 24 Hamburg  
Westplein  
Gulf of Mexico  
Miguel de Larrinaga  
Genoa  
Lisbon  
Vulcanus and Istanbul  
Van Gelder Odense  
and Aarhus  
Noordam New York  
Aelbert Cuyp, Aug 25  
Vancouver  
California Express  
Gothenburg  
Thomas Pollock N York  
Eems Dieppe  
Spramex, Aug 26  
Boucau  
**DELFT AR**  
Zijpe, Aug 24 London  
**SLIKKERVEER AR**  
Joost, Aug 25 Delftzyl  
**ZWYNDRECHT AR**  
Palma, Aug 24  
Fredrikstad  
**DORDRECHT AR**  
Henriette (Du), Aug 23  
Otterbacken  
Sodertelje  
Aldo, Aug 24 Strangnas  
Pudica  
Norwich  
Elisabeth, Aug 25  
Norwich  
Kalmar  
Gees  
**FLUSHING PD**  
Mr. Linthorst Homan,  
Aug 23 for Lisbon  
Abul Kader Falmouth  
Antioch Victory,  
Aug 27 (put back)  
Battle Creek Victory  
Robert Mærsk Sfax  
Longtow (tug) Leixoes  
Viacheslav Molotov  
**GIBRALTAR SD**  
Antioch Victory, Aug 26  
New York  
M.O.W.T. 8 (crane)  
Empire Eddystone  
Port Said  
Casablanca  
Henry Adams Boudaux  
Ebrant Oslo  
Atlantic Middlebro  
Skodsborg, Aug 27  
Hargshamm  
Nova  
Saivo  
Narvik  
**ANTWERP SD**  
Zuidland, Aug 26  
Boom  
Manchester  
Thetis (Gr) Montreal  
Spica Queenborough  
Tankland, Aug 26  
Aruba  
London  
Urd  
Empire Cato Hamburg  
Clara Clausen Esbjerg  
Toms Copenhagen  
Hermes Rotterdam  
Michigan (Fr), Aug 27  
Veracruz  
Helsinki  
Westliart Hamburg  
**GHEHT AR**  
Kiruna, Aug 26 Narvik  
**DIEPPE AR**  
Wasaborg, Aug 20  
Hernosand  
**GIBRALTAR Pd W**  
Oregon Express  
Aug 26  
Attleboro Victory  
James Oliver for US  
Salvador Bran  
Villanova Victory  
Avance I. (No)  
Georgian  
Sea Robin  
Galvin Victory, Aug 27  
Memphis City  
Orbis  
Muron Partington  
Paralos II, Tocopilla  
John M. Morehead  
Havre  
Ameriki  
Athos II,  
F. Scott Fitzgerald  
Strathmore  
Valentin Ruiz Senen  
William A. Richardson  
**MALAGA SD**  
Ria de Muros, Aug 27  
Lisbon  
**PALMA, Majorca SD**  
Achuri, Aug 23 Gijon  
**VALENCIA AR**  
Monte Contes, Aug 14  
Sagunto  
Palamos  
Ebro, Aug 15 Barcelona  
Rey Jaime I, Aug 16  
Palma (Maj)  
Ciudad de Alceira  
Sta Cruz de la Palma  
Valentin Ruiz Senen  
Gijon  
**VALENCIA SD**  
Monte Contes, Aug 14  
Alicante  
Ebro, Aug 16 Alicante  
Rey Jaime I,  
Palma (Maj)  
Ciudad de Alceira  
Barcelona  
Egholm, Aug 26  
Torrevecija  
**TARRAGONA AR**  
Monte Buitre, Aug 18  
Barcelona  
Ophir, Aug 20 Barcelona  
Maruja y Aurora,  
Aug 21 Gijon  
**TARRAGONA SD**  
Argentina, Aug 17  
Palamos  
Monte Buitre, Aug 19  
Sagunto  
Ophir, Aug 20 Barcelona  
**BARCELONA AR**  
J. J. Sister, Aug 21  
Genoa  
Monte Galera, Aug 22  
Aviles  
**GIJON SD**  
Ophir, prev Aug 24  
Seville  
**AVILES AR**  
Castillo Gibralfaro,  
Aug 11 San Esteban  
**AVILES SD**  
Castillo Norena, Aug 14  
Vallcarca  
**CORUNNA SD**  
Abando, Aug 14 Gijon

### VICO AR

Rita Garcia, Aug 25  
Bahia Blanca  
AR  
VIANNA AR  
Santirso, Aug 18 Lisbon  
SD  
VIANNA SD  
Santirso, Aug 21 Gijon  
AR  
LEIXOES AR  
Hjortholm, Aug 27  
Antwerp  
SD  
LEIXOES SD  
Rof, Aug 19 Oporto  
AR  
OPORTO AR  
Rof, Aug 19 Antwerp  
Fendris, Aug 26 London  
SD  
OPORTO SD  
Villa Franca, Aug 21  
Beta  
SD  
SETUBAL AR  
Graslin, Aug 22 Bayonne  
Anfritrite 1 (aux),  
Aug 24 Sfax  
Gros Pierre Lisbon  
SD  
SETUBAL SD  
Zuiderburgh, Aug 20  
Rotterdam  
Miriam (aux) Rotterdam  
Ansyma, Aug 23  
Rotterdam  
Haarfragre Bordeaux  
Graslin, Aug 24  
Casablanca  
Gros Pierre Casablanca  
**HUELVA In Port**  
Castillo Daroca, Aug 25  
Barcelona  
AR  
CADIZ AR  
Tajo, Aug 18 Seville  
Cabo La Plata Seville  
Ciudad de Sevilla,  
Aug 19 Barcelona  
Ciudad de Melilla,  
Aug 21 Canary Is  
Ebro Ceuta  
SD  
CADIZ SD  
Castillo Mombeltran,  
Aug 16 Alicante  
Aragon Canary Is  
Ciudad de Sevilla,  
Aug 19 Canary Is  
Cabo La Plata, Aug 20  
Ceuta  
Ciudad de Melilla,  
Aug 21 Seville  
Polkerris, Aug 24  
Aberdeen

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GOVERNOR, 5671, Brunswick, T. & J. Harrison HENRY GEORGE, 7176, W. Float,† American S.S. Lines Agency HERBERT W. WALKER, 365, Harrington, H. Tyrer & Co. HERBERT RISHIRE, 8398, W. Float Dry 3,† Bibby Bros. & Co. HESPERIDES, 6100, Vittoria,† Cayzer, Irvine & Co. HILARY, 7463, Cammell Laird & Co.'s Wet Bsn.,† J. Holt & Co. HOLMESIDE, 2852, Harrington, H. Tyrer & Co. HOPPER NO. 32, —, Alfred,† T. Phelan & Co. HORORATA, 13,945, Sandon, J. Dowie & Co. INORITA, 201, E. Float,† T. Phelan & Co. INDELLA, 6026, Alexandra 2, Toft & Co. INVERPOOL, 620, Morpeth,† Petroleum Board J.P.W. 615, Canada 3, W. S. Cooe & Co. JERSEY CITY, 6686, Huskisson 3, A. Coker & Co. JOHN HOLT, 3814, Cammell Laird & Co.'s Wet Bsn.,† J. Holt & Co. JONATHAN HOLT, 3778, Brunswick, J. Holt & Co. KAITUNA, 4914, Sandon, J. Dowie & Co. KANA, 2783, Hornby, Furness, Withy & Co. KENTON COAST, 459, Prince's, Coast Lines KENTUCKY, 2136, Carriers', N. Johansen & Dahl KHETI, 2734, Langton Branch, Moss Hutchison Line KILFENORA, 979, Queen's, Limerick S.S. Co. KROSN0, 1896, Gladstone 2, United States Lines KYLE BUTE, 795, Bramley-Moore, Monroe Bros. KYLARRHEA, 323, Liverpool KYLCROFT, 863, Carriers', Monroe Bros. LANCASHIRE, 9557, W. Float,† Bibby Line LANCASHIRE COAST, 1104, Clarence Dry 1, Coast Lines LARCHEFIELD, 493, Albert, W. A. Savage LETITIA, 13,595, Alfred,† Donaldson Bros. & Black LLANBERID, 6068, E. Float,† E. Nicholson LONGFORD, 1913, Prince's, British & Irish Steam Packet Co. LORD GLENTORAN, 5667, Alexandra 1, G. & Forwood Heyn LOSADA, 6520, Canada 1, P. S. N. Co. MACGREGOR LAIRD, 4992, Herculesaneum Dry 3, Elder Dempster Lines MAIDAN, 8150, Vittoria, Wt.,† T. & J. Brocklebank MALAKAND, 8030, Vittoria, Wt.,† T. & J. Brocklebank MALAYA PRINCE, 8593, Canada 1, Furness, Withy & Co. MARCIA, 150, Morpeth Branch,† T. Phelan & Co. MARSHALL, 7311, Alexandra 3, R. P. Houston MARTAND, 7967, E. Float,† Cunard White Star MERCHANT PRINCE, 5229, Langton Dry 1, Sivewright, Bacon & Co. MONALEBN, 633, Brocklebank, Limerick S.S. Co. MONKSVILLE, 499, Canada 1, J. S. Monks MURON, 465, for Partington NEW NORTHLAND, 3445, Langton Dry 2, Elder Dempster Lines NO. 1518, 518, Toxteth, T. & J. Harrison OCEAN WANDERER, 7178, Hornby, Donaldson Bros. & Black OLVINGDEAN GRANGE, 7046, Brocklebank Branch, Houlder Bros. & Co. PACIFIC EXPRESS, 3401, Langton, Lampart & Holt Line PAPAORA, 10,005, Gladstone Dry, A. Holt & Co. PENSTONE, 267, Carriers', W. A. Savage PERLA, 798, Queen's, T. Orford & Son PILCOMAYO, 5567, Canada, P. S. N. Co. PINXTON, 1365, Harrington, MacAndrews & Co. PROCRIS, 1060, Grayson, Rollo & Clovers Dry 3,† H. Tyrer & Co. RAIBWINTER, 5013, Herculesaneum Dry 2, S. C. Chambers & Co. RIBBLEBANK, 351, W. Float,† S. W. Cooe & Co. RIBBECK CASTLE, 8322, Canada 2, Elder Dempster RIVERVILLE, 335, Alexandra 1, J. S. Monks ROBERT L. HOLT, 4000, Cammell Laird & Co.'s Wet,† J. Holt & Co. ROYAL CANADIAN PACIFIC, J. S. Monks ROMAN QUEEN, 1047, Prince's, Coast Lines ST. ENOCH, 326, Alexandra, Ross, Ryan & Co. SALAVERIE, 6612, Canada 1, P. S. N. Co. SAMFORTH, 7219, Alexandra, A. Holt & Co. SAMUDORO, 7210, Liverpool, Marshall, Little & Co. SAMOTHRAE, 7219, Hornby, P. S. N. Co. SAN DARIO, 1137, Dingle Oil Jty., Shell Mex. SANTANDER, 6612, Canada Dry, P. S. N. Co. SIBLEY PARK, 7140, Huskisson 1, Cunard White Star SPRAYVILLE, 466, Canada 1, J. S. Monks STANBARD, 6077, Cammell Laird & Co.'s Dry 4,† Hall Line STANLEY FORCE, 586, Canada 2, W. S. Kennah & Co. STOCK FORCE, 983, Carriers', W. S. Kennah & Co. STRAUM, 287, Morpeth,† T. Phelan & Co. STUART PRINCE, 1948, Hornby, Furness, Withy & Co. TACTICIAN, 5996, Herculesaneum, T. & J. Harrison TAOS VICTORY, 7607, E. Float,† Atlantic Transport Co. TARKWA, 7416, Queen's 2, Elder Dempster Lines THAMES COAST, 1045, Trafalgar, Coast Lines THE MONARCH, 1059, Brocklebank, E. W. Turner & Son TID 28 (Ang), 50, Lpool, T. Phelan & Co. TID 15 (Ang), 50, Morpeth,† T. Phelan & Co. TID 118 (Ang), 50, W. Float,† T. Phelan & Co. TID 117 (Ang), 50, Wallasey,† T. Phelan & Co. TID 143 (Ang), 50, Lpool, T. Phelan & Co. TID 149 (Ang), 50, Wallasey,† T. Phelan & Co. TID 150 (Ang), 50, Morpeth,† E. H. Mundy & Co. TID 163 (Ang), 50, Lpool, T. Phelan & Co. TREVAYLOR, 5257, W. Float Dry 1,† H. Tyrer & Co. TREVINCE, 7292, E. Float,† J. Dowie & Co. TWEED (ex Empire Lady), 7046, Alexandra 3, J. S. Jones UJSTAS, 3791, Prince's Landing Stage, Belfast S.S. Co. URMSTON GRANGE (ex Empire Pibroch), 7046, Langton, Houlder Bros. & Co. VANELLUS, 1886, Brocklebank, J. T. Fletcher & Co. WALTER BAU, 13,751, Brocklebank Dry H. Tyrer & Co. WESTLAAN, 199, Alexandra 1, W. Thomas WICKLOW, 1032, Trafalgar, British & Irish WILD ROSE, 873, Bramley-Moore, R. Hughes & Co.

GARSTON-IN PORT

Vessel Tons Gross Dk. or Wt. Broker BARRGROVE, 5222, Stalbridge, E. W. Turner & Son BEN VOOR, 274, Old, J. Darlington BLAIRSK, 3300, Stalbridge, E. W. Turner & Son COMBER, 513, Stalbridge, J. Darlington EMPIRE LAIRD, 313, North, H. Tyrer & Co. EMPIRE LUNE, 2837, Stalbridge, R. & D. Jones EMPIRE RODING, 2957, Stalbridge, T. Phelan & Co. HANSY (aux.), 391, Old, J. Darlington HEROS, 1594, North, T. Phelan & Co. HOVE, 435, Stalbridge, J. Crean & Co. M. E. JOHNSON, 81, Old, Ross, Ryan & Co. OAK, 318, Old, J. Darlington SIR JOHN R. WRIGHT (Ang), 95, North TITELA, 5389, Stalbridge, Elders & Pyfles THORN, 256, Old, J. Darlington ULSTER COAST, 774, Stalbridge, Coas. Lines

MANCHESTER-IN PORT

Vessel Tons Gross Dk. or Wt. Broker ANGLIA, 1300, Shed 4, Dk. 8, Bahr, Behrend & Co. BALARA, 3294, Ellesmere Port, H. Watson & Co. BRITA THORNDEN, 1899, Shed 1B, Riverside CARROWDORE, 656, Shed 1, Riverside Qy., A. Guinness, Son & Co. COLWITH FORCE, 805, Ellesmere Port, Coast Lines DAKHLUND, 1127, Ince Oil Berth, H. Watson & Co. DOROTHY ROSE, 1600, alongside pooton, A. E. Bowen EGRET, 1390, Shed 2, Dk. 6, Wilson, Son & Co. EMPIRE GALLANT, 1925, Shed 3, Dk. 9, J. B. Couper EMPIRE GIBSON, 555, Wilson Line EMPIRE SCOUT, 2229, Ellesmere Port, B. E. Moors & Co. EMPIRE WILY, 6343, Eastham, J. W. Jones & Sons FEDORA LITKE, 2216, Dry Dk. 2, H. Watson & Co. FORT VERRILLION, 7133, Dry 2, 1, H. Watson & Co. GUNNERS, 1151, Shed 1, Riverside Qy., A. Guinness, Son & Co. HALFDAN, 1448, Runcorn Salt Works, A. Knudsen & Co. HARVEST KING, 119, Weston Point, G. S. N. Co. KONGSAL, 959, Eastham, Vogt & Maguire LOCH FIVE, 237, Runcorn, Greenaway Millington MAJORA, 1132, Shed 3, Dk. 7, H. Watson & Co. MANCHESTER COMMERCE, 5358, Shed 6, Dk. 9, Manchester Liners MANCHESTER DIVISION, 6048, Dry Dk. 3, Manchester Liners MOLEBERG ROSE, 631, Ellesmere Port, Lep Transport MOLINO DEL REY, 10,195, Stanlow Oil Dk. 3, H. E. Moss & Co. ORKNEY COAST, 560, Eastham, Coast Lines OUSEL, 1535, Dry Dk. Jty., Wilson, Son & Co. SHELL COAST, 801, Ellesmere Port, Coast Lines SOVAC, 6724, Mode Wheel Oil Wt., Manchester Liners STARKENBORGH, 857, Shed 4, Dk. 6, British & Foreign Maritime Agencies TROJAN, 1917, South Shed, Dk. 1, H. Watson & Co. VENTURER (aux.), 210, Weston Point, Clark & Grounds WESTON, 485, Ellesmere Port, I.C.I.

CLYDE-IN PORT

Docks are at Glasgow unless otherwise stated Vessel Tons Gross Dk. or Wt. Broker AMERICAN IMPORTER, 8294, Yorkhill, W. B. Woolley APPLELEAF, 5892, Faslane Dk., Port Glasgow ASHURTON, 8000, Great Harbour, Greenock, W. Denny & Sons ASTERIA, 649, Queen's, W. Robertson BAHARISTAN, 5479, Govan, F. C. Strick & Co. BARON RUTHVEN, 3178, River Kelvin, H. Hogarth & Sons BEAVERCOVE, 9800, Fairfield Shipbuilding & Engineering Co.'s Bsn., Govan, Canadian Pacific S.S. Co. BEAVERLAKE, 10,000, Kingston Bsn., Port Glasgow, Canadian Pacific S.S. Co. BRITISH COMMODORE, 6865, Prince's, Gov. Harrison & Co. BRITISH DRAGON, 9909, Stobcross Qy., Gov. Harrison & Co. BRITISH PORTDUDE, 8482, Stobcross Qy., Gov. Harrison & Co. BRITISH FUSILIER, 6943, Queen's, Gov. Harrison & Co. BRITISH KNIGHT, 7300, Harland & Wolff's Bsn., Govan, Gov. Harrison & Co. BRITISH RENOWN, 6997, Elderslie Wt., Scotstoun West, Gov. Harrison & Co. BRORA, 1028, Windmillcroft, W. Sloan & Co. CANTON, 35,784, King George V., Shieldhall, G. S. N. Co. CAPT. ORTEGA, 5100, Mavisbank Qy., Lyle Shipping Co. CEDAROL, Old Kilpatrick Oil Wf., The Admiralty CERUM, 532, Kingston, I.C.I. CHESHIRE, 10,552, Queen's, Roxburgh, Colin Scott & Co. CILICIA, 11,136, Fairfield Bsn., Govan, Anchor Line CLAN LLAN, 7043, Elderslie Wt., Scotstoun W. S. Cayzer, Irvine & Co. CLAN BRODIE, 9913, Garvel Dry, Greenock, Cayzer, Irvine & Co. CLAN BUCHANAN (ex Engadine), 9050, James Watt Dk., Greenock, Greenock Dockyard Co. CLAN MACAULAY, 10,492, Merklands Qy., Partick, Cayzer, Irvine & Co. CLYDEHALL, 5198, River Kelvin, T. L. Duff & Co. CLYDE COAST, 511, Lancelfield Qy., Coast Lines CORTEEN, 550, Rothesay Dk., Clydebank J. B. Couper DELILIAN, 4928, Prince's, Donaldson Bros. DEVONSHIRE, 11,275, King George V., Shieldhall, Roxburgh, Colin Scott & Co. DONAGHABE, 662, Rothesay Dk., Clydebank, J. B. Couper DOBELIAN, 6431, Govan Dry Dk. 2, Donaldson Bros. DUCHESS OF RICHMOND, 20,022, Fairfield Bsn., Govan, Canadian Pacific S.S. Co. EMPIRE CALDER, 2649, Prince's, Moss & Hutchison Line EMPIRE CAMEL, 2719, Prince's, City Line EMPIRE CANUTE, 7750, Great Harbour, Greenock, Greenock Dockyard Co. EMPIRE CHIEF, 8040, Queen's, Chr. Harrison & Co. EMPIRE DOLPHIN, 5037, Gareloch, Gov. Harrison & Co. (laid up) EMPIRE GAZELLE, 4828, James Watt Dk., Greenock, D. McQuillan & Co. EMPIRE GREBE, 5736, Rothesay Dk., Clydebank, J. B. Couper EMPIRE LANKESTER, 7067, Elderslie Wt., Scotstoun West, G. Nisbet & Co. EMPIRE SNEZ, 2497, Lancelfield Qy., W. H. Muller & Co. EMPIRE SPINEL, 650, Queen's, W. Robertson EMPIRE TEBDITA, 891, River Kelvin, Gov. Harrison & Co. EMPIRE TREASURE, 7022, River Kelvin, Donaldson Bros. & Black EMPIRE VICTORY, 21,846, King George V., Shieldhall, Chr. Salvesen & Co. EMPIRE WINDRUSH (ex Monte Rosa), 13,882, Shieldhall Wt., T. Law & Co. ESSO SARANAK, 8031, Dungleas, A. Weir & Co. EUADINE, 7008, Yorkhill Wt., Anchor Line FACNET, 1415, Springfield Qy., Clyde Ship- ping Co. FORT COULONGE, 7137, Glasgow FORT COVINGTON, 7130, King George V., J. & J. Denholm FORT LIARD, 7131, Queen's, Chr. Salvesen & Co. FRIEDA PETERS, 465 GLAS ISLAND, 198, Queen's, J. B. Couper GLENGARRY (ex Empire Humber), 9138, Elderslie Dry, Scotstoun West, Roxburgh, Colin Scott & Co. GOOLE, 360, Greenock HUANCARAN, 6951, By. 7, Tail of Bank, J. & J. Denholm (laid up) CROUCH, 8937, Queen's, A. Weir & Co. JALARAJA, 5000, Kingston Bsn., Port Glasgow, Lithgows, J. T. Law & Co. JOLLY DAYS, 352, Custom House Qy., I.C.I. JOSIAH P. CRESSNEY, 1791, Queen's, J. Hay & Son KAMRAN, 5042, Prince's Pier, Greenock, J. & J. Denholm KARRI, 354, Rothesay Dk., Clydebank, T. Dougal KINGSBOROUGH, 3568, James Watt Dk., Houlder Bros. & Co. LAIRDSBURN, 1870, Broomielaw, Burns & Laird Lines LAIRDSCREST, 789, Broomielaw, Burns & Laird Lines LAIRDSDALE, 891, Broomielaw, Burns & Laird Lines LAIRDSGLEN, 1276, Broomielaw, Burns & Laird Lines LAIRDSDROVE, 1227, Broomielaw, Burns & Laird Lines LANDAURA, 7250, Diesel Wf., Whiteinch, G. S. N. Co. LANDEMER (Ang), 533, James Watt Dk., Greenock, J. & J. Denholm LIANSTEPHAN CASTLE, 1343, Fairfield Shipbuilding Bsn., Govan, Union-Castle Mail S.S. Co. LOCHGORM, 635, Clyde Place, D. MacBrayne & Co. LUXOR, 6554, Prince's Pier, Greenock, J. & J. Denholm MAIHAR, 7653, Yorkhill, P. Henderson & Co. MARIE, 105, Kingston Dk., Clyde Cargo MARINE RAVEN, 11,805, King George V., City Line MARJATA (new), Diesel Wf., Whiteinch MERTINA, 7080, Shieldhall Wf. MERSEY TREN, 805, Rothesay Dk., Clydebank, J. B. Couper MERSEY COAST, 509, Lancelfield Qy., Coast Lines

MONARCH, 1100, Clyde Anchorage MOYALLON, 282, Rothesay Dk., Clydebank, J. B. Couper MOUNTAIN REVELSTOKE PARK, 7144, M. & J. Dowds Qy., Partick, M. Langlands & Sons NERITOPSIS, 8250, Great Harbour, Greenock, Blythwood, Ltd. NORMARK, 7851, By. 5, Tail of Bank, H. NERITOPSIS & Sons NEORPOLK, 14000, John Brown's Bsn., Clydebank, T. Law & Co. OCEAN VOLGA, 7174, Prince's, Lambert Bros. OCEAN VOLUNTEER, 1777, Govan Dry, J. & J. Denholm ORCHY, 1050, Windmillcroft Qy., W. Sloan & Co. PETROBUS, 475 PEROCRO, 56, Kingston Dk. FOUNTAIN BELLINGTON, 8700, J. Brown & Co.'s Bsn., Clydebank, P. Henderson & Co. PROME, 7043, Elderslie Wt., Scotstoun West, Henderson & Co. QUARTER, 160, Greenock, Ross & Marshall RAUTAS, 9125, Rothesay Dk., Clydebank, J. Jenkins & Son RIVERCREST, 6998, James Watt Dk., Greenock, J. & J. Denholm RIVINGTON, 289, Rothesay Dk., Clydebank, J. Gardner & Co. SAMCONSTANT, 7210, Prince's, J. Bruce & Co. SAXON QUEEN, 482, Rothesay Dk., Clydebank, Colic, McPhail SCOTTISH MUSICIAN, 7053, James Watt Dk., Greenock, J. H. Sharpe & Co. SFTON, 7177, Plantation Qy., Govan, Furness, Withy & Co. SERULA, 1600, Springfield Qy., Clyde Shipping Co. SHAHJEHAN, 5400, Victoria Harbour, Greenock, Lithgows, Ltd. SKAERVAEN (aux.), 147, King George V. SOMERSET, 9800, Plantation Qy., Govan, T. Law & Co. SOUTHERN PRINCE, 11,447 STRAMORE, 266, Rothesay Dk., J. B. Couper THE EMPEROR, 1030, James Watt Dk., Greenock, G. Brown & Co. THE PRESIDENT, 926, Rothesay Dk., Clydebank, J. Hay & Co. THOMAS, 1922, Greenock THISTLEMIUR, 7237, Rothesay Dk., Clydebank, R. Love THORN, 256, Queen's, T. Dougal WAVE KING, 8159, Stobcross Qy., The Admiralty WELLPARK, 6700, Queen's, J. & J. Denholm

SUNDERLAND-IN PORT

Vessel Tons Gross Dk. or Wt. Broker ALEXIA, 8016, Greenwell's Dry Dk., France AMPULLA (trawler), 248, Shipbuilding Corporation Qy., Shipbuilding Corporation. Ltd. ARILLA, 3011, Manor Qy., France Fenwick Tyne & Wear Co. BETTY HINDLEY, 1711, Lambton Staiths, J. Westoll, Ltd. BRAYWOOD (ex Empire Vauxhall), 2025, Wearmouth Staiths, France, Fenwick Tyne & Wear Co. BRITISH HOLLY (new), Laing's Qy., Sir James Laing & Sons, Ltd. BRITISH MAUREL, 8500, Doxford's Qy., Pacific Dock & Sons BRITISH ROSE, 6160, Manor Qy., J. L. Thompson & Sons BRITANNY, 4800, South, W. Pickersgill & Co. BRIXTON, 1645, South, S. P. Austin & Sons CORMARSH, 2878, South, W. Cory & Son CORMEAD, 2857, Lambton Staiths, W. Cory & Son DASHWOOD, 2250, Scotia Qy., J. Crown & Sons DORRIEN ROSE, 1039, Lambton Staiths, J. Taylor & Son EMPIRE CONSTANCY, 535, South, T. Rose & Co. EMPIRE SALLY (Ang), 261, Crown's Slipway, J. F. Marshall & Son FAIRWATER, 4108, Clark's Qy., S. Marshall & Co. GASTLIGHT, 1696, Dry Dk. 2, J. Westoll, Ltd. HEGRA, 1316, South, J. F. Marshall & Son HENDRIK, 2250, Pickersgill's Qy., W. Pickersgill & Sons HERMES, 6800, Palmers Hill Qy., W. Doxford & Sons HIGHLAND QUEEN, 1043, Rack Bys., J. Westoll, Ltd. ICEMAD, 1964, North Qy. Bys., J. Westoll, Ltd. JETBLACK, 1560, South, J. Westoll, Ltd. KYLEBAY, 787, Wylam Wf., France Fenwick Tyne & Wear Co. LAYRICK, 1200, Austin's Qy., S. P. Austin & Sons OYSTERMOUTH CASTLE (trawler), 283, Shipbuilding Corporation Qy., Shipbuilding Corporation, Ltd. PORTSLADE, 927, Austin's Dk., J. Westoll, Ltd. RIO DIAMANTE, 5300, Short's Qy., Short Bros., Ltd. ROVUMA, 5200, South, Bartram & Sons SINCERITY, 634, Rack Bys., Common Bros. Co. SPRINGCRAG, 332, Wylam Wf., J. F. Marshall & Son WAYE LAIRD (ex Empire Dunbar), 8200, Laing's Qy., Sir J. Laing & Sons

HULL-IN PORT

Vessel Tons Gross Dk. or Wt. Broker AIRE, 1108, Humber, Ellerman's Wilson Line AIRE LEBERARD, 213, Humber, Oughtred & Harrison ARDRYFE, 979, Alexandra, Atkinson & Prickett ARSO, 5045, Alexandra, Atkinson & Prickett ASKO, 2122, Victoria, F. Bengtsson & Co. ATLANTIC, 221, Alexandra, T. E. Kettlewell & Son BANFF PARK, 7133, King George, Sivewright, Bacon & Co. BENGUELA, 534, Victoria, R. Rix & Son BENTLEY, 604, 6427, Alexandra, Porter & Henderson BERKELSTROOM, 399, Humber, Ellerman's Wilson Line BRENDONIA, 489, Victoria, Craggs & Jenkin BROUGHTY, 504, Humber, Dundee, Perth & London Shipping Co. BUG, 605, Victoria, Craggs & Jenkin CALUMET, 7268, Alexandra, McGregor, Gow & Holland CASTOR, 1225, Alexandra, Atkinson & Prickett CLAN MACLWATHA, 4839, Alexandra, W. Brown, Atkinson & Co. COVALT, 2450, King George, W. France, Fenwick & Co. EILEEN M., 323, Alexandra, Oughtred & Harrison EMERALD QUEEN, 481, Humber, Free Trade Wharf Co. EMPIRE BANK, 402, Victoria, Oughtred & Harrison EMPIRE BEATRICE, 7046, King George, Lambert Bros. EMPIRE CONCESSION, 1966, Victoria, Ellerman's Wilson Line EMPIRE CONSENT, 1942, Alexandra, Ellerman's Wilson Line EMPIRE FARRIE, 411, Victoria, Craggs & Jenkin EMPIRE FATHOM, 411, Victoria, Craggs & Jenkin EMPIRE GAFFER, 1942, Alexandra, J. Good & Sons EMPIRE GANGWAY, 1942, King George, Ellerman's Wilson Line EMPIRE GUNLEVER, 7389, King George, Brown, Atkinson & Co. EMPIRE LANCE, 7177, Mulberry Harbour, Ellerman's Wilson Line EMPIRE RAPIER, 7177, Mulberry Harbour, Houlder Bros. & Co. EMPIRE SALERNO, 877, King George, Ellerman's Wilson Line EMPIRE SPERHAEED, 7177, Mulberry Harbour, McGregor, Gow & Holland EMPIRE TERN, 2479, Alexandra, Sivewright & Bacon & Co. ERICUS, 2387, Victoria, W. Brown, Atkinson & Co. ERNA, 865, Victoria, R. Rix & Sons FAIRBY, 220, Victoria, R. Rix & Sons FORNES (ex Empire Conderton), 1883, Albert, Ellerman's Wilson Line FORT CARLTON, 7131, King George, Houlder Bros. & Co. FORT SIBSON, 7133, King George, Pyman, Bell & Co. HAARLEM, 970, Albert, Newton, Tottle & Wilson HARROGATE, 1113, Victoria, Ellerman's Wilson Line HEBE, 957, Albert, Ellerman's Wilson Line HELEN BIRCH, 159, Victoria, B. W. Steamship, Tug & Lighter Co. KIRKLEIGH, 493, Humber, G. S. N. Co. KIRKLEIGH, 1172, Saltend Jty., Brown, Atkinson & Co. KUTNO, 1780, Alexandra, T. E. Kettlewell & Son LEAWORTH, 2873, King George, W. Tully & Son LIZZIE & ANNIE, 117, Humber, B. W. Steamship, Tug & Lighter Co.

GLoucester-IN PORT

Vessel Tons Gross Dk. or Wt. Broker EMPIRE FARJEON, 410, Gloucester, James & Hodder

SHARPNESSE LADY WOLMER, 1883, Sharpness, V. W. Rowles & Co. T. P. TILLING, 461, Sharpness, V. W. Rowles & Co. CLEARED IN BALLAST Vessel, Flag, Net Tonnage, Master, For, Station, Agents or Brokers. Aug. 26 EMPIRE COMFORT, Br. 375, James, Antwerp, Tilbury Dk., Clemt. THORSHOLM, No. 5882, Hansen, Caripito, Purfleet, J. I. Jacobs & Co. Aug. 27 CROHAM, Br. 154, Dakin, Emden, Woolwich, Harper Petersen & Co. EMPIRE DAFFODIL, Br. 111, Thain, Boulogne, Victoria Wt., G. S. N. Co.

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**MARINE CASUALTIES**

**ALCOA PENNANT.**—Port of Spain, Aug. 26.—Steamer Alcoa Pennant left Trinidad on Aug. 26 for Mobile. (See issue of July 30.)

**AMERICAN PRESS.**—Bordeaux, Aug. 26.—Steamer American Press: Propeller freed on Saturday (Aug. 24); no damage. Vessel left Bordeaux on Sunday.—Bordeaux Underwriters' Association per Salvage Association. (See issue of Aug. 23.)

**ANTIOCH VICTORY.**—Gibraltar, Aug. 27.—American steamer Antioch Victory, Leghorn for New York, with troops, put back here on Aug. 27 with suspected shaft damage. Couplings were tightened up and vessel proceeded.

**AVANT GARDE.**—London, Aug. 27.—French trawler Avant Garde, which grounded at the entrance to the port at North Sydney, N.S., on Apr. 25, refloated and arrived at Sydney, N.S., on Apr. 27. (See issue of Apr. 27.)

**BERNAIS.**—Paris, Aug. 15.—While leaving Marseilles during strong wind, the small motor tug Bernais, owned by M. Pomme, of Port de Bouc, sustained damage to machinery and anchored. The crew were brought ashore and the following day the vessel was towed back to Marseilles by the tug Coolie. "Journal de la Marine Marchande."

**BEAUMONT.**—Montreal, Aug. 27.—Aug. 27.—Spritsail barge Beaumont Belle, London for Colchester with wheat, was in collision with aircraft carrier H.M.S. TRIUMPH on Aug. 14 in Sheerness harbour.

**BEAVERTON.**—Quebec, Aug. 27.—Motor vessel EMPIRE MACALPINE has been in collision with tug Beaver-ton off Cape Goose. Tug sank, 17 survivors returning on EMPIRE MACALPINE.

**BEAUMONT.**—Montreal, Aug. 27.—Motor vessel EMPIRE MACALPINE is putting back to Quebec with 17 survivors from the Royal Canadian Navy tug Beaver-ton, which was sunk off Goose Point this morning. EMPIRE MACALPINE has stem damaged.

**BEAUMONT.**—London, Aug. 27.—British motor vessel EMPIRE MACALPINE, on voyage from Montreal to United Kingdom with a full cargo of grain, has had to turn back following a collision with a tug, it was learned in Edinburgh to-day. The tug was sunk. Seventeen survivors were picked up by the EMPIRE MACALPINE. The managers of the EMPIRE MACALPINE understand that their vessel was only slightly damaged.

**BELNOR.**—Seaforth Radio, Aug. 27.—Following received from Norwegian motor vessel Belnor (Liverpool for Trieste) at 9 a.m., G.M.T.: Returning to Liverpool with engine trouble.

**BUCCANEER.**—London, Aug. 27.—Fleet tug Buccaneer, towing a battle practice target, sank yesterday in position 4 miles Portland Bill 270 degs. in 17 fathoms, after being struck by a 4.5-in. practice projectile fired by the new destroyer St. James. The shell struck the tug's engine room on the port side below the waterline and she sank in 25 minutes. The destroyer took off all the crew. Salvage officer has been sent to inspect.

**BUENOS AIRES.**—Buenos Aires, Aug. 27.—The owners of the steamer Buenos Aires, 1621 tons net, (Buenos Aires for Durban) report that an SOS message has been received stating that the vessel is aground in position lat. 28 42 S., long. 48 55 W.

**BURGO.**—London, Aug. 27.—British steamer Burgo, which was reported to be disabled with propeller gone seven miles N.E. by N. of Low Point on Apr. 16, subsequently arrived at Sydney, N.S. (See issue of Apr. 18.)

**BUROY.**—Stavanger, Aug. 24.—According to the diver's report, Norwegian coasting steamer Buroy has sustained no damage and the vessel resumed her voyage this morning. (See issue of Aug. 27.)

**CABO MENOR.**—Lisbon, Aug. 17.—Spanish steamer Cabo Menor entered this port on Aug. 13 with cargo in Nos. 3 and 4 holds on fire. It was found necessary to pump water into the holds and the fire was extinguished yesterday. Affected cargo mainly consists of bundles of wood shavings, bundles of empty sacks, cases of jewellery and barrels of white earth, destined to North Spanish ports. Damage to vessel is only slight, some deck planks being damaged.

**CAP PILAR.**—Brightlingsea, Aug. 27.—Barquentine Cap Pilar was pumped out and refloated last night. Pump and helpers are remaining until arrangements have been made by owners to secure vessel. (See issue of Aug. 27.)

**CAPE DOUGLAS.**—London, Aug. 27.—Steamer Cape Douglas left Toulon on Aug. 24. (See issue of Aug. 20.)

**CHACAO.**—Valdivia, Aug. 26.—When being launched after repairs at Puerto Montt, steamer Chacao capsized in Angelmo Channel in smooth water. Refloating considered easy.

**CHACAO.**—London, Aug. 27.—The following cable has been received from Santiago, Chile, dated Aug. 26: "Steamer Chacao is stranded in six metres of water in the bay of Puerto Montt. Salvage considered difficult. We think owners may make abandonment. We are sending a representative to the scene of accident. Lloyd's Agents at Valparaiso and Puerto Montt advised."

**CHANGTE.**—Sydney, Aug. 27.—Fire occurred to-day in No. 3 hold of steamer Changte, berthed in Pool and Steel Dockyard, Balmain, and caused slight damage to woodwork and insulation.

**DRONNING ALEXANDRINE.**—Reykjavik, Aug. 26.—Motor vessel Dronning Alexandrine left here on Aug. 24 for Denmark. (See issue of Aug. 23.)

**E. W. SINCLAIR.**—New York, Aug. 20.—Tank steamer E. W. Sinclair, striking wharf in November and further casualty in May: Two plates renew and one off. No. 7 tank deck bulkhead plating, straighten and fair, internal members straighten and part new, tanks stem clean and test, together with sundry damages. Approximate cost, including dry dock charges, \$3500 and \$24,900 respectively.—Salvage Association's Surveyors.

**ELM.**—London, Aug. 27.—At 3 p.m. to-day bales of cotton waste on the Port of London Authority barge Elm, lying in Northern Lay-bye, Surrey Commercial Dock, were found to be smouldering. The fire was extinguished at 3 10 p.m. with water from the steamer Belostrov. Two bales of cotton waste were damaged by fire and water. The fire brigade attended.

**EMPIRE BASCOBEL.**—Plymouth, Aug. 27.—Tug Empire Bascobel put in here yesterday for repairs. (See issue of Aug. 27.)

**EMPIRE CONCRETE.**—Haifa, Aug. 23.—Steamer Empire Concrete was surveyed here on Aug. 20 in consequence of having lost an anchor and touched the ground off Jaffa on Aug. 7. Bilge and tank soundings revealed no leakage, and diver's examination showed the vessel to have sustained no damage. An attempt is to be made to recover the lost starboard anchor and 39 fathoms of cable, for which purpose the vessel is returning to Jaffa.

**EMPIRE MACALPINE.**—See Beaverton.

**EMPIRE SUCCESS.**—Port Elizabeth, Aug. 21.—Steamer Empire Success was surveyed here on Aug. 12 and subsequent dates in consequence of fire in starboard 'tween deck bunker. After discharge of coal, floor of bunker at after end of boiler casing, which had been heated by fire and showed signs of wastage, was temporarily repaired by tack welding a steel plate over damaged area and a guard plate was fitted over tank air pipe to be replaced when guard plate had been destroyed by the fire. No structural damage was sustained, and after reloading sound coal a certificate of seaworthiness was issued. Approximately 360 tons of coal was certified as damaged and useless. (See issue of Aug. 21.)

**EMPIRE WANSBECK.**—London, Aug. 26.—A report dated Aug. 23 states: Motor vessel Empire Wansbeck refloated at about 7 45 a.m., Aug. 23, with assistance of tugs Empire Imp and Empire Race and proceeded under her own power. No apparent damage, survey has been called. (See issue of Aug. 24.)

**ERNEST L. DAWSON.**—Hayre, Aug. 26.—Steamer Ernest L. Dawson has damaged stem and stem plating. Temporary repairs are to be executed here and permanent repairs in United States. Seaworthy certificate will be issued by classification surveyor. (See issue of Aug. 27.)

**EXERTION.**—Maassluis, Aug. 23.—Tug Exertion left Hook of Holland on Aug. 23 for Swinemunde, in tow of tug Elbe. (See issue of Aug. 23.)

**FIN.**—Wapping, Aug. 27.—Dumb barge Fin, owners Vokins & Co., Ltd., has sunk at New Sun Wharf, Steyne; believed leaked down.

**FORT FREDERICK.**—London, Aug. 27.—Steamer Fort Frederick, which left Bushe on Aug. 5 for Bombay, put back to Abadan on Aug. 10 owing to steering gear failure. (Note.—Fort Frederick has since arrived at Bombay on Aug. 18.)

**FORT TREMBLANT.**—Vizagapatam, Aug. 26.—Steamer Fort Tremblant left here yesterday for Calcutta. (See issue of Aug. 21.)

**HARRY YATES.**—London, Aug. 27.—According to advices from the Great Lakes Protective Association at Cleveland, Ohio, dated July 29, the American steamer Harry Yates was in casualty on Apr. 17 and 28 and Nov. 20, 1945. The Association's proportion of the claims amounted to \$8772. (See issue of Feb. 27.)

**HOLMSIDE.**—London, W., Aug. 27.—Steamer Holmside, Rotterdam for Lisbon with coal, grounded at Lisbon on Aug. 7 but sustained no apparent damage.

**JOHN MILLER.**—Honolulu, Aug. 19.—Steamer John Miller, fully loaded, went aground on June 19 off Honolulu, but was refloated on June 21 and proceeded under her own power to Pearl Harbour, where two patch plates were fitted. Vessel left for Balkan ports, with her U.N.R.R.A. cargo, on July 10. (See issue of July 20.)

**KARABACH.**—London, W., Aug. 27.—Motor tanker Karabach, Stanlow for Aruba, in ballast, was in collision with motor tanker NACELLA off the south-east corner of Aruba island on July 22 and had after davit of starboard after lifeboat bent. On Aug. 8, while on voyage from Aruba for Hamburg with gasoline, the Karabach struck a floating object in the North Atlantic.

**LOSMAN.**—Cromer, Aug. 26.—Craft LOSMAN 102, privately owned, reported sunk 50 yards off shore at Holme, Norfolk. Crew of four safe.

**King's Lynn.** Aug. 27.—Craft LOSMAN 102, from Great Yarmouth, reported ashore at Holme Point, near Brancaster. Crew landed.

**Cromer.** Aug. 27.—Craft LOSMAN 102 cannot be located at low water to-day and has probably refloated and gone out with the tide.

**LAGUNA.**—Para, Aug. 16.—Brazilian steamer Laguna refloated on July 27 after jetting on part of her 500 tons of inflammable cargo, with the assistance of steamer Oswaldo Cruz and tugs Parreiras Horta and Maria, all belonging to the Servicos de Navegacao da Amazonia e de Administracao do Porto do Para. The Laguna was towed by the Parreiras Horta to this port, which she reached safely at 4 a.m. on July 28 and where she is now in dry dock undergoing repairs to hull. (See issue of Aug. 1.)

**LORD COCHRANE.**—Cape Town, Aug. 27.—British steamer Lord Cochrane (Tr. Grande and Montevideo for Durban), due here on Aug. 28, reports having sustained heavy weather damage; surveyor appointed.

**MASBATA.**—Hongkong, Aug. 27.—Steamer Masbata left here yesterday. (See issue of Aug. 23.)

**NACELLA.**—See Karabach.

**PACHAUG VICTORY.**—London, W., Aug. 27.—While in Canada Dock No. 2, Liverpool, on Aug. 2, steamer Pachaug Victory had forward davit of one of her boats slightly twisted. Davit was repaired and tested.

**PIT 135.**—See Trust On.

**PITTSBURGH VICTORY.**—San Francisco, Aug. 26.—American steamer Pittsburgh Victory left here on Aug. 24. (See issue of Aug. 27.)

**R. J. REYNOLDS.**—Gothenburg, Aug. 26.—Steamer R. J. Reynolds sailed on Saturday afternoon (Aug. 24) after satisfactory temporary repairs and with 1000 tons of sand ballast.—Salvage Association's Surveyor. (See issue of Aug. 27.)

**REGENT LION.**—Dublin, Aug. 26.—Motor tanker Regent Lion put back to this port on Aug. 24. (See issue of Aug. 24.)

**ROBIN TUXFORD.**—Beira, July 11.—Lighter JOAO, made fast to steamer Robin Tuxford, dropped astern through the action of the seas on the morning of June 15 and struck the propeller of the Robin Tuxford. The lighter was punctured and sank and propeller of the Robin Tuxford was found to have sustained some damage. Two 9 in. hawsers belonging to the Robin Tuxford were broken in the effort to keep the lighter afloat. (See "Lighter Sunk at Porto Amelia," in issue of July 14.)

**S. JOAO.**—Leith, Aug. 27.—Tank steamer Saluta, which left Leith for South Georgia on Aug. 24, returned to Leith on Aug. 25 as a result of an explosion in her refrigeration plant. Repairs are proceeding and vessel is expected to sail in a few days.

**SAMUEL F. B. MORSE.**—New York, Aug. 26.—Steamer Samuel F. B. Morse, bound Montreal (from Bordeaux), in ballast, has lost propeller. Position 1558 miles from Halifax, 2253 miles from New York, 2038 miles from Boston. Owners have dispatched tug Edmond J. Moran, cost \$1000 per day. Tug is expected to contact vessel in about six days.—Salvage Association's Surveyors.

**SAMUEL VERY.**—London, W., Aug. 27.—Steamer Samuel Very, Hartlepool for Kristinestad, in ballast, struck a floating object in the North Sea on July 28, but sustained no visible damage. While at Nyhamn anchorage on Aug. 6, vessel touched the bottom. After leaving Kristinestad for Sunderland with general cargo, vessel grounded in the Kiel Canal on Aug. 13, and while in the River Elbe Estuary on Aug. 14, she struck a submerged object. Damage to vessel unknown until drydocking. (See issue of Aug. 8.)

**SANTA CRUZ.**—New York, Aug. 14.—American steamer Santa Cruz arrived at Seattle on Aug. 10 from Squaw Harbour, in tow of tug Sand Key. (See issue of Aug. 13.)

**SINCLAIR H. C.**—Savannah, Aug. 26.—It is understood that low-pressure turbines of motor tank steamer Sinclair H. C. (Houston for Chester, Pa.) are believed to be considerably damaged and vessel anchored in the roads. She is now being towed into port by local tugs.

**STANWOOD.**—San Francisco, Aug. 20.—Steamer Stanwood struck the United Engineering Company's dock at Oakland on Aug. 15, damaging the dock and the float. Survey was held and diver's examination reveals no damage to the propeller or rudder of the Stanwood.

**THOMAS J. LYONS.**—London, Aug. 27.—Steamer Thomas J. Lyons arrived at Southampton on Aug. 19 and left again on Aug. 27. (See issue of Aug. 19.)

**TIJUCA.**—Rio Grande, Aug. 26.—Master and chief engineer of motor vessel Potaro examined auxiliary barque Tijuca on Saturday (Aug. 24). Vessel is apparently in good condition but plundered of practically all removable gear. She is lying in 3 ft. of water amidships and 5 ft. 6 in. fore and aft. Consider cost of salvage would be disproportionate to value of vessel as now stands.—Lloyd's Agents per Salvage Association. (See issue of Aug. 10.)

**TRUMP.**—(warship).—See Beaumont Belle (s.v.).

**TRUST ON.**—Peterhead, Aug. 26.—Seine net fishing vessel Trust On, of Peterhead, went ashore half a mile from Rattray Head Lighthouse, Aberdeenshire, at 3 a.m., Aug. 26; vessel may refloat later at high tides. (See PD 135 in issue of Aug. 27.)

**TUDOR STAR.**—Buenos Aires, Aug. 26.—Steamer Tudor Star left here on Aug. 24 for Rio Janeiro. (See issue of Aug. 8.)

**TYNEBANK.**—London, W., Aug. 27.—While in the Bay of Bengal on June 17, British steamer Tynebank, proceeding from Colombo to Calcutta with general cargo, had fire in bunker coal stowed in 'tween deck bunkers abaft No. 3 'tween deck. Wooden bulkhead between No. 3 'tween deck was partially destroyed and cargo was damaged. (See issue of June 24.)

**VIENNA.**—London, Aug. 26.—Steamer Vienna (Harwich for Hook of Holland) put back to Harwich at 11 32 p.m. on Aug. 24 owing to fire in reserve bunker hatch. The fire was extinguished and vessel proceeded at 1 15 a.m. on Aug. 25.

**WAVE KNIGHT.**—Port Said, Aug. 27.—Tea steamer Wave Knight: Temporary repairs completed and trials held on Aug. 26, vessel proceeding on Aug. 27 at reduced speed to United Kingdom direct; certificate of seaworthiness granted. (See issue of Aug. 12.)

**WEATHER AND NAVIGATION**

**DERRICKS AND WRECKAGE**  
 Las Palmas, Aug. 26.—A two hundred ton lighter, awash, dangerous to navigation, was reported sighted at 8 p.m., Aug. 25, in lat. 28 32 30 N., long. 14 57 W.

**DRIFTING BUOY**  
 Bermuda, Aug. 26.—KTNR (American steamer William M. Rayburn) reports having passed a black and white nun buoy in lat. 37 09 N., long. 68 11 W.

**MINES REPORTED**  
 Wick Radio, Aug. 24.—Following received from German trawler Heinrich Baumgarten at 12 1 a.m., G.M.T., Aug. 23: Drifting mine observed in position lat. 56 58 N., long. 01 56 E.

**Bermuda.** Aug. 27.—American steamer Caleb Strong reports having passed a floating mine with vertical prong in lat. 35 15 N., long. 52 22 W.

**ATLANTIC WEATHER REPORTS**  
 We have received from the Meteorological Office the following wireless reports, dated Aug. 26, from vessels in the North Atlantic. The times given are G.M.T.

**BARRINGTON COURT.**—6 a.m., 56 24 N., 37 42 W.; SW, light; intermittent slight drizzle; bar. 30 09. Noon, 51 54 N., 38 12 W.; WSW, light; cloudy; bar. 30 03.

**BEAVERBURN.**—6 a.m., 53 12 N., 28 00 W.; W, fresh; overcast; bar. 29 89. Noon, 53 36 N., 30 30 W.; WSW, light; overcast; bar. 29 89.

**BRITISH PATIENCE.**—Noon, 36 12 N., 07 48 W.; NW, light air; cloudless; bar. 29 80.

**CAVINA.**—6 a.m., 55 48 N., 37 24 W.; WSW, mod.; overcast; bar. 29 89. Noon, 55 30 N., 39 12 W.; SW, gentle; overcast; bar. 29 74.

**DUCHESS OF BEDFORD.**—Noon, 47 06 N., 08 00 W.; N. by E, light; overcast; bar. 30 06. 6 p.m., 45 36 N., 08 43 W.; N. by E, mod.; intermittent slight drizzle; bar. 30 00.

**EMPIRE MACCALLUM.**—6 p.m., 55 36 N., 38 00 W.; WNW, gentle; overcast.

**EMPIRE MACDEMOTT.**—Noon, 50 48 N., 16 48 W.; W. by N, fresh; rain showers; bar. 29 94. 6 p.m., 51 00 N., 18 42 W.; W, mod.; overcast; bar. 29 92.

**PANAD HEAD.**—Noon, 56 00 N., 14 24 W.; W. by S, mod.; partly cloudy; bar. 29 74. 6 p.m., 55 42 N., 12 42 W.; WSW, light; partly cloudy; bar. 29 74.

**FRANCONIA.**—6 p.m., 49 00 N., 07 12 W.; WNW, mod.; cloudy; bar. 29 97.

**HIGHLAND MONARCH.**—6 p.m., 40 36 N., 10 18 W.; NNW, fresh; cloudy; bar. 30 09.

**HOPEPEAK.**—Noon, 49 36 N., 09 48 W.; W, gentle; partly cloudy; bar. 29 86. 6 p.m., 49 30 N., 08 12 W.; W, gentle; partly cloudy; bar. 29 83.

**MANCHESTER EXPORTER.**—6 p.m., 54 54 N., 21 36 W.; WNW, light; partly cloudy; bar. 29 74.

**MANCHESTER SHIPPER.**—Noon, 56 30 N., 20 42 W.; W, strong; cloudy; bar. 29 68. 6 p.m., 56 24 N., 23 36 W.; W, fresh; cloudy; bar. 29 71.

**ORDUNA.**—Noon, 49 06 N., 06 00 W.; W, gentle; partly cloudy; bar. 30 09. 6 p.m., 48 00 N., 07 18 W.; NW, gentle; partly cloudy; bar. 29 97.

**PILAR DE LARRINAGA.**—6 p.m., 48 42 N., 31 20 W.; NW, gentle; mist, vis. between 5 and 10 cables; bar. 29 80.

**PORT LINCOLN.**—Noon, 43 42 N., 09 30 W.; W, light air; cloudy; bar. 29 94. 6 p.m., 42 18 N., 10 18 W.; NW, mod.; precipitation within sight; bar. 30 00.

**MISCELLANEOUS**

**LABOUR TROUBLE IN BRISTOL CHANNEL REPAIRING YARDS**  
 London, Aug. 26.—Two thousand boiler-makers in the Bristol Channel repairing yards stopped work to-day. According to the employers, the charge men decided to cease functioning as such, and as a result of an embargo on overtime and other restrictions which the men imposed, they had to give notice to men that their engagements would be suspended under the Essential Works Order.

London, Aug. 27.—About 1200 boiler-makers employed in ship-repairing yards in the Bristol Channel have stopped work. A further 800 attendant workmen were rendered idle in consequence.

**LABOUR TROUBLE AT SHIP-REPAIRING YARD AT SOUTH SHIELDS**  
 South Shields, Aug. 26.—About 45 platers' helpers employed by Messrs. Brigham & Cowan, Ltd., ship-repairers, of South Shields, ceased work to-day as a protest against the firm's alleged failure to reinstate a shop steward, who was paid off with a number of other men about three weeks ago.—"The Shields Gazette."

**STRIKE OF SHIPYARD WORKERS AT MONFALCONE**  
 Trieste, Aug. 27.—Seven thousand workers left the shipyard at Monfalcone, near Trieste, last night after a six-hour sit-down strike called as a protest against the entry of 35 British troops and 25 Venezia Giulia policemen on the order of the Allied Military Government.—Reuter.

**THE STRIKE OF AMERICAN SEAMEN ON THE GREAT LAKES**  
 Detroit, Aug. 27.—The Great Lakes shipping strike which started on Aug. 15 ended to-day when 1500 workers returned to their vessels. About 98 vessels were tied up by the strike.—British United Press.

Falmouth, Aug. 27.—British steamer MRWATA PARK (London for Vancouver) called here to-day to land stow-away.

**LOYD'S LIST** Page 19  
 Wed., Aug. 28, 1946

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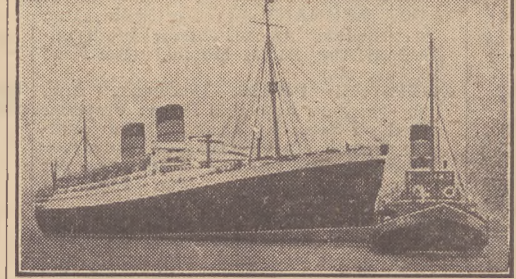
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