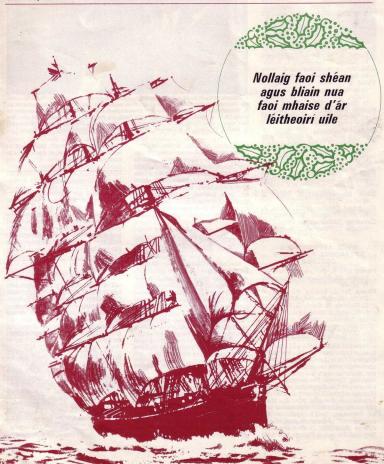
SIGNAL

WINTER, 1974

NEWSLETTER MAGAZINE OF IRISH SHIPPING LTD.

Vol. 12, No. 3



DECK AND ENGINEER OFFICERS ASHORE AS AT 22nd NOVEMBER, 1974

Masters: C. Mahon, M. Devine, M. McMahon, B. Reilly, H. Fiddler.

Chief Officers: E. Greevy, M. Doyle, B. Kehoe, G. Kyne, P. Murphy, P.

Tyrrell, J. Whyte.

Second Officers: J. Darcy, F. Healy,
P. Hughes, A. Coghlan.

Third Officers: P. McNulty, J. Kenny, M. Darcy, J. Hickey, C. Graham, J. Murphy, J. Clarke, M. Purcell

Chief Engineers: F. Reilly, G. Cunningham, D. Knott, W. McCarthy, T. Murphy, R. Tennent.

Second Engineers: P. Dowling, J. Doran, R. Broderick, D. Menzies, P. Collins, T. Hanrahan, T. Kenny, M. Byrne, N. O'Neill, J. O'Toole, M. Egan, P. O'Halloran.

Third Engineers: E. Sweeney, W. Roberts, D. Walsh, T. O'Keeffe, F. Mullin, M. Donovan, A. Bolster, D. Gerety.

Fourth Engineers: D. O'Loughlin, M. McCann, C. Corcoran, J. Denham, P. McCarthy. Junior Engineers: J. Boyd, P.

Junior Engineers: J. Boyd, P. Clarke, F. Cronin, N. Duffy, P. Fox, P. Hayes, C. McGarrigle, B. Mc-Ginley, O. Mortimer, P. Molloy, M. O'Gormon, T. Ryan, D. Walsh, B. Wright.

Engineer Cadets: N. Brick, T. Lanigan, B. Geoghegan, V. Hetherington, A. Kelly.

Deck Apprentices: D. Elliott, J. Whelan.

Electrical Engineers: J. Grace, A.

Kane, J. Maguire, H. Stears.

Catering Officers: J. Clinton, P.
Farrelly, T. O'Connell, J. Rogan.

DECK APPRENTICES ATTENDING PLYMOUTH COLLEGE

Phase III: K. Daly, H. O'Brien, M. Kirrane, M. McCarthy, C. Lawless, P. Miley.

Phase II: J. Bourke, P. Boyd, K. Cotter, N. Cummins, D. Dignam, D. Fleming, B. Kinch, G. O'Connor, F. O'Flynn, T. Sarsfield, L. Foley.

Distinction for Marine Engineer Cadets

Included amongst the 135 students from eight faculties in the Cork Regional Technical College who were conferred with national certificates and diplomas were a number of Irish Shipping Cadets. The ceremony took place on 11th November when the Director of the National Council for Educational Awards, Mr. P. MacDiarmada, said that the ceremony was an important bench mark in the development of technological education in Cork city in that the Cork Regional Technical College has been



Members of Cork staff making a presentation to Commodore and Mrs. Poole to mark the Commodore's retirement. Presentation made at 41 South Mall also includes Miss R. Barrett recently retired who like Commodore Poole commenced and completed with I.S.L. at Cork. Commodore Poole took his first I.S.L. command and also his last here. Left to Right: Mr. P. J. Growley, Comm. Poole, Miss Barrett, T. Redmond, E. Walsh, D. Kyan, P. O'Connor, Miss M. Murphy, V. McMahon, Mrs. Poole.

designated as the major national centre for marine engineering education. Mr. Mac Diarmada referred to
the recent discovery of oil deposits
off the Cork coast and said that these
discoveries would undoubtedly have
a very significant effect on the future
economic position of the region and
that the College would have a great
responsibility in ensuring that technological skills will match developments.

AWARDS

Irish Shipping Cadets who received awards at the conferring ceremony were:

National Diploma in Marine Engineering

Nicholas Brick, Laurence Byrne, Finbar Murphy, Anthony Cronin, Thomas Lanigan, George O'Toole, Patrick Conran, James Durham, Vincent Hetherington, Dermot Horan, Norman Peason and Maruice Tracy. Cadets Brick, Byrne and Murphy had the honour of providing the College with the only candidates to obtain special distinction at the diploma level in any category for which diploma examinations were held.

National Certificate in Marine Engineering

In this examination Thomas Keeling obtained a special distinction and other successes amongst Irish Shipping Cadets were Joseph Dillon, Michael Flynn, G. P. O'Brien, Michael O'Leay, Francis Brennan, Patrick Molloy, Walter Salmon, Michael Boland and Anthony Kelly. We offer our congratulations to all our successful

cadets and we wish them further success in their future careers both academic and at sea.

Condolence

We offer our sincere sympathy to Mr. Tony Lavelle of our Head Office staff on the death of his wife which took place on 12th November. The late Mrs. Lavelle took part in the staff outling on the "Saint Patrick" last year and made many friends amongst our staff members on that occasion. May she rest in peace.

Acknowledgement

I wish to thank the Managements and Staffs of Irish Shipping Ltd, Irish Continental Line and Port Services Ltd, for their many kind expressions of sympathy on the deaths of my sisters, Mrs. C. Burke and Mrs. M. O'Neill, and my brother-in-law, J. O'Neill, following a motor car accident on 30th November.

Bill Burke, who was seriously injured in the same accident and his daughter. Esther, also wish to convey their sincere appreciation of the many messages and personal condolences which they received during this particularly painful period. Bill is still very ill in hospital as we go to press but he is hopeful that the prayers and good wishes of his friends in I.S.L. will not be in vain and that he will soon be on the road to recovery.

John Higgins

THE STORY OF WHEAT

From 1941 to 1945 the tired and battered ships of our war-time fleet brought one million tons of vital foodstuffs to our beleagured shores. Eighty per cent of that precious million tons was wheat and, ever since, this staple crop has continued to be the greatest single item of cargo carried in our ships. That this should be so is not surprising since the growing of wheat, like that of no other crop, is a world-wide operation. Wheat is basic to diets everywhere with the exception of certain regions of the Orient. The story of wheat is as old as civilisation itself and its use extends well beyond the earliest period of recorded history.

In technical terms wheat is an annual grass belonging to the family Poaceae and the genus Triticum. Within this genus there are fourteen species, of which three cover about 90% of the world's wheat production. These three are generally referred to as common wheat, club wheat and durum or macaroni wheat. Wheat plants vary in size from two to seven feet. Their roots may reach as much as eight feet into the soil although most remain in the top twelve inches. The plants have long narrow green leaves that turn golden as harvesttime nears. The stems or culms, emerge about two-thirds of the way up the plant and at the top of these stems are the spikes which contain the kernels, the only part of the plant used for human food. Each kernel of wheat is only one-eight to oneguarter of an inch long and a pound of wheat contains 14,000 to 17,000 of them. The kernel has three major parts - the endosperm, the bran and the germ.

The endosperm is most important for it is the source of our white wheat flour and each endosperm is made up of about 30,000 cells containing starch granules and protein material. About three-quarters of the kernel's protein is in the endosperm. The bran is the kernel's skin and protects the endosperm and the germ. The germ contains the seed of a new plant and would sprout if planted. Whole wheat flour includes the bran and the germ as well as the endosperm.

It is impossible to separate the history of wheat from the history of man. Both are presumed to have originated in the same place, the fertile basin of the Tigris and Euphrates rivers in what is now known as Iraq. From this cradle of civilisation wheat spread eastwards and westwards to become an important part of nearly every culture that has ever existed.

The use of wheat for food may date as far back as 17,000 years or more and the first men to eat wheat probably just chewed the kernel of the wild grain. When they found they could cultivate the wild grain, they were able to sette in one place and make other important discoveries, such as how to grind the wheat into flour and bake the flour into bread.

Bread

The earliest known bread was made by the Swiss lake dwellers, a Stone Age people who lived more than 8,000 years ago. They mixed flour and water into a dough which they baked on hot stones. To obtain the flour they ground wheat between two hand-held stones. The bread contained no leavening to make it rise so it turned out flat like a thick pancake, hard on the outside and soft on the inside. This type of wheat bread is still eaten in parts of the world and is made in a manner not much different than that used thousands of years ago.

Discovery of the first leavened or raised bread was probably an accident and is believed to have occurred in Egypt around 5,000 years ago. As one story goes, a baker in a royal household set aside some dough made from flour, sugar, and water and forgot about it. By the time he remembered the dough it had soured. He tried to cover up his mistake by mixing the sour dough with a fresh batch and when this new dough was baked it rose into a lighter bread than had ever before been produced.

What the Egyptian baker didn't know was that some wild yeast from the air had crept into his dough and started to ferment the sugar, making air bubbles which caused the dought or ise and puff up. Although a new bread-making process had been discovered, the action of the yeast was not explained scientifically until the seventeenth century.

Down through the ages, men invented new ways to cultivate and mill wheat and to bake it into bread and other products. Murals on Egyptian tombs, ancient Chinese writings and bronze tablets from Assyria all describe the cultivation and processing of wheat. As wheat bread became more and more important to man, it was given very high status in various civilisations. The Greeks had a bread goddess named Demeter and offered bread to the gods with prayers for good harvests. The Roman equivalent of Demeter was Ceres, who gave her name to all cereal grains. Bread riots dethroned emperors in Rome in late medieval times and baker guilds were powerful organisations whose leaders



harvester in a wheatfield on the Great Plains.

became important town officials.

Wheat is not native to the Western Hemisphere but was brought in by the early Spanish settlers. In the United States the first English colonists at Jamestown in 1607 were preparing to plant wheat within two weeks after they landed. The Massachusetts colonists likewise brought seed for planting wheat. Commercial bakeries appeared in the United States as early as 1640, however, it was not until the twentieth century that baking was to be undertaken as a regular commercial activity outside the domestic sphere.

A Grain of Truth!

"Bread may be the staff of life but that does not mean that the life of the staff should be one long loaf."

World Wheat Production

More than one-fifth of the world's cropland is devoted to wheat which is the staple food of a billion of its people. On the average, wheat provides modern man with about one-fifth of his calories. It is thus one of the world's two most important energy foods, the other being rice.

Wheat is such an adaptable crop that it grows in a wide variety of climates. Every month of the year wheat is being harvested somewhere in the world. It grows at elevations from sea-level to ten thousand feet and in areas of varying moisture and soil conditions. The best areas for growing wheat are in the temperate zones and have an annual rainfall of fifteen to thirty-five inches with

soil of clay or loam. Ideal land for large scale production is flat and expansive. About 90% of the world's wheat crop is grown in temperate regions of the Northern Hemisphere such as North America, Europe, Asia and Northern Africa. Most of the remainder grows in temperate parts of the Southern Hemisphere.

World wheat production amounts to between ten and eleven billion bushels every year. One bushel weighs 60 lbs. The leading producer of wheat is the Soviet Union and the United States is the second largest producer. Other important wheat growers are mainland China, Canada, Australia, Argentina, France, taly, India, Turkey, Spain, Pakistan and countries in Northern Africa.

About one-fifth of the wheat produced in the world is exported by countries that grow more than they need and is sent to those countries which do not have sufficient for their own needs. The United States is the world's biggest exporter of wheat followed by Canada, Argentina, Australia, France and the Soviet Union.

Most of the wheat carried in our ships originates in the United States which exports half its total of wheat, grown on over 700,000 farms throughout America. Nearly every State in the U.S. grows some wheat but the main area of wheat production is located in the Great Plains, which includes all or part of the ten States of Texas, Oklahoma, New Mexico, Colorado, Kansas, Nebraska, Wyoming, South Dakota and Montana. Together, these ten States account for about 60% of all the wheat produced in the U.S.

Although there are only 14 species of wheat there are thousands of different varieties and each has its own unique characteristics. Today, wheat farmers in the United States grow over 200 different varieties and in order to choose the correct variety for his farm the wheat farmer must take into eccount local climatic conditions and the kind of market in which he hopes to sell his produce. In laboratories and greenhouses, scientists continue to search for new and even better ways of avoiding crop diseases and producing a high yield of good quality kernels. To develop a new variety, a scientist chooses parent plants with desirable characteristics and crosses them. He gets those that contain characteristics of both parents and then he plants the wheat over and over again until he gets a variety with a combination of characteristics which he has been seeking. The new wheat is tested in every possible way before any seed is mass produced and sold to farmers.

Sometimes a wheat variety makes history. For example, due to weather conditions in Kansas it was almost

impossible to grow dependable wheat crops until a variety called Turkey Red was brought in from Russia in 1873. This variety was the ancestor of the hardy wheats which are grown in a large part of the Great Plains today and helped to make Kansas the biggest wheat producing state in America.

Whatever variety of wheat the farmer grows, must be of acceptable quality. His wheat must mill easily into flour that will make good products and not all wheat flour is the same. Some kinds of flour make the dough for bread while others make cakes that are light and fluffy and still others make the best macaroni. To help in distinguishing the different wheats, the varieties of wheat grown are grouped into five classes and these classes tell millers and bakers what kind of flour the wheat will produce. Which class a wheat fits will depend on three things, the hardness of its kernels, the colour of its kernels and its planting time. Although all dried wheat kernels look hard, some are harder than others and, therefore, all wheats are divided into hard and soft types.

The hard wheats are higher in protein and make the best bread flour. Durum, the hardest of all wheats provides semolina flour for spaghetti and mararoni. Soft wheats provide flour for cakes, pastries, quick breads, crackers and a host of snack foods. Both hard and soft wheats may vary in colour from white to yellow and from amber to brownish red. The colour of the wheat kernel does not have any bearing on the use of the flour.



A Cargo of wheat being poured into the hold of a ship.

Wheat Exchanges

The movement of wheat from field to consumer involves a long and sometimes complicated process. After the wheat has been harvested on the farm it is placed in a storage bin or taken to a country elevator. These are the first collection points for the entire American wheat crop. The farmer has to decide whether to sell his wheat to the elevator operator right after harvest or to store it for a while and wait for a better price. The elevator operator takes a sample of each load of wheat he receives and pays the farmer according to the sample. The operator then "elevates" the different grades of wheat into different bins in the elevator where the wheat is stored until it is moved to its next destination either by rail or truck to larger elevators in big cities which are called terminal markets. There, similar kinds and grades of wheat from many small country elevators are consolidated into larger units and some of these terminal elevators can hold fifteen million bushels of wheat. The big buying and selling of this wheat takes place at grain exchanges. The biggest grain exchanges in the United States are located in Chicago, Minneapolis and Kansas

City. The wheat exporter buys wheat at the grain exchanges and then offers it to foreign importers at a price that covers both the cost of the wheat and the cost of shipping it overseas. He specifies the kind of wheat on offer so that the importer knows exactly what it can be used for and the foreign importer, having bought the wheat, then sells it to his flour millers who grind it for flour and it then makes its way to the eventual consumer.

Today, American wheat is used from Rome to New Delhi and Tokyo. It is used in Italy's spaghetti, in India's traditional bread called the chippati and in Japan's noodles. American wheat goes to more than seventy countries in Europe, Asia, Africa and South America and amongst the most important importers of American wheat are Japan, the Netherlands, Brazil, India, Pakistan and Korea.

Wheat may move by rail or truck directly to Atlantic, Pacific or Gulf ports where it is transferred to ocean-going vessels. It may move to inland ports along the Great Lakes from which ocean-going ships carry it out through the St. Lawrence Seaway or it may be transported to river ports along the Mississippi and its tributaries to be carried by barge to ports in the Gulf of Mexico.

Enrichment

A number of years ago nutritionists discovered that flour did not contain adequate amounts of certain essential nutrients for man's daily diet. As a result a programme was started to add nutrients to some common foods. Because wheat flour products are plentiful, inexpensive and used by everyone, they were chosen to be among the foods to carry additional quantities of four of these nutrients namely iron and the B vitamins, niacin, thiamin and riboflavin. Wheat products containing these added nutrients are labeled "enriched".

Today, all family flour is enriched before it leaves the flour mill and most bakers add an enrichment formula to white bread. Many other wheat products such as macaroni are enriched. Enrichment of wheat flour products is credited with vastly improving nutrition and has helped to combat iron deficiency and to stamp out vitamin deficiency diseases so that wheat takes care of health as well as our appetites.

It is hard to imagine life without wheat and its many and varied by-products. So next time you are feasting on some mouth-watering puff pastry you might spare a kindly thought for that ancient and absent - minded Egyptian baker.

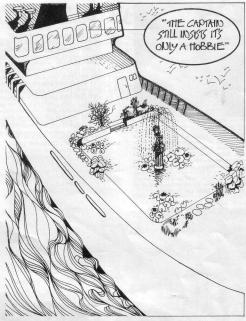


The final product.

Congratulations

- To: J. White, on obtaining his Master's Foreign-Going Certificate.
- To: **M. Cronin**, on obtaining his Mate's Foreign-Going Certificate.

 To: **M. Ryan**, on obtaining his
- Second Mate's Foreign-Going Certificate.
- To: **T. Kenny,** on obtaining his First Class Certificate.
- To: W. Sherringham, on obtaining his First Class Certificate.





Captain Ivan Shiel, Master of the "Saint Patrick" and members of the ship's personnel pictured at the presentation of the wheelchairs to representatives of the Irish Wheelchair Association.

Christmas Greetings



CHRISTMAS GREETING

To Michael Walsh, deck department, "Irish Star" wishing you a very happy Christmas and bright and happy New Year from your loving wife, Elizabeth and baby son, Michael. Also good wishes for the festive season from the Moynihan family and all your relatives and friends in Blackrock - hoping all on board the "Star" will have a very ahppy Christmas. The above photograph is of Mr. Walsh's baby son Michael.

To: Joe Smith, Chief Cook, "Irish Larch", wishing you a very happy Christmas and every blessing in the new year from your loving wife, Mary and also from Mother. Father and all the family.

To: Sean Lloyd, "Irish Larch", wishing you a very happy and holy Christmas and New Year from the one who loves and misses you so much -

your living wife Mary.

To: **Jim Hanlon,** "Irish Elm", best wishes to you, Jim, for a very happy Christmas. Sorry you can't be with us this year but we will be thinking of you, with love from Mammy, Steve, Tony and Frankie.

To: Ronan Dunne, Second Steward, "Irish Cedar", Christmas greetings and best wishes from Mam, Dad, Ciaran, Darina, Kate, Aedamar, Jim and family.

To: Jack Doran, Catering Officer, "Irish Maple", wishing you a very happy Christmas and all the best for 1975 from Mum, Phil and Peter.

To: Maurice Kidney, "Irish Cedar", greetings for Christmas and for your eighteenth birthday from Dad, Mam, Frances, Ann, Monica, John, Peter and Grandad.

To: Vincent Murphy, "Irish Maple", hope you have a happy Christmas and best wishes to all on board the "Irish Maple". Hope to see you soon, P.G. Love and best wishes from Mam, Dad, Sean, Dolores, Carmel and Ann. A big bark from Cliff and

To: Thomas and Alan Doyle, "Irish Star", merry Christmas and happy New Year from Lorraine, Mam, Dad. Declan and Denise.

To: Thomas Hughes, "Irish Star", Christmas greetings to you and all aboard and every good wish for the New Year from Mammy, Daddy, brothers and sisters, also from Mary and Noel and Patricia and Liam.



About this time of year many young 'followers' of our fleet turn their thoughts, kindly perhaps, to our annual Schools' Competition. For this pleasant photograph of last year's winners together with their project and the "Follow the Fleet" trophy we thank Monica O'Neill of Presentation Convent, Carrick-on-Suir, Tipperary whose classmates were successful in 1973.

BUENOS AIRES

Situated on the right bank of the estuary of Rio de la Plata, Buenos Aires is the first port and capital city of Argentina. The history of Buenos Aires began in the year 1536, when the first Governor of Rio de la Plata, Pedro de Mendoza, built a small settlement on the estuary of the river. After only five years the inhabitants were forced to abandon the little colony in the face of continuous attack from hostile Indians who set fire to and completely destroyed, what was, in effect, the first town of Buenos Aires.

It was not until 1580 that a town was again founded, this time by Juan de Garay, and was named Santisima Trinidad y Puerto de Nuestra Senora de Los Buenos Aires or Holy Trinity and Port of Our Lady of the Good Aires. This new town flourished although in its early years it was somewhat overshadowed by the Viceroyalty of Peru. However with the creation of the Viceroyalty of Rio de la Plata and the designation of Buenos Aires as the capital of this region the town progressed very rapidly and in 1806 successfully repulsed two attacks by British forces attempting to cease it. Possibly these victories gave impetus to the movement for full emancipation which was centred in Buenos Aires. This movement culminated in the revolution of 25th May, 1810 which was successful in establishing an independent Republic in Argentina. In 1816 Buenos Aires became the capital city of the new Argentine. Today the city area extends for nearly 75 quare miles but its suburbs, known as Greater Buenos Aires cover approximately 580 square miles with a population of more than eight million people.

The Port

A country which has such agricultural and mineral resources as Argentina naturally needs first-class ports to facilitate the movement of its foreign trade. As the leading port in the country, Buenos Aires provides facilities for the handling of largescale exports of cereals, meat, wool, linseed and hides as well as catering for its imports of coal, oil, lumber and manufactured goods.

Due to its geographical position the approach channel leading to the port needs regular dredging to prevent silting. As might be expected, the handling of grain cargoes is of particular importance and the port's seven elevators can load up to three hundred tons of grain per hour. Future plans for the development of the port envisage a projected new quay with a grain elevator and a capacity for an additional 80,000 tons bringing the total port capacity for grain to 230,000 tons. Buenos Aires is situated at the entrance to the Parana River which is navigable by river steamers throughout its length in Argentina, a distance of 1,700 miles. Large ocean-going steamers can navigate to the port of Sante Fe which is 312 miles up-river from Buenos Aires. Also situated 222 miles up-river from Buenos Aires is Rosario the second port of Argentina and a regular calling place for vessels of the Irish Shipping fleet. In addition to its grain facilities, the port of Buenos Aires has berthing for twenty tankers, has two drydocks and three floating docks to cater for smaller vessels. The planned development of the port also includes the provision of facilities for handling containers and LASH vessels as well as additional ship-vard facilities.

Ån indication of her shipping needs can be gauged from the country's leading position in world trade. Argentina is the third largest beef producer in the world with annual exports worth more than 300 million dollars. She is the third largest producer of



Avenida del Libertador

wine after Italy and France and is also the third largest linseed producing country. In world rating Argentina is fourth as the producer of wool; is the sixth largest producer of corn and occupies the same position in the production of mutton and lamb. Argentina is an exceptionally fertile land and produces an average of fifteen million tons of cereals as well as ten million tons of sugar, 650 tons of vegetable oil and two million tons of fruit. A considerable quantity of cotton is also produced in the country and because of her proud achievements in agricultural production Argentina is known as the "world granary".

The City

Buenos Aires is the world's sixth largest city with an inner-city population of more than three million inhabitants. Its people are mainly of Spanish or Italian descent but Portuguese, French, English, Germans, Slavs, Russians, Turks, Arabs and Jews are all to be found amongst the Portenos as residents of Buenos Aires are called. The city is one of the most modern in the world with elegant shopping arcades and high-quality goods displayed in shop windows on the busy downtown avenues such as Sante Fe, Corrientes and the

shopping mall now reserved for pedestrains only on Florida Avenue. Its five underground railways, the first of which came into operation as long ago as 1913, carry a total of 280 million passengers per year. To aug-ment this excellent service Buenos Aires has 8,000 buses, 30,000 taxis and well over 300,000 private cars. Buenos Aires is a city of trees, many of them are regional such as the Jacaranda or the curiously named Palo Borracho or "Drunken Tree", so called because of its swollen mis-shapen trunk. Floral decorations are to be found all round the city streets and they make a most colourful display on the many stalls where they are sold on street corners. For the visitor there are 153 public promenades where one can stroll leisurely and enjoy the many and varied sights to be seen in this, the second largest city in South America.

Art and Culture

Buenos Aires is one of the cities of the world which places considerable emphasis on art and culture. Amongst the features of the city are its thirtyseven museums its many art galleries and lecture halls. Each day the visitor has a choice of between fifteen and twenty lectures on a wide variety of cultural and scientific subjects. Outstanding amongst the city's forty-five theatres is the Colon Theatre which is the second largest opera house in the world with accommodation for 4,000 people. Some of the world's greatest artists have performed in the Colon and such are the facilities for production purposes that the theatre can be used for almost any stage performance without the assistance of any outside agency. Buenos Aires is second only to Paris in the matter of theatres. There are 250 cinemas within the city area and these together with the city's four television stations give film-goers a wide variety of entertainment and information services. Also in the field of communications local

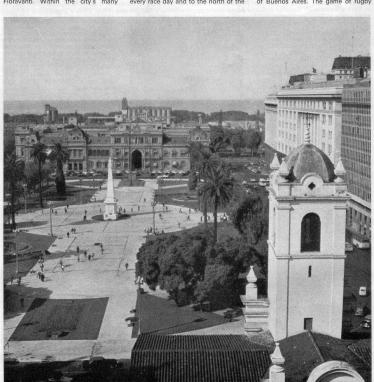
newspapers and magazines are published in 26 different languages. There are seven locally based national newspapers.

Architecturally Buenos Aires still retains impressive relics of colonial influences such as can be found in the San Telmo region or amongst the magnificent mansions to be found in Northern Palermo and Recoleta. In the modern style great skyscrapers are to be seen in the city's financial and commercial sectors. Parks and plazas abound in statuary, many of them fine examples of the work of such famous artists as Rodan, Bourdelle, Larco or Fioravanti. Within the city's many

churches, both ancient and modern, can be seen a fine selection of art and historical relics. An experience which most visitors to the city enjoy is a stroll along the city's majestic Avenida del Libertador, a giant avenue which stretches on for miles into the residential and select northern suburbs.

Of particular importance to Argentinians is their love of sport, especially football. Buenos Aires has ten sports' stadiums with accommodation for between 40,000 and 100,000 spectators. There are two local race-tracks which rank among the seven largest in the world. The Palermo track usually accommodates 40,000 spectators every race day and to the north of the

city limits the San Isidro race-track usually attracts some of the finest race horses in the world. Polo is also a very popular sport and the native sport of Pato provides a unique spectacle for visiting sports lovers. This is a very dangerous sport played on horse-back in which players struggle for possession of a special ball which is equipped with handles and the team gaining possession have as their objective a type of basketball net through which the ball is hurled to register a score. Each team has four players and the pitch used is approximately 200 yards by 30 yards. The game is played mainly in the province of Buenos Aires. The game of rugby



Plaza de Mayo, Buenos Aires

is also making much progress and the recent tour of Europe by the Argentinian "Pumas" revealed a skill which followers of the game here had not previously attributed to this South American region.

Perhaps the most unique feature of Buenos Aires and indeed of Argentina is its reputation for good food. Argentinians claim to be the best fed people in the world and some of its magnificent restaurants are internationally famous. Naturally in such a flourishing meat producing country its hostelries are renowned for their steaks. Tourists from the United States can be seen in the famous La Cabana in Buenos Aires photographing and measuring the steaks that are brought to them, such is the physical size of the portions.

Historic Link

It is appropriate that the ships of our fleet should be no strangers to the port of Buenos Aires for it. is in the Recoleta cemetery in this city that William Brown, founder of the Argentine navy, and a native of Foxford, Co. Mayo, is laid to rest. His contribution to the birth and development of the great South American republic established a very real maritime link between his adopted and native lands in the early years of the nineteenth century.

Royal Lifesaving Society Award



Deck Cadet Anthony Kelly receiving his gold medal award from Captain J. J. Walsh on board the "Irish Elm". The medal was awarded by the Royal Lifesaving Society for success in survival tests. A similar award was won by Cadet George Hopkins, at present serving on the "Irish Larch".

AS WE REMEMBER THE LATE PRESIDENT



In 1981 Mrs. Childers performed the naming ceremony at the launch of the "Irish Sycamore" at West Hartlepool. In this picture, taken before the launch, the late President and Mrs. Childers are accompanied by the late Mr. J. J. Stafford and Sir William Grav. Chairman of William Grav & Sons, builders of the vessel.



(Above) Pictured on board the "Irish Spruce" in February 1960 with the late Captain J. H. Syms and former Chairman of Irish Shipping, the late Mr. J. J. Stafford. This photograph was taken on the occasion of a special reception on board the vessel after she had completed a two year voyage covering 40,000 miles which had taken the "Spruce" round the world twice.

(Right) On a visit to the "Irish Sycamore" when she called at Dublin, Mr. Childers is shown over the yessel by Captain T. Hughes.



Their Word is their Bond

Not many years ago when one did not have to mortgage the humble homestead to partake of a holiday in the sunny South, I spent a very pleasant vacation in Tralee and its environs. One morning, hortified to discover an unpaid telephone bill in my pocket, I immediately set out to make restitution at the local G.P.O. Sighting an official-looking building which sported a golden harp over its hallowed portal, I entered and joined a queue which was woming its issistently way towards an official ensconced behind a brass grille. Eventually I reached my objective and neatly placed the overdue bill and my money before the grilled official. "What's this "'sez he. "May telephone account", sez I. "This is the Labour Exchange", sez he. "Good morning", sez I, as I shuth out with seemingly, a thousand scornful eyes expediting my exit. I knew then what it must feel like to wander unwittingly into the Kildare Street Club wearing bicycle clips. I suspect that ordinary mortals would feel similarly out of place within the confines of the Baltic Exchange. Like the Kildare Street Club, it is strictly for 'members only' which probably accounts for the fact that we ordinary shipping types know so little about the institution which is of south importance in our business lives.

The Baltic Mercantile and Shipping Exchange, known in shipping circles as the Baltic, has as its primary function the provision of facilities for the fixing of cargoes for merchant vessels. The Exchange had its origins in seventeenth century London when ships' captains and merchants used the city's coffee houses as business premises. In these coffee houses those with ships for hire concluded deals with merchants for the carriage of various cargoes. One of the most prominent of these establishments was the Virginia and Maryland Coffee House which became known from 1744 onward as the Virginia and

Baltic. The Virginia and Baltic was so named because the varied merchandise dealt with there came mostly from the plantations of the American colonies or from the countries along the Baltic Seaboard. The proprietors of the coffee houses provided newspapers and commercial information for their patrons besides refreshments and it was quite usual for a saleroom to be on the premises where cargoes were auctioned. Sales at these auctions were transacted "by the candle", a system which consisted of the lighting of a candle one inch in length with the bidding continuing until the candle burnt itself out.

In 1810, business had expanded to such an extent that it was necessary for the Baltic to take larger premises and the Antwerp Tavern in Treadneedle Street, was acquired and renamed the Baltic. Around this time tallow had attained great importance more particularly in the trade which had developed between Britain and the Baltic countries as well as with Russia. To effect some control over this dominant trade in tallow a committee of Baltic members drew up and published, in 1823, rules and regulations for the "Baltic Club" which was limited to a membership of 300. The rules established a com-



A general view of the floor of the Baltic Exchange with the telephone switchboard in the foreground.

mittee to control the Baltic's affairs and provided for a dining room and a saleroom. Wine, tea, coffee, chocolate and sandwiches were to be

furnished in the coffee-room.

From this point onwards the membership and importance of the Baltic grew steadily. Although the trade in tallow continued to serve as a basis for fixing freight until 1890 the importance of the tallow trade itself diminished as other means of lighting were developed and in place of the tallow, grain cargoes began to dominate the business of the Exchange. This process was accelerated by the Repeal of the Corn Laws in 1846 which marked the recognition by parliament that the answer to Britain's grain shortage was not protective tariffs but the importation of foreign grain at economic prices. When the grain trade was added to the Baltic's activities it could scarcely have been foreseen that Britain would be eventually compelled to import much of its grain from overseas and that it would become one of the principal commodities with which the shipping world would concern itself.

Important Developments

In 1857 the Baltic bought South Sea House from the liquidators of the Royal British Bank. This early eighteenth century building had been the headquarters of the Honorable Society of Merchant Venturers trading to the South Seas, whose coat of arms the Baltic Company adopted. The new premises provided better facilities for the Baltic activities but in the following decades two developments revolutionised world shipping, increasing the membership of the Baltic in the process. These were the development of the tramp steamer and the opening of the Suez Canal. The Baltic was the centre of the growing market in steamer freight and its expansion was uninterrupted throughout the century. The opening of Suez gave ready access to new markets and stimulated international trade to a considerable

In 1891 the London Shipping Exchange was founded to meet the needs of liner shipping and became an institution whose activities overlapped, if they did not seriously rival, those of the Baltic. Both institutions were in need of more space and better facilities and a joint committee representing both Exchanges was established to plan a merger and to purchase a suitable building site. Jeffrey Square in St. Mary Axe was eventually purchased, and in 1903 the Exchange as it is today had been built.

With the intention of adding to the amenities of the Exchange the bombed site adjoining the Baltic premises was purchased in 1947, and the foundation stone of the new wing was laid on 2nd March, 1955. The building has provided considerable additional office space, an impressive banqueting hall with all modern facilities, including a wall that can be raised to divide it into two self contained sections, and a new Board Room and suite of offices. for the Baltic itself. This building was opened on 21st November, 1956 and the Banqueting Hall, which is now known as the Queen's Room, can be used for conferences and company meetings as well as for more social

The main hall of the Exchange, the 'Floor' as it is called, is designed to provide an appropriate background to the business conducted there. It conveys an impressive sensation of space and height being over 20,000 square feet in area and having a large central dome. The columns supporting the roof and the walls are finished in marble and there is a rostrum from which 'waiters', as the attendants are still called, can summon members whenever they are needed. This system is always in use since telephone calls are constantly being made from the Exchange and are received there from all parts of the world.

Communications System

The Baltic Exchange Telecommunication System consists of a private automatic branch Exchange with internal extensions, external extensions and private circuits. The internal extensions, which terminate on telephones, serve points inside the Exchange and the external extensions and private circuits terminate on member companies' switchboards or on telephones serving the offices of members of the Exchange.

Associated with the Baltic Exchange Telecommunications System are two paging systems, a public address system and a radio paging system. The later ingeniously enables telephone operators in the offices of member companies to dial direct the number of the pocket paging unit carried by the individual member on the floor of the Exchange.

The "Floor" is informally divided according to the various markets. Foremost of these is the freight market which appropriately occupies the centre of the "Floor". Here cargoes are found for ships and ships for cargoes by shipbrokers and chartering agents whose knowledge of the particular features of the market enables them to assess prices and costs accurately. Chartering agents draw up charter parties for submission to owners' brokers and obviously they must have a reasonable knowledge of mercantile law.

The free operations of the freight market on the Baltic is of great benefit to International Trade, since it ensures that no representative on the Baltic, with ships or cargoes available anywhere need be ignorant of market conditions and there need be no expensive time lag in meeting their requirements. It can be readily appreciated that costs in shipping depend on the economic deployment of ships, which chiefly means the avoidance of delay and avoidance of voyages in ballast. The role of the Baltic, therefore, in these matters is of very great importance. Although the Baltic Exchange also deals in commodities markets such as grain, oil and oilseeds and recently added an Air Market the freight market is the central activity of the Exchange.

The Freight Market

Chartering operations represent the most numerous transactions on the Baltic Exchange. They mainly concern tramp ships but are not entirely confined to these. The tramp ship owner will let out his ships, voyage by voyage to trade in any direction in which the most profitable cargo is available at any particular time. The cargoes obtained in this way are usually full cargoes of one commodity such as grain, coal, iron ore, sugar or sulphur.

Thousands of deep-sea tramps are are constantly seeking employment and merchants and shippers all over the world are in constant need of ships to carry their cargoes. This process of mutual search, the right ship finding the right cargo and vice versa, would obviously be prolonged and chaotic without central organisation where things could be sorted out. This is the function performed by the shipping section of the Baltic Exchange and it is this activity, with rates fluctuating from day to day according to supply and demand, that constitutes the London freight market, the world's main freight market.

In considering the structure of the freight market one must not overlook the hundreds of people engaged in it on the Exchange. Some of them, known as chartering agents, represent the merchants or other interests who charter ships to carry their cargoes. Others known as owners' brokers, represent the ship-owners. There are many broking firms who have both charterers and ship-owners among their clients and thus work on both sides of the fence; the merchants or ship-owners concerned may be in London or anywhere else in the world. Many merchants and ship-owners who are members of the Baltic Exchange have their own chartering staff on the Exchange who take the place of, but perform the same function as, chartering agents, or brokers.

Worldwide Operations

These, then, are the people who compose the market. With some



The famous ship's bell from the "Ceres" which was shipwrecked in 1729 and is now a prominent feature of the Baltic Exchange. The bell is struck by the Superintendnet as the signal that the day's business has come to an end.

hundreds of ships scattered all over the globe being named on the market on any given day as available for employment how does the chartering agent know how to find the ship he wants and strike a bargain with the owner's broker? And with apparently hundreds of freights to choose from, how does the owner's broker narrow down the scope and reach the stage where negotiations can commence? This may seem very confusing but to a great extent matters are already sorted out in a pattern which is reasonable clear to the broker of moderate experience. This pattern is composed of the various groups of chartering agents associated with the geographical sub sections of the freight market, much in the same way as jobbers on the Stock Exchange are known to deal in their groups of securities. Thus the experienced broker knows, for example, that chartering agents A. B. C and D. are the group who regularly charter ships for cargoes of coal from Hampton Roads, and likewise he knows the various agents who charter for cargoes of grain from the River Plate, Australia, North America and the Gulf of Mexico or for iron ore from Brazil. At the same

time he must be constantly watching for inquiries from new sources which frequently occur in these modern times of rapid change. Similarly the chartering agent keeps track of his ships which are named to him from day to day, especially those which are, or will be, proceeding with outward cargo in the direction of the area with which he is concerned. Consequently these agents and brokers are not suddenly confronted with a confused picture of hundreds of ships and freights. They are in daily contact with one another and are constantly noting changes that occur each day.

Here it would be appropriate to mention time-chartering, that is the chartering of ships for a period of time as distinct from chartering a ship to carry a specific cargo on a specific voyage. This is a prominent feature of the freight market and the various liner companies, both British and foreign, often arrange the time-chartering of ships to supplement their own ships. For obvious reasons, in the case of time-charterers, the ships of good speed and relatively low fuel consumption command the best rates.

These negotiations for a charter, whether for a single cargo, for a

specific voyage, or for a time-charter, involve a process of bargaining. Obviously the broker acting for the owner must secure the highest rate possible while the broker representing the charterer must try to do exactly the opposite. Consequently the negotiations usually require great diplomacy in which the skill and experience of the respective parties and their personalities come into play. The process is fascinating and absorbing, especially for those who have a particular flair for it, so that the work of an agent or broker engaged in the freight market on the Baltic Exchange is of constant interest. There is something new every day.

A Practical Example

Although the Baltic is a place for the exchange of information, it is also a place for the witholding of information. If a member discloses his market information to all and sundry he will never do good business. This simple truth was demonstrated in a very practical manner two years ago when the Russian government purchased huge quantities of grain from the United States. The actual purchase of the grain was transacted in an un-

obtrusive way by quietly negotiating with many dealers while at the same time concealing the vast total of their

actual needs.

A lesser known fact is that the Russians similarly concealed their ultimate intentions in the matter of ship chartering. They concluded very many charters on the Baltic without revealing their massive cargo space requirements. However word eventually escaped and immediately the rate of freight shot up from \$9 per ton to \$12. One can readily imagine the scene on the floor of the Exchange on this particular occasion. Milling about under the high dome ceiling hundred of brokers, shipping agents and ship owners representatives generating a steady din of chatter while uniformed attendants at a public address system paged individuals for telephone calls or other urgent messages.

Apart altogether from the normal effect of supply and demand such factors as storms at sea, epidemics, political insurrections or, indeed, any other cause beyond control of charterers can upset the best-laid plans of those engaged in the business of ship chartering. They must be familar with current affairs around the world. Not so long ago Australian stevedores

at the resumption of bombing Vietnam. Chile laid on an expensive port fee and India, for political reasons, bars Indian-flag ships from going to South Africa. Again if a ship has been to Israel she is automatically placed on the Arab blacklist. These complications explain in part why the Baltic dealers tend to specialise in certain trades and are very conversant with the pecularities of trading on certain routes

Membership

The Baltic Exchange is owned by over 700 member companies who are shareholders. Each member firm pays £250 per year for membership plus £50 for each individual member on the 'floor' plus £25 for each clerk on the 'floor'. Altogether about 2,400 representatives, either members or clerks, transact business in the Exchange. This business is still remarkably similar to the original transactions carried on in the old coffee houses. The business is done by word of mouth and the motto of the Baltic is 'our word our bond". It is a remarkable fact that only on two occasions in one hundred years has anyone gone back on his word, an act which incurs immediate explusion for a guilty party.

If there is disagreement a particular case can be heard within the Exchange which has its own form of arbitration to settle disputes outside courts of law. The Exchange opens at 10 a.m. and over 60% of all international shipping transactions are negotiated by Baltic members. There is no fixed rate on the "Floor" and the market can and does vary.

Apart from its freight market the Baltic Exchange caters for the sale and purchase of ships, drydocking and ship repairing, cargo superintending, average adjustment and ship bunkering. These are all auxiliary services which help to make the Baltic Exchange a centre of comprehensive services for the shipping business. In addition the air chartering market provides an important service in arranging for the air lifting of ship crews which expedite the exchange of crews in foreign ports.

Irish Shipping has been very much concerned with ship chartering since the early 1950's and today all our vessels are on charter so that the Baltic Exchange is of particular importance to us and it is hoped that this account of its history and activities will help to dispel for our readers some of the mystery surrounding this exclusive 'Club'.

Marine Group

Formation of Irish Branch of Institute of Chartered Shipbrokers

At a recent meeting in Dublin an Irish branch of the Institute of Chartered Shipbrokers was formed. Thirtyfive of the fifty Irish members of the Institute attended this inaugural meeting

The Institute of Chartered Shinbrokers was founded in 1913 and it is the internationally recognised professional body comprising those involved in Ship Chartering and Ship Agency activities. Membership is by examination and there are members in every port in the UK and Ireland.

The formation of this Irish branch will provide Irish members for the first time with the opportunity of making known as a group the particular features which relate to their activities in Ireland. It will also enable Irish members to be represented on the Council in London which manages the Institute's affairs

The first officers elected were: President: Mr. Raymond F. Burke, Chairman, R. A. Burke Limited, Ship-

brokers, Dublin,

Vice-President: Mr. Eddy O'Regan. Agency Division, IrishShipping Limited. Secretary/Treasurer: Mr. F. C. Fewell Bristol Seawheel Limited.

Council Members: Mr. Stephen M. Clery, Agency Division, Irish Shipping Limited. Mr. J. Dundon, Mullock & Sons Limited, Limerick. Mr. John C. Hannigan, James Scott & Company (Cork) Limited. Mr. Patrick Monohan, Drogheda. Mr. G. McMillan, Irish

Memories of Sailing Ships The following is a very welcome and interesting letter received from our good friend Capt. R. M. Woolfenden. now enjoying his retirement at home in Birkenhead.

"I thank you for the latest copy of Signal, very interesting indeed following the movements of the ships.

Your article on the "Stars" took my attention. In 1925 I was in Oaklands - then a backwater of 'Frisco taking the two apprentices out for a life-boat sailing lesson, we sailed around the numerous ships laid up there for the season, all of the Alaskan Packing Company's fleet, and all "Stars", the largest being the "Star of India", a four masted Barque.

Another big four master lying there had the faint markings of "Golden Gate, Liverpool" under her American name, if it was the same vessel, my father commanded her in 1890 at the age of 26

I believe the Alaskan Packers sold their entire fleet about 1926.

The photograph of Newcastle, N.S.W., recalled memories of when it was a sailing ship-port, I was there in 1919, I suppose the old steam trams will have disappeared but I hope the old hospitality of the Newcastle people has not, sailors could do no wrong, especially the apprentices,

My best wishes to the Company ashore and afloat".





FLEET NEWS

"Elm" carries Japanese Cars

On completing discharge of her cargo of coal from Norfolk, Virginia, at Nagoya, the "Hish Elm" will load Datsun motor cars at Nagoya and Yokosuka for Rotterdam and Middlesboro. She is expected to sail from Nagoya on 3rd December arriving at her second Japanese loading port on 4th December and sailing from there on the following day. She is expected at Panama about Christmas Day and will berth at Rotterdam about 10th January. She is expected to complete at Middlesboro on 14th January approximately.



A recent picture of the "Irish Larch" taken while the vessel was in the English Channel.

"Irish Larch"

This vessel is at present discharging lumber at Cardiff and is expected to sail from there on 25th November for Antwerp where she will complete discharge of her cargo loaded at British Columbia. She will then load a steel cargo at Antwerp and is expected to sail from there about 6th December for Los Angeles, Oakland, Portland and Vancouver.

The "Larch" will be due at Panama about 20th December and will probably spend the Christmas holiday at Los Angeles.

"Irish Plane"

Captain T. Hughes recently took over command of this vessel from Commodore J. Poole. The "Plane" is at present discharging her phosphate cargo at Dublin and is expected to sail for Casablanca about 27th November and should arrive at the loading port about 1st December.

"Irish Stardust"

Recently, while this vessel was at Tacoma, Captain J. Caird relieved Captain M. Devine as Master and at the same port Chief Officer P. Farnan and Second Engineer H. Teehan relieved E. Greevy and J. Doran respectively. She is at present completing discharge of her general cargo, loaded at Kawasaki, at the Mexican port of Manzanillo. The ship will sail about 26th November for Eureka, Longview, Crofton, Vancouver and Squamish. She will load forest products at these ports for discharge at London and Boulogne. The "Stardust" should sail from her final loading port about 8th December and is expected to arrive at London about 1st January and should sail for her French discharge port on 8th January.

"Irish Star"

This ship is due at Jacksonville, Florida, on 28th November from Brake. West Germany. The vessel is in ballast and will load a phosphate cargo at Jacksonville for Port Moody. British Columbia. She is expected to sail on 1st December and should transit the Panama Canal about 5th December arriving at Port Moody on 17th December. It is expected that she will complete discharge about 21st December and will then load lumber at British Columbian ports as well as a consignment of Borax Powder at San Diego, California, for discharge at Rotterdam and Esbierg. Denmark. The vessel will be at a British Columbian port for the Christmas holiday period.

"Irish Pine"

At present on passage from Antwerp with a steel cargo, the "Pine" is expected at Panama about 4th December and should arrive at her first discharge port of Los Angeles on 12th December. She will also call at Oakland and Seattle and will complete discharge at Vancouver about Christmas Day. After discharging her steel cargo it is expected that the "Irish Pine" will load forest products at British Columbia for U.K. and Continental ports.

"Irish Maple"

Captain M. O'Dwyer recently took over command of this vessel from Captain M. McMahon. The ship is at present discharging steel from Antwerp at Portland, Oregon and will then proceed to Vancouver to complete discharge. It is expected that she will commence loading lumber at British Columbian ports after completing discharge about 27th November and will begin her eastbound passage for U.K. and Continental ports about 6th or 7th December.



Captain Peter Kelly making a presentation to Captain J. Onions on behalf of his sea-going colleagues at a special reception to mark the retirement of Captain Onions. In centre is Captain M. D. Langran, Personnel Superintendant, I.S.L.

A Word of Thanks

On behalf of my wife and myself I would again like to express my sincerest thanks to all who contributed towards the recent presentation to me on my retirement and, I would like to take this opportunity to express a special word of thanks to all my very good friends and colleagues of the sea-going staff. It gives me great pleasure to look back over the years with such happy memories of all those shipmates whose friendship, co-operation and lovalty made my lot as Master a truly happy one and, I trust that I will occasionally have future opportunities of renewing my acquaintance with

Again, many thanks and with every good wish for the future.

J. H. Onions,

Master.



Radio Officer, Mr. Peter Behan, receiving his Meteorological Award from Captain Coleman Raftery on board the "Saint Patrick". Also included in the picture are Captain Ivan Shiel and Chief Officer Mr. Enda Connelan. The award was made to Mr. Behan for his contribution to weather reporting during his service on board various vessels of the Irish Shipping Fleet.

"Cedar" on Chilean Voyage

On her present voyage the "Irish Cedar" is carrying a cargo of phosphate rock from Belledune, near Bathurst, New Brunswick. She is expected to transit the Panama Canal on 28th November and should arrive at her Chilean port of discharge about 8th December. Although we are not certain, we believe that this particular call at Belledune is the first call by an lish vessel at this particular port.

The "Cedar" which is on timecharter to United Co-Operative of Ontario is sub-chartered for her present voyage to Phoenix Navigation Company and will probably revert to her normal trading pattern on completing her present South American trip.

"Irish Oak" at Rio

Having loaded a general cargo at Kobe and Yawata, the "Irish Oak" is at present on passage via Cape of Good Hope for Rio de Janeiro, Santos and Vitoria in Brazil.

The ship will be due at Rio about 11th December and on completing discharge at Santos she will probably load a cargo of grain for U.K./Continental European ports.

Her time-charter to Lloyd Brasileiro of Brazil will then terminate and the ship is expected to be re-delivered, probably at Lisbon.

Tribute from Dun Laoghaire

"A Ghráinne Mhaoil Tá do thriall thar Sáile Tá Loingeas Teo. na hÉireann Ar fud na Seacht mara Aon long deag díbh Ag cruinniú duit Saibhris Ní clisfidh Siad ort go deo".

O Grace O'Malley Your path is oe'r the Main Irish Shipping Limited Sails the Seven Seas All eleven ships of them Forever earning — Never shall they fail you.

(This kindly tribute to our sea-going colleagues was sent to us for publication by the young "Followers of the Fleet" from Dominican National School, Dun Laochaire.)

Anonymous Correspondents

If the writers of a letter which we have only recently received and which was dated 24th August, 1974, "Irish Larch", will contact the Editor and sign their names to their letter or otherwise advise us we shall be happy to reply to their interesting comments.

It will be readily appreciated that we cannot reply to letters which do not carry the names of the writers.

Fleet Personnel



DECK AND ENGINEER OFFICERS IN ORDER OF RANK (AS AT 22nd NOVEMBER, 1974)

m.v. "Irish Cedar" - Captain J. Kerr; Deck Officers: J. Movnihan, S. O'Byrne, M. Kinsella: Deck Cadets: R. McCabe, M. Butler, M. Kidney; Engineer Officers: G. Rowe, P. Caffrey, P. McGlade, P. Smyth; Junior Engineers: M. McAneny, F. Sheehan, E. Tubridy: Electrical Engineer: M. English Catering Officer: J. Dillon; Radio Officer: M. Cregan; Deck Department: J. Ryder, M. Doyle, P. White, J. Murphy, M. Keogh, A. Loughlin, J. Knight, F. Glavin, S. O'Byrne, P. Shanahan, G. McGuinness, D. Fitzgerald; Engine Department: M. Manson, M. Sheehan, B. Coogan, A. Vaughey; Catering Department: J. McGrath, A. Rourke, R. Dunne, J. Cooney, D. Coombes, H. McClenahan, S. Kinsella.

m.v. "Irish Stardust" — Captain J. Caird; Deck Officers: P. Farnan, J. A. Flanagan, T. F. McCarthy; Deck Cadets: D. Coleman, G. Burns: Engineer Officers: J. Mooney, H. Teehan, P. Herlihy, P. Morris; Junior Engineers: B. Wright, M. Egan, F. Flynn; Engineer Cadets: F. Murphy, M. Boland; Electrical Engineers: E. Perry, P. Tobin; Catering Officer: L. Fanning; Radio Officer: E. Killeen; Deck Department: A. Hearne, D. O'Sullivan, J. Handley, J. Willis, T. Kealy, J. Weadock, P. Dowling, J. Grace, A. Malone, T. Fitzgerald, J. Walsh, J. Mahon; Catering Department: W. Rogan, F. Gavin, J. Maguire, D. Barry, G. Cummins, G. McGrail, M. Gavin, G. Cummins,

m.v. "Irish Star" — Captain J. A. Gleeson; Deck Officers: J. Ryder, P. Richardson, P. Smyth; Deck Cadets: G. Farrell, T. McMahon; Engineer Officers: P. Bardon, D. O'Brien, C. Kealy, K. Daly; Junior Engineers: C. O'Brien, F. Keane; Engineer Cadet: A. Kelly; Electrical Engineer: T. Duggan; Catering Officer: U. Maher; Radio Officer) D. Connellan, Deck Department: J. Tallon, T. Hughes, M. Kavanagh, S. Smith, A. Poutch, B. Quigley, A. Doyle, J. Weldon, A. Byrne, H. Black, T. Ryan, Catering Department: T. Doyle, J. Kelly, F. O'Reilly, J. Coholan, J. Cooney, D. Rouke, P. Wilson. 1

m.v. "Irish Elm" — Captain J. Walsh; Deck Officers: J. Kelly, D. Hopkins, P. O'Shea; Deck Cadets: A. Kelly, P. Dorgan, W. Kavanagh; Engineer Officers: B. Larkin, J. Devitt, M. Hayes, F. Cotter; Junior Engineers: M. Tyrrell, J. Hannon, K. Flood; Engineer Cadets: A. Curran, L. Byrne; Electrical Engineer: D. Niall; Catering Officer: B. Dorgan; Radio Officer: K. Wheeler; Deck Department: K. Maher, J. Roice, P. Cantwell, M. Russell, M. Murray, F. Macken, D. Kelly, G. Mooney, J. Duff, A. Graham, V. Beech, M. Fitzgerlad, J. Ryan, M. Whitney; Catering Department: T. Mason, J. Hanlon, G. O'Toole, E. Foran, M. O'Connor, C. Pullen.

m.v. "Irish Oak" - Captain M. Carey: Deck Officers: D. Kavanagh. H. McGowan, F. Traynor; Deck Cadets: D. Devenney, R. O'Shea; Engineer Officers: J. Morgan, D. Gabriel, J. O'Connor, D. O'Flaherty: Junior Engineers: D. Kelly, K. Vekins: Engineer Cadets: G. O'Toole, P. Conran; Electrical Engineer: J. Dunn; Catering Officer: P. Murphy; Radio Officer: M. C. Murphy; Deck Department: L. Moloney, P. Rice, L. Byrne, V. Lotti, Miss E. Daulton, A. McDonnell, M. McElligott, J. Brennan, F. Cole, F. McCarthy, J. O'Neill, T. Kelly; Catering Department: D. Meagher, D. Duffin, S. Paige, D. Redmond, J. Roche, P. Farrell, M. Coleman.

m.v. "Irish Maple" — Captain M. O'Dwyer; Deck Officers: D. Mundow, A. O'Callaghan, J. Foley; Deck Cadets: M. Poole, E. O'Callaghan, G. M. Butler; Engineer Officers: M. Dillon, J. Reilly, J. O'Meara, J. Hughes; Junior Engineers: M. Scully, J. Keane, J. Lynch; Engineer Cadet: D. Horan; Electrical Engineer: P. Fitzgerald; Catering Officer: J. Doran; Radio Officer: J. McCarthy; Deck Department: V. Murphy, R. Nugent, P. Duffy, A. Gill, M. Carr, J. MacKey, J. O'Donnell, P. Craine, J. Murphy, A. Preston, D. Kelleher, R. Coe, P. Marken; Catering Department: G. McGovern, P. Foley, T. Mahoney, D. Byrne, J. Murphy, C. Murphy, M. Berry.

m.v. "Irish Pine" - Captain T. Byrne: Deck Officers: N. Hearne, M. Cronin, M. Rvan; Deck Cadets: P. Cafferky, J. Flaherty; Engineer Officers: M. Curley, T. O'Toole, D. Power, M. Byrne, T. Farrell; Junior Engineers: T. O'Leary, J. Garvey, P. O'Mahoney; Engineer Cadet: J. Durham; Electrical Engineer: P. O'Toole; Catering Officer: P. Walsh; Radio Officer: P. Meehan; Deck Department: P. Garry, E. Frampton, M. Byrne, J. Whyte, E. O'Leary, J. Grimes, N. Byrne, D. McDonnell, P. O'Brien, A. McDonnell, R. Rooney; Catering Department: E. Byrne, J. Savage, J. Evans, P. McKenna, J. Kenneally, E. Donnery, G. Humphries.

m.v. "Irish Larch" — Captain W. Garvey: Deck Officers: J. Whyte, J. Daly, L. Gavin; Deck Cadets: D. Elliott; Engineer Officers, M. Byrne, L. Sherringham, S. McLoughlin, P. McDonnell, J. O'Leary; Junior Engineers: H. Mahon, W. Kells; Engineer Cadets: N. Pearson, M. Treacy; Electrical Engineer: P. Clarke; Catering Officer: H. Bond; Radio Officer: J. Butler, M. Donnelly, Deck Department: P. Harris, J. McGrath, D. O'Reilly, T. Norris, L. Byrne, P. Boyle, R. Allen, H. O'Connor, M. O'Shea, B. O'Reilly, A. Stewart, D. O'Beirne, C. Kelly; Catering Department: J. Smith, J. Edwards, S. Lloyd, J. Byrne, C. Lewis, L. Doyle, D. Fennell.

m.v. "Irish Plane" — Captain T. Hughes; Deck Officers: P. Kehoe, E. Curry, N. Davids; Engineer Officers: H. Mooney, J. Nangle, J. Waters, F. Hennessy; Junior Engineers: P. A. Cummins, J. Kavanagh, D. Purcell; Electrical Engineer: S. Byrne: Catering Officer: E. Fricker; Radio Officer: J. O'Shea; Deck Department: H. Mc-Elwaine, P. McDonnell, D. Healy, D. O'Driscoll, N. Kearns, D. Early, J. Farrelly, P. Kelly, S. Doyle, J. Carroll, W. Carroll, S. Smith: Catering Department: P. O'Reilly, W. Muldoon, D. Gronin, P. O'Reilly, C. Guiden, J. Gardiner, D. Leonard.

Contributions and correspondence for "SIGNAL" should be sent to the Editor at