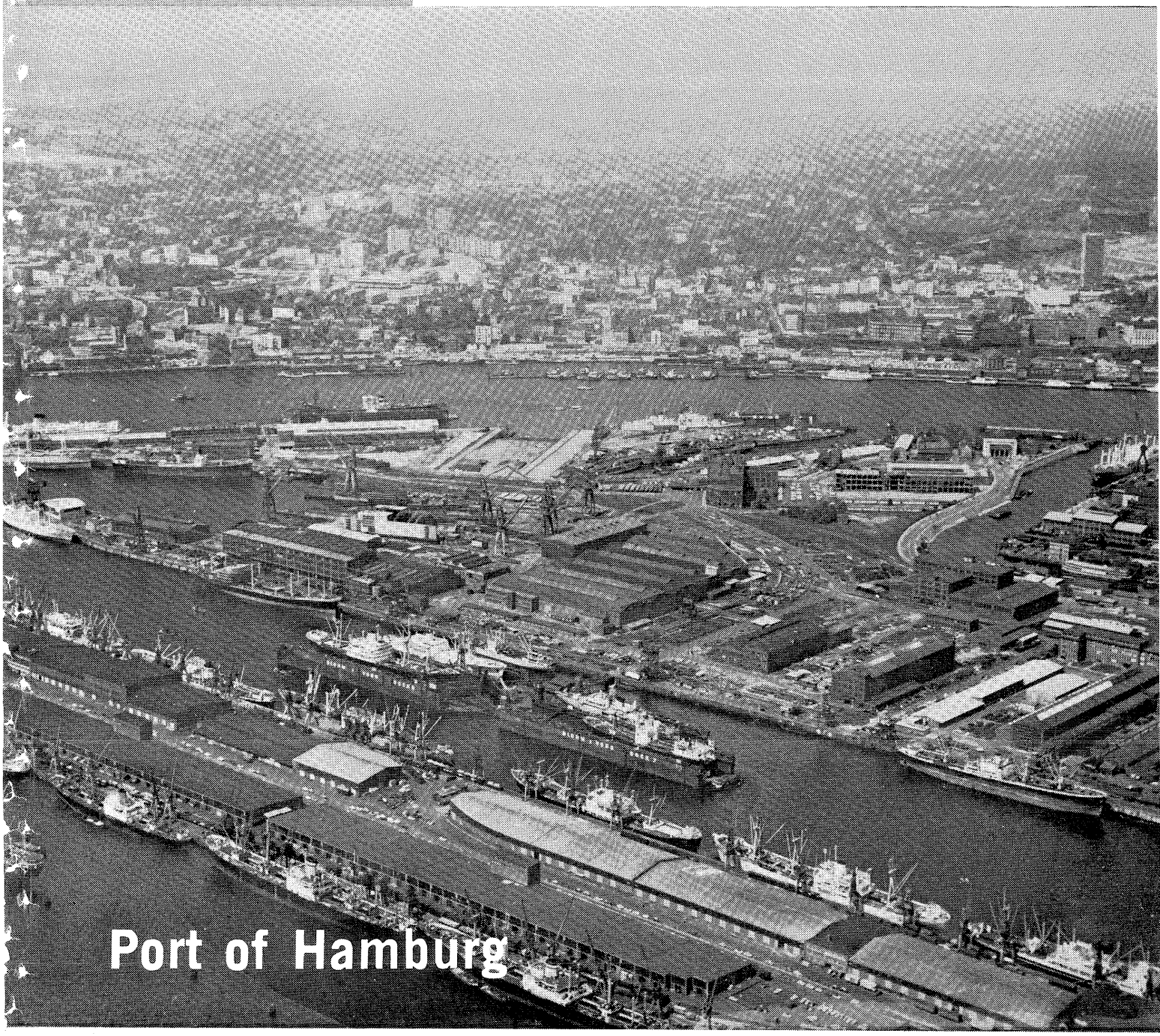
PORTS and HARBORS

OCT. — DEC., 1966 Vol. 11, No. 4



Port of Hamburg

THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

THE PORT OF KOBE

—Modern, Efficient Port With Elegance—

The Port of Kobe, a fine, natural port in the heart of the vital Osaka-Kobe industrial area of Japan, served as a main gateway for shipping and trade between Japan and the Asian continent from ancient times. Described as the "Naples of the Orient," Kobe is renowned for its scenic beauty with the Rokko Mountain Range forming a colorful background to the port city. The headland of Wada to the south at the mouth of Kobe Bay protects the port from high seas.

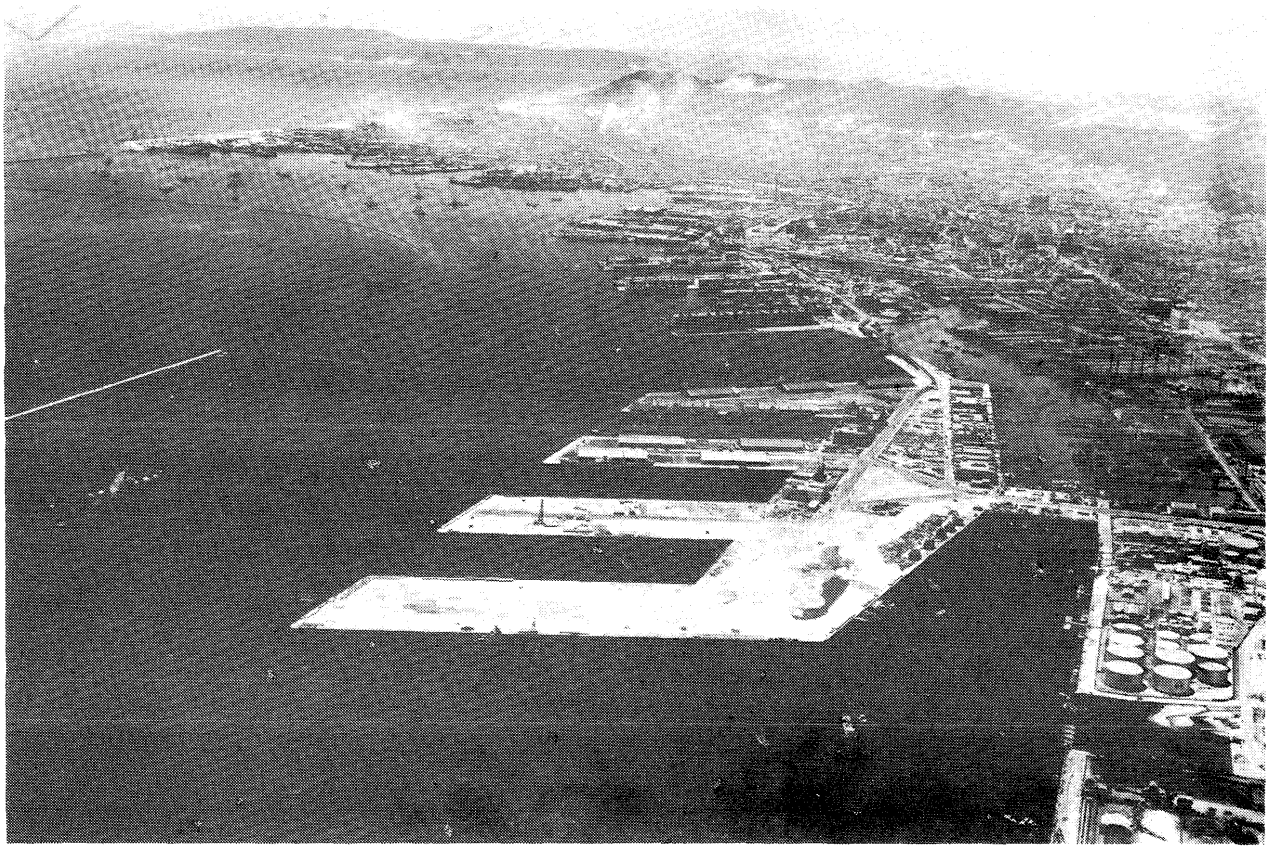
It is nearly 100 years since Kobe was opened as one of the first trade ports of Japan. Today it is one of the major export ports of Japan and handles cargoes representing 30 per cent of the value of Japan's total export trade.

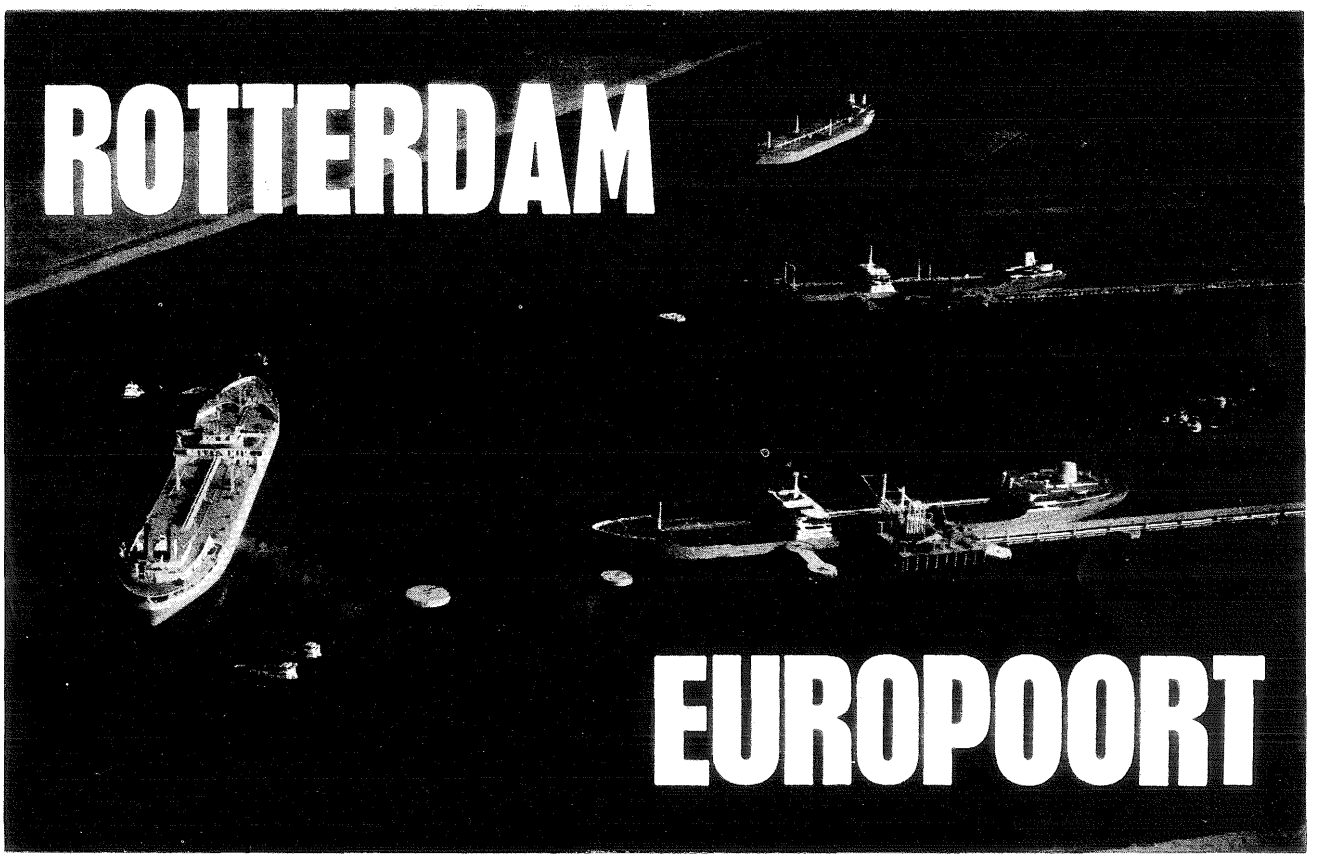
In parallel with the recent growth of Japan's economy, ships and cargoes arriving at Kobe from abroad have been increasing in number and tonnage. This growth has made the expansion of water-front facilities here essential. In the light of this demand, the construction of the Maya pier terminal was undertaken in the eastern section of the Port in fiscal 1959 to increase foreign trade facilities. The Maya terminal, to be completed at a total cost of ¥22 billion by the end of fiscal 1966, is to be a massive and up-to-date unit of four piers capable of accommodating eighteen 20,000-tonners at one time. In order to deal successfully with containership services, preparations are in full swing to make the Maya Pier No. 4 a container terminal to welcome the first container carrier in the summer of 1967.

On the other hand, to connect the Maya terminal now under construction and the Shinko pier terminal already in operation, a semi-suspension bridge, the first of its kind in this part of the world, was completed in June, 1966. This bridge has contributed to a great improvement of the port facilities and functions.

Thus, the Port of Kobe handles more than 7,200 foreign service ships and 42 million tons of foreign and domestic cargoes yearly. It is under a rational management with the motto of "inexpensive, speedy and reliable cargo handling."

With the objective of preparing itself for the world's expanding economy, the Port of Kobe has taken a step forward this year in greeting the container-ship age by beginning its five-year project to construct a 1,000-acre island for increased facilities.



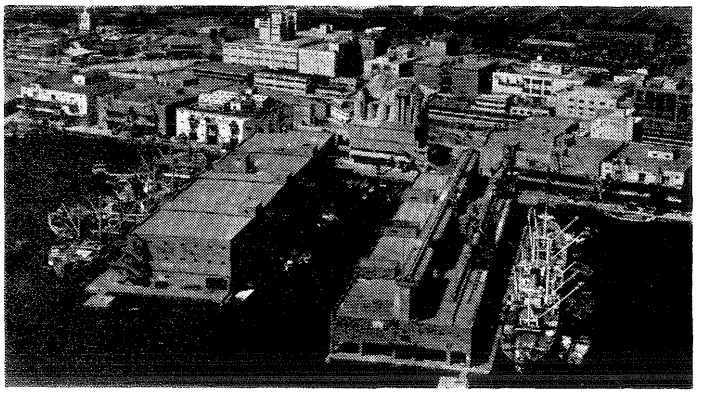


KOBE FUTO KAISHA, LTD.

President.....Chujiro Haraguchi

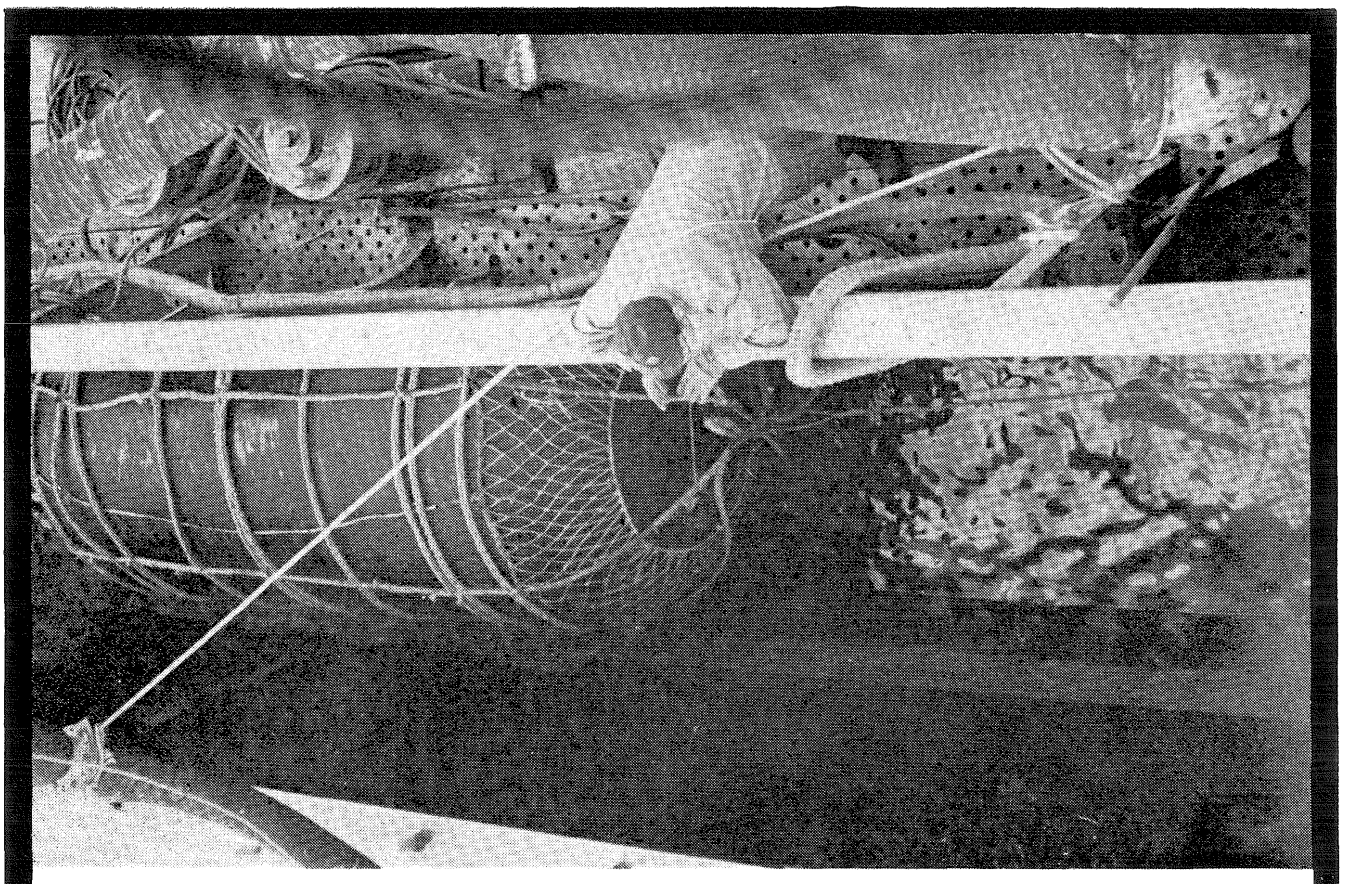
Capital .....¥205,000,000.

KOBE FUTO KAISHA was established in 1952 at the instance of the Kobe City Government with cooperation extended by interested business circles for the purpose of both providing Pier 7, which had been constructed under the Kobe Port Construction Project, with vertically connected transit sheds and warehouses, silos and cargo handling machinery and managing them.



Facilities on Pier 7 on which Kobe Futo Kaisha prides itself as the best in the Port of Kobe.

PIER 7 is of the twin-pier type. Of the twin piers, the west one has a full berthing facility, marginal sidetracks and a three-storied transit shed and warehouse combination of 21,500 sq.m. for the use of general cargo. The east one has a two-storied transit shed and warehouse combination both equipped with silos (26,000 tons in capacity, including that of the city-owned ones located at the base of Pier 7) which are designed to store and distribute imported cereals in bulk and with automated cargo handling equipment for pneumatic unloading, conveying, fumigating, bagging and transporting in bulk. Both piers provide the most efficient terminal services for imports and exports.



WHY DID ENGLAND'S SHELL PETROLEUM CO. CHOOSE YOKOHAMA PNEUMATIC RUBBER FENDERS?

Because Yokohama Pneumatic Rubber Fenders excel in protecting ships as they come along side other ships or quaies—protect quaies from damage and facilitate loading and unloading.

Yokohama Pneumatic Rubber Fenders easily absorb the intense shock energy created when ships contact the quay while berthing or bump against each other when along side at sea. These fenders are already in common use with large-size whaling vessels and mother ships, mammoth tankers and ore carriers around the world.

A unique and epochal development of The Yokohama Rubber Co., Ltd.—patented abroad in the United States, England, Norway and elsewhere.

YOKOHAMA
PNEUMATIC RUBBER FENDERS

THE YOKOHAMA RUBBER CO., LTD.

CABLE ADDRESS "YOKORUCO TOKYO"
NO. 36-11, 5 CHOME, SHIMBASHI, MINATO-KU, TOKYO

PORTS and HARBORS

Oct.-Dec., 1966 Vol. 11, No. 4

PORTS AND HARBORS is quarterly published by the Central Secretariat of the International Association of Ports and Harbors as an official journal of the Association, to provide its members with information concerning port and harbor developments in the world.

CONTENTS

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

Consultative Status, N.G.O., U.N.

President: **Viscount Simon, C.M.G.,** Chairman, Port of London Authority

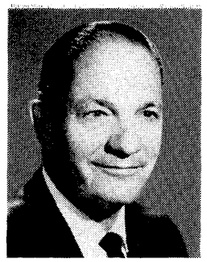
Secretary General: **Gaku Matsumoto**

The Central Secretariat:

Mori Bldg., 7th, 2, Tomoe-cho, Shiba, Minato-ku, Tokyo, Japan

WHO's WHO in IAPH—4

—Know them by face—



Mr. Charles L. Vickers
Committee Chairman
General Manager
Port of Long Beach, U.S.A.

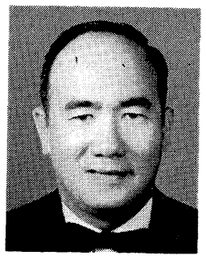
Mr. Carlos Castillo
Committee Member
Chief, Div. of Port & Harbors
Department of Public
Works & Communications
Manila, Philippines

No. 1 STANDING COMMITTE

(in alphabetical order)

Mr. Hu King-fin
Committee Member
Superintendent, Dock Dept.
Keelung Harbor Bureau
Republic of China

Mr. Albert Lyle King
Committee Member
Director Marine Terminal Dept.
The Port of New York
Authority U.S.A.

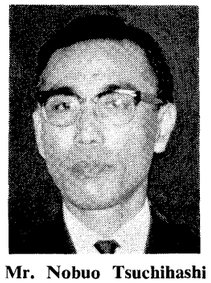


Mr. Loh Heng Kee
Committee Member
Acting Operation Manager
The Port of Singapore
Authority

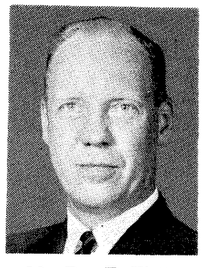
Mr. A. Nallusamy
Committee Member
Assistant General Manager
Penang Port Commission
Malaysia

Mr. Dudley G. Perkins
Committee Member
Director General
Port of London Authority
England

Ir. J. den Toom
Committee Member
Managing Director
Port of Amsterdam
Netherlands



Mr. Nobuo Tsuchihashi
Committee Member
Director
Port & Harbor Bureau
City of Yokohama, Japan

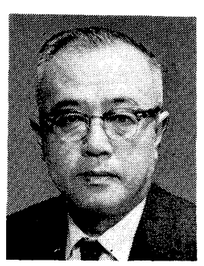


Mr. Rae F. Watts
Committee Member
Port Director
San Francisco Port Authority
U.S.A.

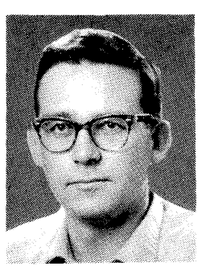
Mr. Kozo Yomoda
Committee Member
Director
Port and Harbor Bureau
City of Kobe, Japan

No. 3 STANDING COMMITTEE

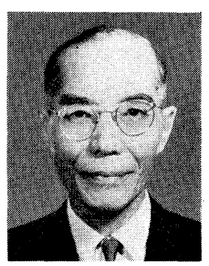
(in alphabetical order)



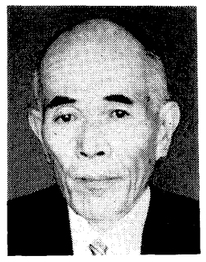
Mr. Hajime Satɔ
Committee Chairman
Director
Bureau for Ports and Harbors
Ministry of Transport
Tokyo, Japan



Mr. A. Gafny
Committee Member
Head of Economic &
Commercial Dept.
Israel Ports Authority
Israel

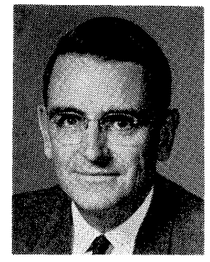


Mr. Hung-Kwei Jan
Committee Member
Harbor Master
Kaohsiung Harbor Bureau
Republic of China



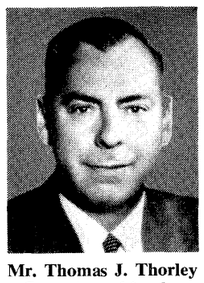
Mr. Ichizo Maeda
Committee Member
Vice-Administrator
Nagoya Port Authority
Japan

Mr. Howard A. Mann
Committee Member
Chairman
National Harbours Board
Ottawa, Canada



Mr. Ben E. Nutter
Committee Member
Executive Director
Port of Oakland
U.S.A.

Mr. Sing-yi Tang
Committee Member
Vice President
China Merchants Steam
Navigation Co., Ltd.
Republic of China



Mr. Thomas J. Thorley
Committee Member
Assistant General Manager
Port of Long Beach
U.S.A.

Mr. Keng-Chi Wee
Committee Member
Secretary
The Port of Singapore
Authority
Singapore

I.A.P.H. 5TH CONFERENCE—TOKYO

The Organizing Committee

Name: The Organizing Committee of the I.A.P.H. TOKYO Conference '67

Address: Room No. 459, Nippon Bldg., 8, 2-chome, Ohte-machi, Chiyoda-ku, Tokyo.

Tel.: (Tokyo) 270-2501

Cable Address: IAPHMEET TOKYO

From May 5 to 14, 1967, the Committee will move its office to Tokyo Prince Hotel.

Conference Duration

The Conference will open on May 8 (Monday) and last until May 13 (Saturday) of 1967. Beginning in the afternoon of May 13 through May 17 (Wednesday), a post conference tour will be arranged to take participants and their accompanying ladies to Kyoto for sightseeing and to Kobe for observation of the port and participation in the centennial celebration of the port.

Conference Site

The conference will be held at Tokyo Prince Hotel
Address: No. 3, Shiba Park, Minato-ku, Tokyo
Cable Address: HOTELPRINCE

Registration

Registration will be accepted between 9 a.m. and 5 p.m. of May 8, 1967, at Tokyo Prince Hotel. Those arriving on May 9 or later are asked to register at the Organizing Committee's office which will be established next to the conference hall.

Participants are asked to pay a registration fee of ¥36,000 (US$100) on the registration day. Accompanying ladies are not required to pay the fee.

Application Forms

Application forms are set in the enclosed leaflet. The formal forms are to be sent back to the Organizing Committee by Jan. 31, 1967.

The application forms consist of Forms 1, 2, 3 and 4, with a formal and a copy,—or a set of 8 sheets of paper.

Each participant is requested to complete one set of the application forms in block letters or type.

Your application forms must be sent to reach the Organizing Committee by Jan. 31, 1967.

Conference Program

(1) Speeches by leaders of the world's ports and harbors and discussions on their papers.

(2) 10-minute speeches on problems faced by world ports and harbors and means of obtaining appropriate solutions.

(3) Matters related to the management and operation of the Association, including revision of the Constitution and By-Laws.

(4) Observation tour of the ports of Tokyo, Kawasaki and Yokohama in Tokyo Bay.

Conference Papers

"The Role of Government in the Development of Ports"
Dr. Hajime Sato, Director, Bureau for Ports and Harbors, Ministry of Transport, Japan.

"Problems on the Development of Ports in ECAFE Region"
Mr. S. Aldewereld, Vice-President, International Bank for Reconstruction and Development.

"Impact on Port Development of Modern Trends in Ship Design"
Ir. F. Posthuma, Managing Director, Port of Rotterdam, Netherlands.

"Function of Public Relations in Port Development"
Mr. Harry C. Brockel, Port Director of Port of Milwaukee, U.S.A.

"Development of Ports and the Role of the World Trade Center"
The Hon. T. Hale Boggs, Member of the House of Representatives, U.S.A. (under negotiation)

"The Future of Tankers"
Comm. E. H. W. Platt, M. D. E., R. N., Director of B. P. Tanker Co., Ltd., England.

10-Minute Speeches

The purpose of 10-minute speeches, to be given for the first time in an I.A.P.H. Conference, is to hear from volunteer speakers the problems facing their ports and plans to solve them, so that other participants may obtain information and ideas to cope with their own port problems. We hope there will be as many speakers as possible to cover a wide range of topics and problems.

Those who wish to speak (both members and non-members are eligible) are requested to inform the Organizing Committee of the themes of their speeches in advance in the application form. The Committee reserves the right to select, in case there are too many volunteers.

Those named to speak are requested to send English summaries of their speeches to the Committee by Feb. 28, 1967. Since only 10 minutes are given to each speech, no question-answer sessions are scheduled.

Questions and discussions will be welcome in coffee breaks or out-time of the Conference in the lobby.

Official Languages

The official languages will be English, French, German, Spanish and Japanese. Simultaneous interpretation service will be available.

Speeches and Votings

Speeches and votings by members at plenary sessions shall be conducted according to By-Laws.

Privileges of Members (By-Laws)

Sec. 6. Each Regular, Supporting and Life Supporting Member shall have the privilege of subscribing for any number of membership units and of attending Conferences at the rate of one delegate per subscribed membership unit.

Each Regular Member shall have the privileges of the floor in considering all matters that may be brought before a Conference and shall have the right to exercise one vote, without regard to the number of membership units subscribed or the number of delegates. Regular Members whose membership dues are delinquent for more than one year shall not be privileged to exercise their vote.

Each Supporting, Life Supporting and Honorary Member shall have the privileges of the floor in considering all matters that may be brought before a Conference, including the privilege of participating in debate and being appointed to any Standing Committee, but not the privilege of moving resolutions or bills, making or seconding nominations, or of voting.

Non-members are not entitled to vote or speak during Business Plenary Session.

Conference Receptions

During the course of the Conference, receptions will be given in honor of the participants and their accompanying ladies by the Minister of Transport, Governor of Tokyo and President of I.A.P.H.

Conference Tours

(1) Half-Day Tour of Tokyo

A choice of four different courses of tour through Tokyo will be offered on May 10.

(a) Industrial Tour A

This tour will take you to see electronic industrial facilities, now one of Japan's representative industries, and other places of interest in Tokyo.

(b) Industrial Tour B

This tour will feature a visit to one of the world-renowned camera plants and will also include sightseeing in Tokyo.

(c) Amusements in Tokyo

This tour will cover Tokyo's amusement and entertainment centers, including the popular downtown section of Asakusa, Kokusai Theater and Kabukiza Theater, the mecca of the traditional stage art of Kabuki.

(d) Modernity in Tokyo

This tour will make a round of the architectural masterpieces built for the 1964 Tokyo Olympic Games, the headquarters of the internationally serving Japan Broadcasting Corporation (NHK) and other modern facilities in Tokyo.

(2) Observation Tour of Tokyo, Kawasaki and Yokohama Ports

The three ports, Tokyo, Kawasaki and Yokohama in Tokyo Bay, are adjacent to one another and have grown to be representative ports of Japan through close relations. On the day of the trip, a chartered passenger ship will take you to the ports and other facilities, including a 300,000 DWT shipbuilding dock.

Hotel Accommodation

The Organizing Committee has reserved a sufficient number of rooms for participants and accompanying ladies in Tokyo Prince Hotel, which is well and comfortably equipped within easy access of the central section of Tokyo. However, special request for particular hotels will be accepted in the Application Form.

Payment

For hotel accommodation and the Post Conference Tour, participants are requested to pay 10 per cent of the total cost into the account of the Organizing Committee in the Marunouchi Branch of Fuji Bank by Jan. 31, 1967. As soon as the Organizing Committee is notified of the payment from the bank, participants will receive a deposit receipt for the Post Conference Tour and reservation card for hotel accommodation. The remainder of the Post Conference Tour charge will be accepted at the time of registration. The balance of hotel charges may be settled by direct payment to the hotel. In case advance payment is infeasible due to foreign exchange regulations, participants are requested to inform the Organizing Committee in the Application Form.

Dress

Dark suit, cocktail dress or national costumes are desirable at receptions. Walking shoes will be convenient on some occasions during the program for ladies.

Climate

In Japan, May is one of the best times of the year, with an average temperature of around 19 degrees C. (66 degrees F.) A light coat may be useful.

PORTS and HARBORS

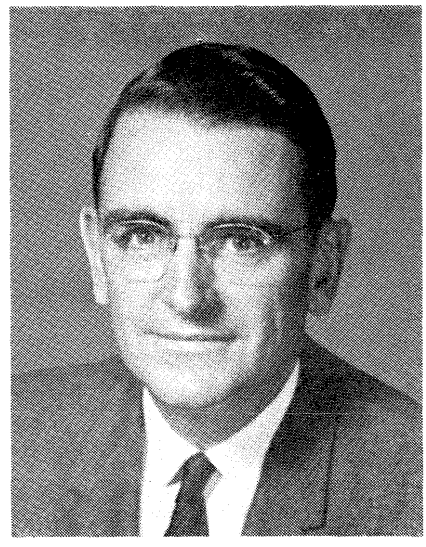
Oct.-Dec., 1966, Vol. 11, No. 4

FORUM ON PORT PROBLEMS

Development of A Politically and Financially Independent Port

By Ben E. Nutter

Executive Director and Chief Engineer
Port of Oakland, California
U.S.A.



Mr. Ben E. Nutter

Prior to 1925, the development of the Port of Oakland had been inadequate and, on occasion, had been the cause of stormy controversies in the City of Oakland.

By 1920, the port's facilities had become crowded and outdated. Yet the people of the City of Oakland were reluctant to spend more money on their harbor, since previous expenditures of large sums of money had apparently resulted in little improvement of facilities.

In 1925, the Commissioner of Public Works proposed that a general obligation bond issue of almost $10 million be approved by the voters for further port development, and that a Port Commission, separate from the Department of Public Works, be created.

This new Commission would have complete charge of all funds for port development and all related work.

In effect, this proposal was designed to make the port a politically and financially independent agency of the City.

In November, 1925, the voters approved by an 8 to 1 margin both the bond issue and the formation of a Commission to direct further port development.

The voters subsequently approved an amendment to the City Charter providing for the creation of a separate Board of Port Commissioners, and the first Board was sworn into office in 1927.

Since then the development of the port has proceeded at a rapid rate, and on only one occasion has the port gone back to the City's residents for financial assistance.

This occurred when the City Government requested the port to build a jet-age international airport, which required the sale of $10 million worth of general obligation bonds. Total cost of the new terminal and runway was approximately $20 million.

In terms of what the Port of Oakland is today, and in view of its diversity, the decision to make the port politically and financially independent was wise. However, financial independence does create some problems, which I will discuss later.

The importance of the port's independence can be judged only in light of its responsibilities, activities and objectives.

The Port of Oakland is a complex organization. It operates and is developing marine terminal facilities; Oakland International Airport; an industrial park; a restaurant and tourist center; and various other commercial and industrial properties.

The port's very location, and the rapidly unfolding technological changes in cargo movement, dictate freedom of decision for rapid and optimum development of these facilities.

The port is situated in the population center of the nine-county San Francisco Bay Area. It has excellent deepwater channels, and is served by three transcontinental railroads, all of which terminate in the Oakland area. An excellent freeway network has been developed, and hundreds of trucking firms are scattered throughout the area.

Another asset is the abundant land available for development. A breakdown of this property shows approximately 900 acres at the airport; 700 acres at the industrial park; and between 1400 and 1500 acres for marine terminals, including areas which would have to be filled on San Francisco Bay.

To develop this land to meet the needs of commerce, and to take full advantage of the area's transportation resources, the port has a projected capital improvements pro-

gram of approximately $100 million.

If these projects are to be realized, not only is financing required, but complete freedom of action is an absolute necessity.

The port's accomplishments since 1927 have been manifold. And during the past 40 years, while continually striving for higher standards of development, the port has never exceeded the bonds of independence granted by the voters.

Occasionally, however, the port must defend its status to those who feel the City once again should direct port affairs.

In today's complex business world, control of the port by another governmental agency would be extremely impractical.

Experience has shown that a number of port developments, now judged very successful, possibly would not have been realized had the port been under direct control of the City Government.

At the time the developments were proposed, vigorous opposition was encountered. If the port had not been politically and financially independent, we are sure measures would have been taken to make the port accede to the opposition.

The port's opinions prevailed, however, and subsequent developments justified our viewpoint.

A good example would be the 140-acre marine terminal facility which the port is now constructing at the foot of Seventh Street in Oakland.

Matson Navigation Company has leased 42 acres at this terminal, and has options for an additional 24 acres. In addition, the port staff is negotiating with other United States and foreign flag shipping lines interested in space at the terminal.

It is estimated that the completed terminal will create some 1,000 direct jobs for the City of Oakland, and will generate millions of dollars in payrolls and services.

When the terminal was first proposed, however, it received strong opposition from a segment of the City Government, which claimed the city's waterfront was not being properly developed.

In a situation of this nature, one must decide which agency is best qualified to develop an area which has tremendous social and economic impact upon the community.

Should it be an agency of the City Government which has no real knowledge of the modern-day requirements of the shipping industry? Or should it be an agency which daily deals with the steamship industry, and has intimate knowledge of the industry's present and future requirements?

Fortunately, the port was able to progress with construction of the Seventh Street Terminal which, as I pointed out, is attracting tremendous interest. I am confident that the city will benefit immeasurably because we had the freedom to do what we thought best.

With the authority it now enjoys, the port has been able to prepare for the technological changes occurring in the transportation industry, while at the same time insuring compatible development of all port areas.

This authority results in a planning protection and priority for the port's transportation facilities.

In cities where this planning protection does not exist, housing is being permitted in the noise zones of jet runways, and apartments are being constructed behind marine terminals, congesting and choking the flow of commerce to other areas.

An important by-product of the port's freedom is the ability to conduct negotiations on a confidential basis and enter into transactions swiftly without an additional level of control and approval.

Following negotiations, a full disclosure of the transactions is made to the public.

As an independent agency, the port controls its funds, and no additional local or governmental approval is required in planning the expenditure and investment of these funds.

This would seem like a blanket authorization for the port to conclude as many agreements as it wished. We are governed, however, by our ability to finance these transactions.

Leases resulting from negotiations can call for large capital outlays which require budget flexibility. The port must operate as an efficient municipal business with a minimum of red tape if it is to compete effectively with other ports, industrial parks and airports in the state of California.

If budgetary control were exercised over the port by the City Government, we could not bargain effectively on the basis of what we expected the City Government to do when the budget amendments required for a particular transaction were presented for approval.

Negotiations involving steamship lines, airlines and industrial prospects have to be extremely confidential; and when successfully resolved, the port has to be free to quickly and firmly complete the transactions.

Further, it would be difficult to obtain prior approval from the City Government, whose transactions are open to the public, to conduct negotiations with a particular firm. Companies involved in these negotiations would not permit an early disclosure of their intentions.

They expect our confidence, which we can give under our present status.

The freedom the port has enjoyed during the past 40 years has undoubtedly hastened the development of our transportation facilities, much to the benefit of the city.

But this freedom, which includes financial independence, does create some problems.

As I mentioned above, the port has accumulated a projected capital improvements program of approximately $100 million.

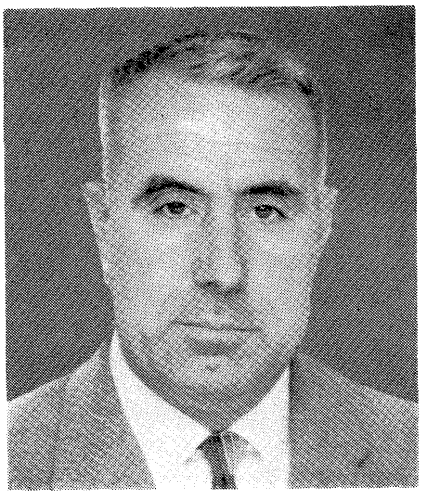
Of this, marine terminal development requires about $50 million; airport improvements require about $35 million; and further development of the industrial park will require approximately $15 million.

Yet the ability of the port to finance all of these developments at any one time is limited by its sources of revenue.

One source of capital improvement funds is direct port revenue, which is generated by marine terminal operations; the sale and lease of industrial and commercial properties; and airport operations.

The port augments this income by the periodic sale of revenue bonds. The bonds are sold to private investors, and are retired with funds from port income. The

(Continued on Page 26)



Mr. Aurelio G. Isla

Past, Present and Future of The Port of Barcelona

By Aurelio G. Isla

Director

Port of Barcelona, Spain

HISTORICAL PROCESS

The Port of Barcelona, which is completely artificial, arose from the disappearance of the natural anchorage existing to the SW of the Montjuich mountain, caused by the silting up produced by material carried down in the river Llobreget. This mountain was the natural protection of the anchorage then used as a port. Its existence is confirmed by different descriptions which come down even from the 1st Century B.C. as for example the stone found in 1903 in the New Cemetery which commemorates the fact that the Duumvir Quinquenal Caius Coelius had ordered the building of walls and gates to fortify it. This is also the origin of the name of the district Our Lady of the Port which comes from a chapel which still exists to-day.

With the disappearance of this anchorage around the X Century A.D. because of the currents and the sediments which converted it in the first place into marshland and later on into cultivable land, the ships then anchored off the beach and the commercial operations were carried out by primitive methods. The city reached down to the very beach and the first shipyards were to be found there, "La Fustería Vella". It was an anchorage which offered poor conditions for facing up to the Levant storms which are so common off our coast and vessels were frequently lost and for these and other reasons, the citizens of Barcelona had fervent desires to build an artificial port, something which was not done until the middle of the XV Century.

The 8th December, 1483 may be considered as the starting point for the city of Barcelona to have its port when the King Alphonsus V, called the Magnanimous, granted the Councillors of Barcelona the privilege of building their quays where they thought fit. On the 2nd May, 1439 the first works were blessed in a place which corresponds more or less to the site of the present Square of Arms in the Citadel Park. A difficult struggle was then developed between man and the elements and the latter frequently triumphed in this battle. In 1477, a new mole was built in the place where the Civil Government is standing to-day and it joined a small hill on the beach to the island of Mayans and with the sandbanks which surrounded it. For two centuries this was the beaching point for small craft and it may be considered that this period of trial and error for the Port of Barcelona finished in the last year of the XVI Century.

Description of the Crest

This is the Crest of the Port of Barcelona.

It is not a particular Crest for this Harbour but a General Crest of the Ministry of Public Works, which is the superior Authority for all Spanish Ports.

The Crest includes a bridge, a channel and an anchor, corresponding to the general activities of the Ministry.

The oak and the palm branches in the Crest signify the strength and the art of construction.

Nevertheless, in spite of the importance of its Shipyards, the Port of Barcelona did not have a suitable structure until the beginning of the XVIII Century when in 1772, under the reign of Charles III, the great breakwater was finished and the light was placed at the end of the quay, it seemed that at last the Port of Barcelona had acquired a solid structure and that this old lighthouse, to-day converted into a clock, was the symbol of the renaissance of our maritime trade. Thanks to the construction of this port, it was possible to build, on the sandpits of the northern sector, the sea-side quarter of the Barceloneta which, as is known, is an area of regular blocks presided over by the church of St. Michael of the Port. Later on, since this port was constantly filling with sand to the extent that it even blocked with enough sand to be able to cross on foot, the East breakwater was continued and the West dyke was built from the foot of Montjuich to prevent sand from being carried inside the port. Both dykes were finished in 1874 and in 1900 the port was extended

again with the construction of the extension of the East dyke a mile long and the building of the present counter-dike. These works were finished in 1925 and form the present port. It has been necessary to extend the port once again with the works being carried out at present, outstanding among which because of their extraordinary importance are the new extension to the East dike for another mile, about to be finished, and the building of a new counter-dike 600 meters long and already finished.

Currently the port facilities in use cover an area of 3,151,000 sq.m. with 1,320,500 sq.m. on dry land and 1,830,500 sq.m. of protected water area.

The total length of berths is 10,390 meters of which 7,051 m. are for commercial traffic, 1,731 m. for naval repairs, 517 m. for fishing vessels and 1,019 m. for sundry uses.

The depth of the modern quays is 12 m. and the entrance channel is 15 m. deep.

The transit sheds offer 110,650 sq.m. of covered-in area and the warehouses 26,424 sq.m. The explanades for depositing goods measure 106,090 sq.m.

The general cargo is handled by 75 dock cranes from 1.5 to 12 tons capacity and another 43 are currently under construction. There is also a 35-ton floating crane and two 90-ton twin cranes which means that the handling capacity for large loads is 180 tons.

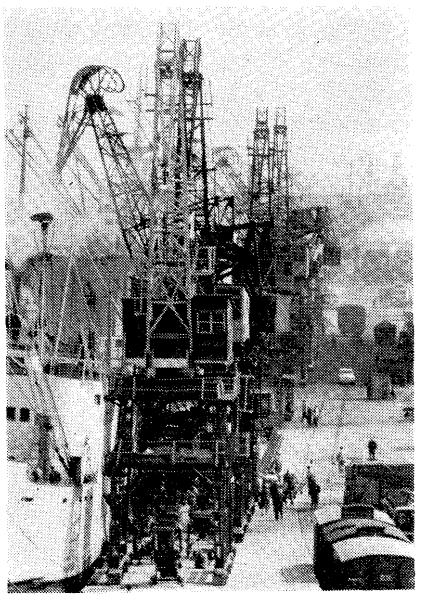
There are special facilities for shipping potashes with an annual capacity of 600,000 tons on three berths, a 20,000-ton silo for unloading and storing cereals at the rate of 3,000 tons daily and a 42,-000 cu.m. capacity cold storage and zones for reception and storage of inflammable liquids, vegetable oils, asphalts, greases, etc.

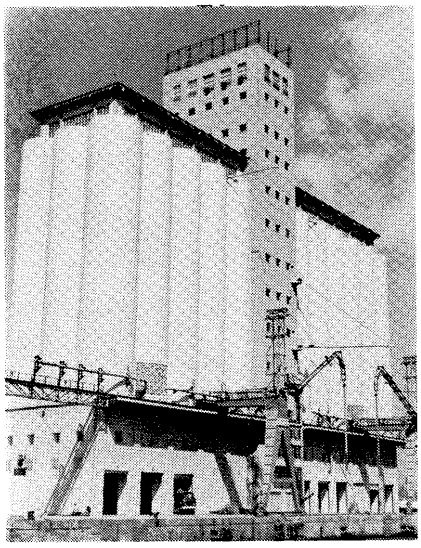
As light handling material for general cargo, there are in service some 45,000 American type 1.20 x 1.80 pallets, 200 fork lift trucks up to 14 tons capacity, 170 electric trucks and other sundry material. There are 21 kms. of railway track with two truck classification stations.

Adjoining the Port to the South there is an industrial area of some 450 hectares where a large number of factories and industries related with maritime traffic are established.

A gasification plant is also being built to reconvert the Lybian natural gas transported in liquid state due to cooling. This factory will have a production capacity of 500 million cu.m. gas per annum and will receive 1,000,000 tons of liquid gas yearly.

The port extensions currently being carried out consist essentially of the creation of a new protected water area of 1,300,000 sq.m. by lengthening the outer works which will be finished in 1970, where we are planning to build 7,910 metres of new commercial quays and also, of the construction of an inner port with access through this area where there will be 7,160 m. berth





length.

For the construction of this inner port, the Port Committee has recently acquired 233 hectares of land.

Once the extensions are complete, the port will have a capacity for 25 million tons traffic per annum.

TRAFFIC

Approximately 10% of Spain's foreign trade is channelled through the Port of Barcelona which deals mainly in imports.

The total tonnage handled has grown from 4,408,000 tons in 1962 to 7,165,000 tons in 1966 which represents an increase of 63% in 4 years.

The largest item is general cargo which this year accounts for 2,-850,000 tons or 40% of the whole. The dry bulk shipments add up to 2,066,000 tons, the non-petroleum liquids 295,000 tons and the petroleums to 1,954,000 tons.

In the Port there is also a T.I.R. facility for the Customs clearance of goods transported overland in direct trucks from all over Europe.

Another important facet of the Port of Barcelona consists of its intercontinental mission of receiving goods in transit for other European countries. This aspect of its work is growing daily.

The Port of Barcelona is linked by regular shipping lines to all points of the world. Below there is a list of the most important Conferences that make regular calls here:

Mediterranean/Canada Freight Conference

Mediterranean/U.S.A. Great Lakes F.C.

Weekly to: Montreal, Quebec, Toronto, Hamilton, Cleveland, Detroit, Toledo, Chicago and Milwaukee.

Spain/U.S.A. Rate Agreement

Weekly to: Boston, New York, Philadelphia, Baltimore and Norfolk.

Gulf/Mediterranean Ports Conference

Weekly to: Mobile, Tampa, Brownsville, Houston, Galveston, Orleans, Veracruz and Tampico.

Acuerdo Espana/Centro America

Weekly to: República Dominicana, Trinidad, Venezuela, Curaçao, Tahití, Jamaica, Colombia Atlántica and Cristóbal, Costa Rica, El Salvador, Guatemala, Honduras and Guatemala, Honduras and Nicaragua.

Europa/South and Magellan Conference

Fortnightly to: The Harbours of Colombia-Pacífic, Ecuador, Perú and Chile.

Mediterranean/North Pacific Coast F.C.

Fortnightly to: Guaymas, Los Angeles, San Francisco and Vancouver.

Conference Freight Spain/South America

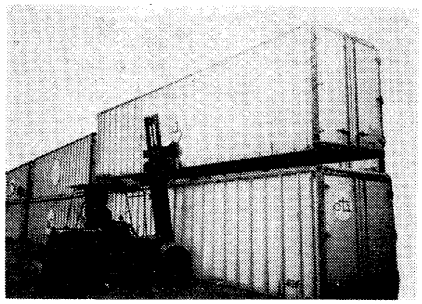
Weekly to: Buenos Aires, Montevideo, Santos, Río Grande, Río Janeiro, Salvador/Bahía, Recife and Fortaleza.

U.K./Port Said Freight Conference

Continent/Red Sea Conference

Occasional departures of lines calling in Barcelona to Far Orient.

Associated Mediterranean/Persian Gulf Lines



Continent/India and Pakistan Conference Lines

United Kingdom/Colombo Freight Conference

United Kingdom/Bourma Conference

Continent/Java Freight Conference Occasional departures

Continent/Far Eastern Freight Conference

Continent/Japan Freight Conference

Philippines/Europe Conference

Continent/China Freight Conference

Tently to main ports of: Malaya, Japan, China, Philippines, Sandakan and Sarawak.

Outward Continent/Australia Conference

Homeward Continent/Australia Conference

Tently from Australia to Barcelona.

Europe/New Zealand Freight Conference

Monthly from: New Zealand to Barcelona.

South Africa/Europe Conference

Beira/Europe Freight Conference

East Africa/Europe Conference

Fortnightly from: Cape-Town, Port-Elizabeth, East London, Durban, Lourenço Marques, Beira, Tanga, Dar Eas Salam, Zanzibar and Mombasa.

Europe/South Africa

Europe/East Africa

North Continent/Spain Freight Conference

Weekly to: Dunquerque, Amberes, Rotterdam, Amsterdam, Bremen and Hamburgo.

COFIFE (Conference Freight Italia/Spain)

Weekly to: Lisboa, Genova, Nápoles, Savona, Livorno and Marseille.

Spain/Finlandia/Suecia/Norway/Denmark

Spain/United Kingdom and Ireland Weekly service.

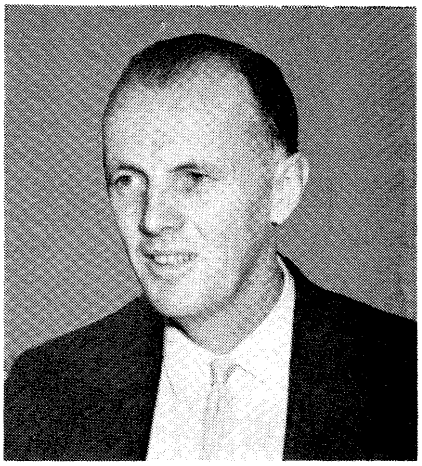
Uniformity in Australian Port Statistics

By A. T. Bonds, B.A. (Hons.)

Fremantle Port Authority

Statistical and Research Officer

(Reprinted from Port of Fremantle Quarterly July, 1966, Vol. 2, No. VII.)



Mr. A. T. Bonds

THE AUTHOR was recently chairman of a committee set up to examine the question of uniform Australian Port Authorities. All major ports, together with interested government departments, were represented at the meeting which was held in Melbourne under the auspices of the Australian Port Authorities Association. The history of the problem and the findings of the committee are defined below.

The Changing Role of Statistics

Changes in the national role of statistics have been little short of startling since the end of World War II. Prior to that conflict, statistical publications were principally of an historical and descriptive nature, and it was only the impact of Keynesian economics with its stress on governmental planning and active intervention in spending that highlighted the need for adequate, and most of all, up-to-date statistical material. Governments devoted to growth with stability at a full employment level have become the rule, and with them the extensive bureaux necessary to collect and supply the data essential to such a policy.

Port statistics in the past have generally been extremely localised, and in a country such as Australia where interport competition has not been a predominant feature, their development has, at the most, been aimed at satisfying local needs. A similar situation had apparently developed in the United Kingdom, for it was from this quarter that the most important public declaration of statistical inadequacy was to be voiced.

In order to achieve some rationalisation within the large number of ports which had, over the years, appeared on the British coast, many within the same estuary, the British Government in 1962 appointed a committee of investigation under the chairmanship of Viscount Rochdale, O.B.E., T.D., D.L. The outcome of this investigation was the creation of a National Ports Council with the power to create estuarial authorities, a final decision on large-scale investment within the ports, and in particular the setting up of a central bureau of statistical information basic to investment plans. Thus, in this situation, port statistics may be seen as following a similar path to national statistics, with a common basis of implementing investment plans.

Speaking to the conference of the International Ports and Harbours Association in London in May, 1965, Viscount Rochdale made the following comments:—

"It follows, I think, that whatever else the central body needed to help it in its work, it would have to have access to up-to-date and adequate statistics. This was something that during their enquiries the Committee found conspicuous by its absence; indeed, for the purpose of the enquiry above, the Committee itself had to assemble the greater part of the statistics it needed."

And in relation to investment:—

"Now may I say a word about investment? You cannot really plan investment unless you have information, and the essential foundation of any ports plan, such as we are trying to build up, is that we should have adequate statistics and information, and information not only about facts, but about trends."

Australian Port Statistics

Any semblance of uniformity in the statistics collected by Australian ports in the past would be considered as due to coincidence rather than definite intention. Even within the capital ports the range of data collected varies from next to nothing up to what could be considered a quite comprehensive collection considered in relation to world standards. If any unifying feature has existed, it would probably be located in the tables of port tonnages published by the Commonwealth Stastistician, which do at least allow for some comparison on the level of total tonnages.

The Port of Fremantle has, among Australian ports, a good record in the collection and development of statistical fields. Right from the establishment of the Fremantle Harbour Trust in 1903, efforts were made to maintain a concise record of all the principal cargoes, the method of handling, and a very complete picture of the vessels arriving, their tonnages and the duration of their stay. Through ensuing years these collections have been enlarged to show berth detail as against totals, and further particulars relating to the ship such as length and draught. Since the presentation of the Tydeman Report in 1949, many of the statistical tables involved therein have been continued, so that today a reasonably comprehensive picture of berth activity and efficiency is available.

Despite the growth in data collection, however, the Port of Fremantle, like other Australian ports,

has developed individually to serve its own needs, which to date have been the only requirement. A similar situation no doubt existed in each of the other major ports, so that by the early 1960's the overall Australian picture was one of a series of individual statistical collections, almost incomparable, if only for the reason that very little of the information was available in publications such as annual reports.

The publication of articles on the Rochdale Report brought an awareness of the more national role of port statistics and the fact that uniformity could be desirable for both local and national economic growth. In order to bring about a measure of uniformity in commodity or trade statistics, the National Ports Council of Britain adopted as the basis of their collection, a classification which had been prepared by the United Nations Organisation for statistical use in conjunction with the tariff classification based on the Brussels Nomenclature. This was the Standard International Trade Classification (Revised) or S.I.T.C., designed to bring uniformity on an international level.

The growing need for research data and the obvious deficiencies in commodity data collected at the Port of Fremantle, brought to the fore the necessity for a recasting of the classification of commodities. Consideration was being given to an alignment with the National Ports Council classification when it was announced that the Commonwealth Bureau of Census and Statistics would, from July, 1965, collect their import trade statistics in line with S.I.T.C., with the exports to follow in 1966. Here was a keystone, linking U.K. port statistics with Australian trade and it seemed a most timely link to which at least Port of Fremantle statistics could be aligned. The decision was made, and in the annual report of the Fremantle Port Authority, 1964-65, trade tables were presented for the first time by any Australian port, under the principal headings of S.I.T.C.

Other ports were not unaware of the growing need for more research data, and the incomparability of the various port collections. In line with extensive data processing expansion, the Maritime Service Board of N.S.W. was proceeding with the institution of a Central Information Bureau and had become aware of National deficiencies. The Commonwealth Bureau of Census and Statistics was endeavouring to expand its collection and Commonwealth Department of Shipping and Transport was aiming at further detail of interport cargoes to assist in National planning. The Melbourne Harbor Trust, in trying to compare port figures, came up against a brick wall and decided to refer the matter to the Permanent Committee of the Australian Port Authorities Association. The matter was deliberated, and a decision made to appoint a sub-committee which would "investigate and draft a list of goods to be adopted by Port Authorities throughout Australia."

Conference on Uniformity of Statistics

The subcommittee was convened by, and met under the chairmanship of the Statistical and Research Officer for the Port of Fremantle. Representatives from each of the six capital ports attended, and probably for the first time in such meetings, two Commonwealth Departments, the Bureau of Census and Statistics and the Department of Shipping and Transport, sought and were granted representation on the committee.

Although the field of uniformity is extensive, concentration in this case was, as indicated in the terms of reference, on the aspect of uniform commodities. It was soon apparent that uniformity could only come from joint adherence to a common classification, and for this purpose S.I.T.C. seemed ideally suited. The dissimilar methods of statistical collection were discussed and the advantages of S.I.T.C. outlined. These were principally as follows:—

(a) It is an international classification and thus globally comparable.

(b) It is flexible. Consisting of 9 main sections, subdivided into 57 divisions, the ports can maintain their present commodities individual to the port, yet by grouping under section or division headings a comparison with any other port is possible.

(c) The sections are meaningful and distinguished under such headings as Crude Materials, Foodstuffs, Manufactured Goods, Mineral Fuels, etc.

(d) Coding or classifying is simplified and the present preponderance of trade classified as "general" can be related to a specific section or division.

(e) Despite the differing methods of extraction in each port, uniformity of statistics can be preserved.

The principle of uniformity under S.I.T.C. was accordingly adopted and a recommendation to the Permanent Committee that all ports endeavour to redraft their commodity classifications in accordance with the international classification.

Of particular interest to delegates were the comments, necessarily brief, of the Commonwealth observers present. Comment at the meetings stressed the need for uniformity in the first place, and where possible, greater statistics of interport cargoes at Australian ports. Discussions on uniformity, although not instituted on this basis, were most timely and in keeping with the increasingly national role of the ports, rather than the individualistic approach of the past.

The unanimous recommendation of the subcommittee is a distinct achievement and augurs well for future co-operation. The Bureau of Census and Statistics has made available its services in facilitating measures to uniformity, and in fact has already made available to each port the essential document, the Standard International Trade Classification. It could well be that future committees of enquiry will not be confronted with the situation that confronted Viscount Rochdale —much of the spadework will already have been done.

Port of Hamburg

Focal Point of World Trade

By Dr. Kaufmann

Leitender Regierungsdirektor
Hamburg, Germany

Dr. Heinz Kaufmann

The rise of Hamburg to a world port is assumed to be due to its favourable central European position. Hamburg first flourished as a handling- and storage-center for trade between the Baltic and the North Sea area. When Spain, Portugal, and England lost their monopoly in overseas trade during the 19th century, Hamburg ships were able to sail to non-European ports and their sphere of action spread out to the markets of all continents. A growing stream of European exports and overseas imports began to arrive in the port of Hamburg. It was, therefore, with good reason that one could speak of Hamburg as a world port even in the middle of the 19th century .

In spite of its important position in the world trade Hamburg, contrary to other examples in European history, nearly never engaged in politics. Hamburg's leading citizens were businessmen and the maxim of thier activity was based on economical ideas. The historical development in the world and especially in Europe exerted its influence, however, on Hamburg and led more than once to difficult situations for city and port. In the recent past, during the last war, these alien influences seemed to destroy the vital nerve of the "Hansestadt" and its traditions. Not only pessimists thought, at that time, that now the final chapter to the history of Hamburg as a world port has begun. But the up to 80 per cent destroyed port installations and the harbour docks full of shipwrecks, changed in a few years to a modern port, whose mechanical power today greatly exceeds the level of the prewar period.

Though this rapid resurgence may be regarded as a miracle, it was, nevertheless, solely the result of a concentrated determination to rebuild on the port of Hamburg Senate and civil activities. At the same time, however, it was also a reflection of the economic revival in Europe with raising export figures. In spite of the numerous mortgages which, in the postwar period, were imposed on Hamburg, due to the political development in Europe, the "Hansestadt" very soon recovered its former status as a European world port.

Structure of traffic determines the importance of Hamburg

Last year the statistics of the port of Hamburg showed 20,000 ship arrivals with a total tonnage of 34.8 mn nrt. The handling of goods amounted to 35.3 mn tons. This places Hamburg, as in previous years, in third position among all European ports. Of course, this rating is not an authentic scale at all.

Corresponding to an old tradition it is used to compare sea ports with one another according to the total quantity of goods-handling. It should be stressed that the economics-importance of a port cannot be expressed in any way by that comparison. First of all the composition of the different im- and export goods plays a decisive role. The second point for the analysis of the port handling depends on the share of bulk goods such as mineral oil, ores, fertilizers, and that of general cargo such as industrial products on the export-side, or that of tropical fruit, coffee, cocoa, tea, or tobacco on the import-section. It is therefore of special importance to consider that the goods traffic of Hamburg is notable for the high proportion of general cargo in the total handling volume. In 1965 there were 12.1 mn tons which constituted about a third of the total traffic.

In addition, predominately high value general cargo are handled by Hamburg. A comparison in figures can confirm this: The average value of one ton of exported goods handled in Hamburg amounts to more than DM 2,000 as against the average value of German exports which is only around DM 700 per ton.

The second factor for the importance of a seaport is the network of shipping lines sailing from this port. In Hamburg approximately half of the total of 20,000 sailings during the past year were on regular routes. Undoubtely these regular

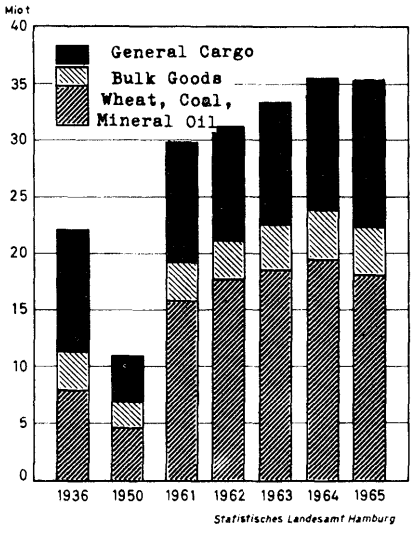
General Cargo Traffic in the leading European Ports in 1964

(in mn tons)

port	general cargo	total handling
Antwerpen	18.1	51.7
Rotterdam	17.1	110.0
Hamburg	12.0	35.4
Bremen/Bremerhaven	9.4	15.8
Amsterdam	4.2	14.2
Genua	4.2	29.7
Marseille	2.3	16.1

Traffic of Goods
via the Port of Hamburg

(in mn tons)



sailings form the back-bone of shipping. At present 260 regular shipping lines announce up to 750 sailings per month to all parts of the world, and offer to shippers a daily opportunity to transport their goods to all continents. Practically all sea-faring nations of the world participate in this seagoing traffic.

Next to the analysis of goods and shipping traffic the economic potential of the port and that of its hinterland is of decisive importance. Hamburg's importance does not only results from its function as a goods-handling-center but rather from the close link between three economic factors—port, commerce, and industry. A glimpse into history shows that Hamburg trading companies have unlocked the overseas markets

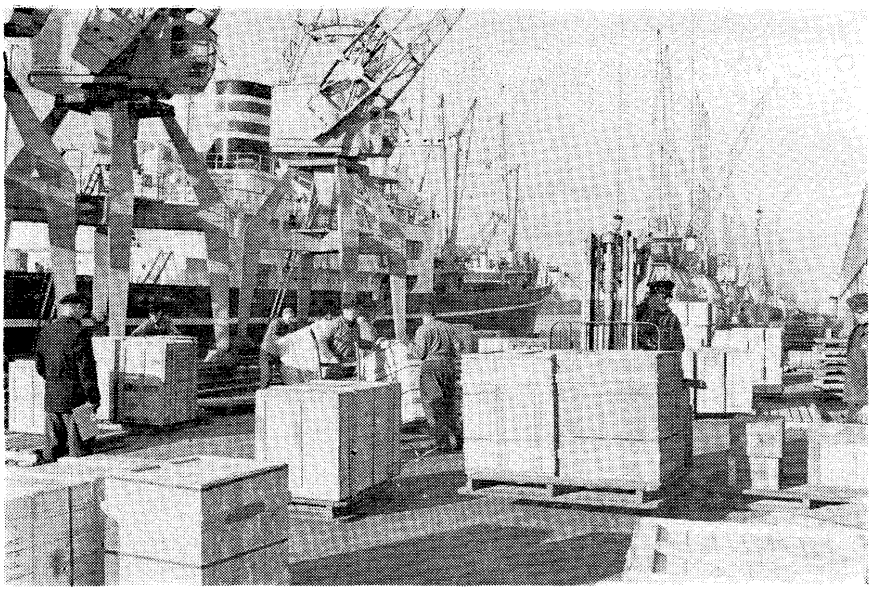
with their own fleets. Trade and shipping lay thereby in one hand and were the characteristics of the Hamburg merchant shippers.

Although in the wake of general specialisation in most instances a clear devision between the foreign trade and the shipping companies has arisen, today as before, both sections of the Hamburg economy are bound together as closely as possible. For both of them the potential of the port is the basis

Sailings of the Regular Liner Service

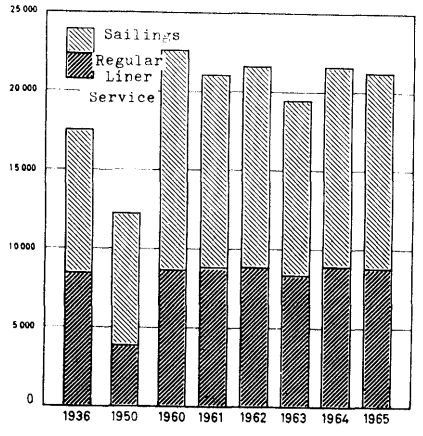
(Average per Month)

from Hamburg to:	Sailings
North- and North-East-Europe	144
Great Britain and Ireland	73
Other European States	115
Mediterranean-Sea	31
North America Eastcoast	20
„ „ Westcoast	12
„ „ Gulf-Ports	40
Central America/West Indies	54
South America Eastcoast	26
„ „ Westcoast	15
Africa (without Mediterranean-Sea-Ports)	92
Asia	93
Australia	16



Port of Hamburg quays are all capable of lifting heavy cargo of up to three tons each, at a maximum extension of 25 metres. More than 900 mostly full portal level luffing cranes make Hamburg the best equipped port of the world for handling general cargo.

Sailings from Hamburg to Oversea



of their activity. In this way commerce greatly profits from the status of a Hamburg free port, which makes it possible to store high valued imports outside the European customs frontiers in a warehouse capacity of an extent that no other European port can offer.

A much younger branch, as compared with commerce of the Hamburg economic potential is presented by industry which during recent years has developed into an increasingly important factor. Hamburg is, after Berlin, the largest German industrial area and is on the way to further improve this position. The convenient 2,500 hectare port expansion area directly adjoining the present port area is a good example of this. Its development will lead to an extension of the port capacity and in similar fashion to its industrial potential. A productive industry, particularly when it is itself connected with imports or exports, directly increases the attraction of the port for shippers, by reason of the additional freight available. The consequence of this is a general invigoration of the port traffic and a further increase in the number of sailings. The policy of industrial settlement recently followed by Hamburg wants to give the port additional impulses on a new, but hitherto less consistently pursued, course, and thereby make the port more attractive to shippers in the broad hinterland. Industrial progress results, at the same time, in port progress and is therefore of great benefit to the internal economy.

The hinterland is, among all other factors, of supreme importance for the development of a seaport. Hamburg, in comparison with other European ports, is by reason of its georgraphical position, favoured in this respect. As the most northern port for the great shipping lines, it is, at the same time, the most eastern European North Sea port. These natural advantages are supplemented by an effective port potential and by the multilateral invisible facilities and opportunities, which the economic centre of Hamburg offers. As a consequence of these numerous constituents the hinteralnd of the port of Hamburg stretches beyond the Federal Republic of Germany from Scandinavia and Finland in the north through Eastern Germany, Czechoslovakia, Poland, Hungary, and the USSR in the east, as far as Romania, Austria, Italy, and Switzerland in the south.

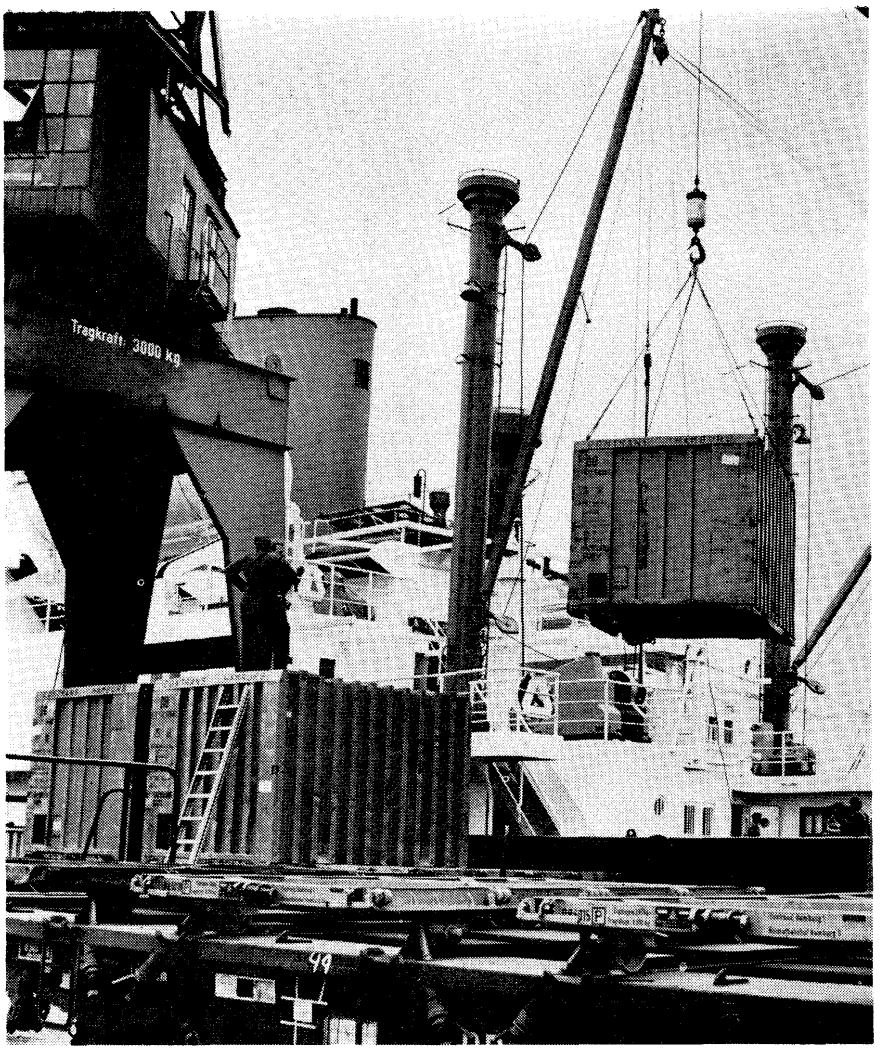
In comparison with all other ports on the North Sea or Mediterranean coasts, Hamburg could claim the attribute of being the most European of all European ports. Of particular importance is the fact that the hinterland of the port of Hamburg not only crosses political frontiers and blocks, but also the three great economic areas of Europe — EEC, E F T A, and COMECON—are associated in it. Last year the total goods handling of Hamburg comprised 27.5 mn tons EEC-, 1.9 mn tons EFTA-, and 3 mn tons COMECON-goods. Hamburg, therefore, today practises the function as a link between the European markets and overseas.

Far-sighted Planning for the Future

Hamburg's rapid resurrection to the leading group of world ports became possible essentially because

Transit-Traffic of the Port of Hamburg in 1965

Total Handling Volume 1965	35,300,000	tons
including		
Foreign Trade with East-Germany	1,376,401	„
and Transit-Traffic with		
Czechoslovakia	1,454,613	„
Austria	1,008,990	„
Denmark	617,644	„
Sweden	246,487	„
Hungary	133,442	„
Finland	83,819	„
Switzerland	62,801	„
Norway	57,511	„

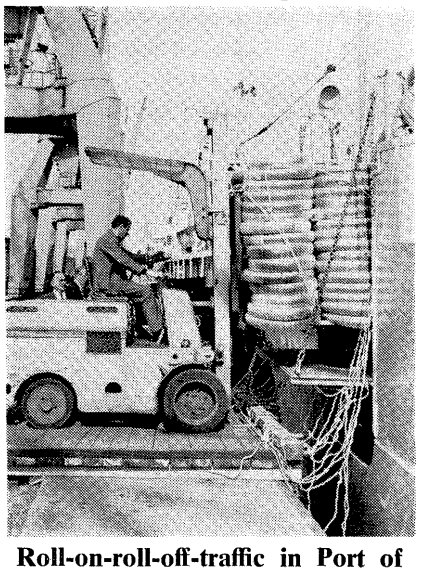


Container-traffic

of the far-sighted planning of the reconstruction of handling- and storage-capacity destroyed in the last war. The reconstruction phase is now, in the main, completed. The port today is more mechanically powered than before the war. A particular characteristic of the harbour-capacity of Hamburg is moreover its versatility. The capacity offered to the economy of the hinterland can handle all kinds of goods in world trade both rationally and speedily. The Hamburg port potential ranges from the bulk goods sector of discharge jetties with pumping plant, tanks for mineral oil, ore and coal handling installations, grain and silos to weather-proof fertilizers facilities. For the handling and storage of general cargo besides the normal quay sheds and warehouses numerous special installations are available, such as heatable fruit sheds, distribution sheds for the consolidated export goods, cold storage plants, special equipment for handling of motorcars, tropical timber, and paper or heavy lift cranes with a capacity up to 400 tons.

The demands which trade and traffic place on such a port as Hamburg grow from year to year. It is, therefore, worth while even today to make provision for the future. All planning and building projects must take into account the probable developments in shipping, in goods handling, and traffic to and from the hinterland. The continuing trend towards larger ships requires, therefore, above all, a further deepening of the river Elbe to 12 metres. Besides this Hamburg's important position as a handling- and storage-center for general cargo requires rationalisation and further expansion of the existing capacity. The central distribution shed for consolidated cargo now under construction is a good example for this. For European importers as for overseas exporters the Hamburg free port grows continually in importance as regards the storage of goods outside the German and also European customs frontiers. This means that particular attention must be paid to the future expansion of the warehousing capacity. In the course of a general transport rationalisation—the expansion of through traffic on pallets, container shipments or roll-on-roll-off-traffic —Hamburg has new problems to contend with, which the port is today already tackling. The increase

(Continued on Page 27)



Roll-on-roll-off-traffic in Port of Hamburg

THE PORT OF Hamburg

Special Facilities for all Goods of World Trade

for Bulk Goods:

Silos for grain and oil seeds (storage-capacity: around 600,000 tons); 55 stationary grain elevators, 19 floating grain elevators. 36 transporter grab bridges for coal and ore; potash plant for 100,000 tons; vegetable oil: 160,000 cu.metres and latex: 5,000 cu.metres. 8 tanker basins with 30 discharge jetties; storage capacity for mineral oil: 3.6 mn tons.

for General Cargo:

70 quay-sheds with a total area of 613,000 sq.metres, including 13 heatable fruit-sheds with 121,000 sq.metres. Warehousing capacity: 564,000 sq.metres; 5 cold storage warehouses (43,700 sq.metres); 3 facilities for tropical logwood (67,000 sq.metres), 900 quayside cranes up to 400 tons lifting capacity; handling- and storage facility for paper.

Is Minnesota Receiving Its Due Share Of Seaway Benefits?

By Robert T. Smith

Port Director, Duluth, Minn. U.S.A.

Mr. Robert T. Smith

Port Director Robert. T. Smith is well qualified to analyze the relationship between the St. Lawrence Seaway and the Port of Duluth. Prior to his acceptance of the post of Port Director, Mr. Smith had served in maritime fields for forty years in many capacities at East Coast and Gulf Ports.

In 1956, Mr. Smith became the Port Director of Duluth, and began preparations for the opening of the Seaway. He is well versed in the legal and historical background of the St. Lawrence project, and is intimately acquainted with all phases of shipping and port operation.

From his position as Port Director, Mr. Smith has seen flagrant acts of discrimination against the Port of Duluth since the opening of the Seaway in 1959, and has fought courageously to overcome these handicaps to Minnesota shippers. This article points out the unfair competition faced by Minnesotans, and the solution which can only be attained through state-wide support.

Historian Carleton Mabee, in his book "The Seaway Story" describes the efforts of many prominent Minnesotans for an early congressional approval of a Seaway. Credit goes to John Lind, an attorney from New Ulm, Minnesota, for introducing for the first time in Congress a resolution calling for joint United States and Canadian study of improvements of the waterway from the head of Lake Superior to the sea. This occurred in 1892 and culminated in a joint Seaway Commission being formed by both governments in 1895. Political chicanery, opposition groups from the East, and World War I prevented further development. It should be of interest to know that around the time John Lind introduced the first resolution to Congress calling for a Seaway in 1892, many predictions were made concerning Duluth's future. Such important men as Thaddeus Stevens, Stephen A. Douglas, Horace Greeley, Jay Cooke, George W. Childs and Joaquim Miller, were publicly predicting that Duluth would be one of the nation's most important cities, perhaps the most! Their predictions were based, in the main, on *geographical location and building of the Seaway.* These predictions were echoed by five New York newspapers and the London Financial Times.

Then, early in 1919, Charles P. Craig, a Duluth attorney and real estate dealer, through persistent efforts, founded the Great Lakes-St. Lawrence Tidewater Association. The States of Minnesota, Michigan and Wisconsin each appropriated $12,500.00 to finance the association's activities. Julius Barnes, another Duluthian, actively supported Craig, and within a year all states bordering the Lakes, except New York and Pennsylvania, but including Iowa and other plains and mountain states, had offered their support. In 1922 Craig gave up his business ventures in Duluth and moved with his family to the Capital to devote full time to the Seaway cause. He was unquestionably the leading spirit in the drive for a Seaway until his death in 1935. Craig was succeeded by another Minnesotan, A. O. Moreaux. Of the latter-day Minnesotans, Congressman John A. Blatnik of the 8th Congressional District was perhaps the most outstanding in the fight to bring the Seaway to fruition.

When the Wiley-Dondero Bill (Seaway Act) was signed in 1954, Minnesota started to prepare for the coming of this new avenue of world-wide trading. In 1957 the State Legislators unanimously approved a grant of $10 million to the Port Authority of Duluth for construction of a modern Public Marine Terminal. Relating these historical facts has to do with the subject of this report.

Discrimination by Agents

Since the Seaway opened in 1959, a small group of vessel agents in Chicago has dominated the various freight conferences and dictated policy as it applies to "preference ports." They declared ports on Lake Superior as *being off the established trade routes;* specifically, the Port of Duluth, and they have assessed premium ocean freight rates on commercial shipments over those applying to Lake Michigan Ports. They further discriminated against us by charging to cargo moving through our port certain terminal charges which were absorbed in the ocean freight rate at all other Great Lakes Ports. We had to appeal to the U.S. Maritime Commission to obtain relief from this unfair practice. They dominate our local vessel agencies and will not permit them to solicit cargo for Duluth. This places the full responsibility of solicitation on our Authority, using Minnesota taxpayers' funds for the purpose. The irony of this is that commissions on

freight booking generated by us often go to these underserving agents, and this money is lost to the economy of our district. Some send vessels here to load government relief cargo without appointing a local agent, an indication of their lack of interest in serving commercial shippers. Some of our shippers of bulk liquid commodities have stated they must use Chicago-Milwaukee because space is not allocated for Duluth, even though the vessels are coming here for government-sponsored cargoes.

Some Case Histories

One large exporter, when trying to have a certain line include Duluth as a regular scheduled port of call, was informed by the agent this was impossible, as to do so would mean a diversion of cargo from Chicago. Through our persistent efforts of solicitation, as well as those of our European and New York agents, many exporters/importers have become interested in Duluth, only to be thwarted in its use by lack of scheduled sailings. When I was in Europe recently, a shipowner's representative told me frankly that so long as Minnesota's industries support them out of Milwaukee and Chicago, there was no point in this line calling at Duluth. The obvious answer by me was that they supported him because they had no other choice. If they had a choice, they would use that port that afforded the lowest cost of transportation—that the savings in transportation might increase their trading activities, and would perhaps make possible the entry into foreign trade of industries that heretofore were unable to compete.

Another excuse used by vessel operations is that Duluth has not sufficient cargo potentials to warrant scheduled services. Yet prior to World War II they thought differently. During 1938 and 1939 we had vessels trading with Scandinavian ports, and mind you, at that time we were without a Port Authority, vessel agents experienced in foreign trade, stevedoring contractors, experienced longshoremen, and suitable marine facilities — all necessary to trade development. Apparently the owners were satisfied, as the record indicates they were considering a regular schedule with more frequent sailings. Now, 30 years later, they contend we don't have sufficient cargo, despite the fact that within this period our trade area population has increased, as have our industries. Add to this all the port services, the Port Authority, and modern marine terminals that we now have and one wonders what changed their thinking. Our local press, on February 22, 1946 (20 years ago), publicized a statement that vessel operators who had served Duluth prior to the war would be returning, and this only adds to the inconsistency of their present-day decisions.

An importer desiring to use our port asked us to develop transhipment rates via a line calling here regularly. The local agent obtained the rates from his Chicago principal and passed them on to us. To me, the through freight rates were excessive, so I asked our European trade promotional agent to confirm the quotations direct with the line's headquarters. I was not surprised when he informed me the rate quoted to us were excessive by $25 per 1,000 K on one commodity, and $35 per 1,000 K on the other. Lines calling here, members of Conferences, charge premium ocean freight rates over those charged to Lake Michigan ports, under the pretense that diversion time into Lake Superior makes this necessary. Some vessels do not enter Lake Michigan, so there is no diversion encountered — yet they assess the premium rate. A Minneapolis importer had a shipment loaded at a Mediterranean port and received a bill of lading designating Duluth as port of discharge. When the vessel was in Milwaukee, he was informed by the agent there that if he took delivery at that port he would save $16.00 — 1,000 kilos in his ocean freight. Naturally he took advantage of the offer, but was so incensed over the unfairness that he sent me a copy of the agent's letter confirming the premium charge to Duluth. This kind of activity is helping no one, including the perpetrators, but it is hurting us, those that can use our port, the Seaway, and certainly the shipowners. Above all, it is a restraint of trade!

Who Is the Victim?

While we do not condone acts of selfish-interest groups, we must admit what we are experiencing is not unusual. Are not shipping interests, railroads, Port Authorities serving Atlantic and Gulf ports opposing the Seaway's progress? It is a matter of record that the U.S. Department of Defense is not supporting Great Lakes ports as it should. The American Flag Vessel Preference Act is used by American-flag vessel owners to circumvent serving Seaway ports, regardless of the fact that their subsidy monies come in part from Lakes-bordering states, and others included in their total area of influence.

Selfish-interest groups prevail through ignorance of their membership, and through the lethargy of those who have the power to expose and stop them — the American exporter and importer. No matter how one analyzes the matter, it is the shippers' money that is being played with, as it is their opportunity to increase trade. The U.S. Department of Commerce recently announced North Dakota's foreign trade increased 46% during the period 1961 through 1963, and South Dakota's, 30%. We suspect their grains that move through Duluth-Superior account for the phenomenal increases. Assuming this to be so, it confirms the value of lower overall transportation costs. Would not these savings have the same value to importers-exporters of other commodities? We think so.

Conclusions:

Without the foresight and dogged determination of prominent Minnesotans in the latter part of the 19th century and early part of the 20th, there may never have been a Seaway. Money spent by Minnesota taxpayers since then and to the present has amounted to many millions of dollars. This money was spent so we may have our rightful share of Seaway benefits. We cannot stand by idly much longer while a small group of selfish-interest

(Continued on Page 26)

Port of Liverpool

Focal Point of World Shipping

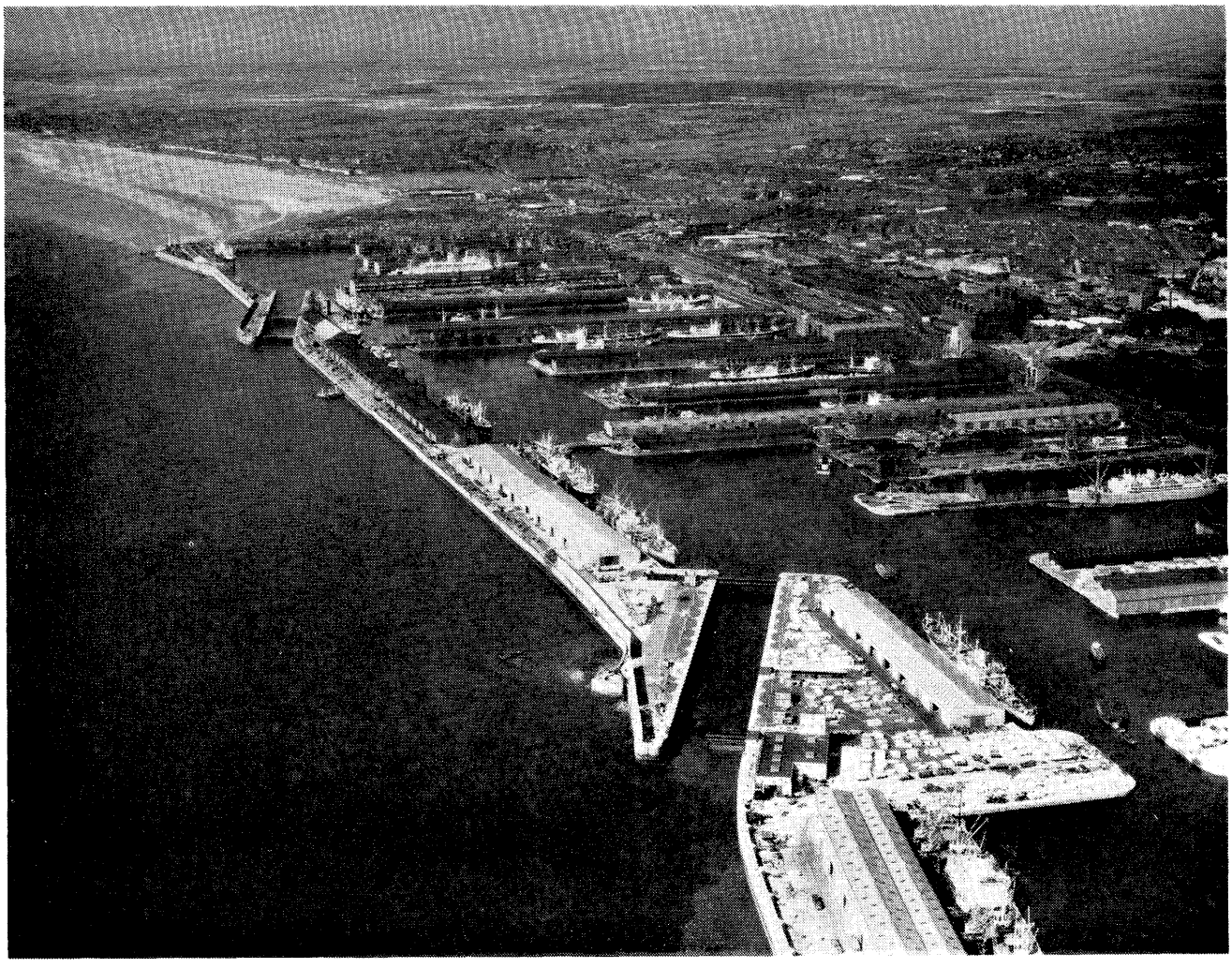
Mersey Docks & Harbour Board

Liverpool, England

The Port of Liverpool on the Mersey Estuary is one of the largest sea Ports in the World. From the Gladstone Docks at Bootle to the Herculaneum Docks at the South end of Liverpool, the River Mersey is fronted for a distance of some seven miles by Docks having a total water area of some 467 acres. On the Cheshire side of the River the Birkenhead Docks, an important part of the Port, have a water area of 181 acres. All these Docks, with quays totalling more than 36 miles, form the largest enclosed Dock System in the United Kingdom. Every type of accommodation has been provided, from the deep water berths, required by large bulk carriers, to the lesser needs of small coasters.

The Mersey Docks and Harbour Board, who own and control the Port, is a public trust constituted by Act of Parliament in 1858. Prior to this time the Port was administered by the Municipal Authority as part of its civic responsibilities. At present, the Board has 28 Members comprising the leading Merchants and Shipowners of Liverpool. 24 Members are elected by the Dock Ratepayers, i.e. persons paying Rates and Dues on Vessels and Goods. The remaining four members are appointed by the Minister of Transport under his authority as Conservator of the River. The Board is responsible, not only for the development of the docks to meet the ever growing needs of trade, but for the maintenance of the sea approaches to the Port in a condition which ensures the safe and unrestricted passage of vessels. These are extremely wide powers covering, not only the day-to-day administration of a great trading terminal, but conservancy

The northern system of Docks Liverpool, showing the site of the New Port, top left.



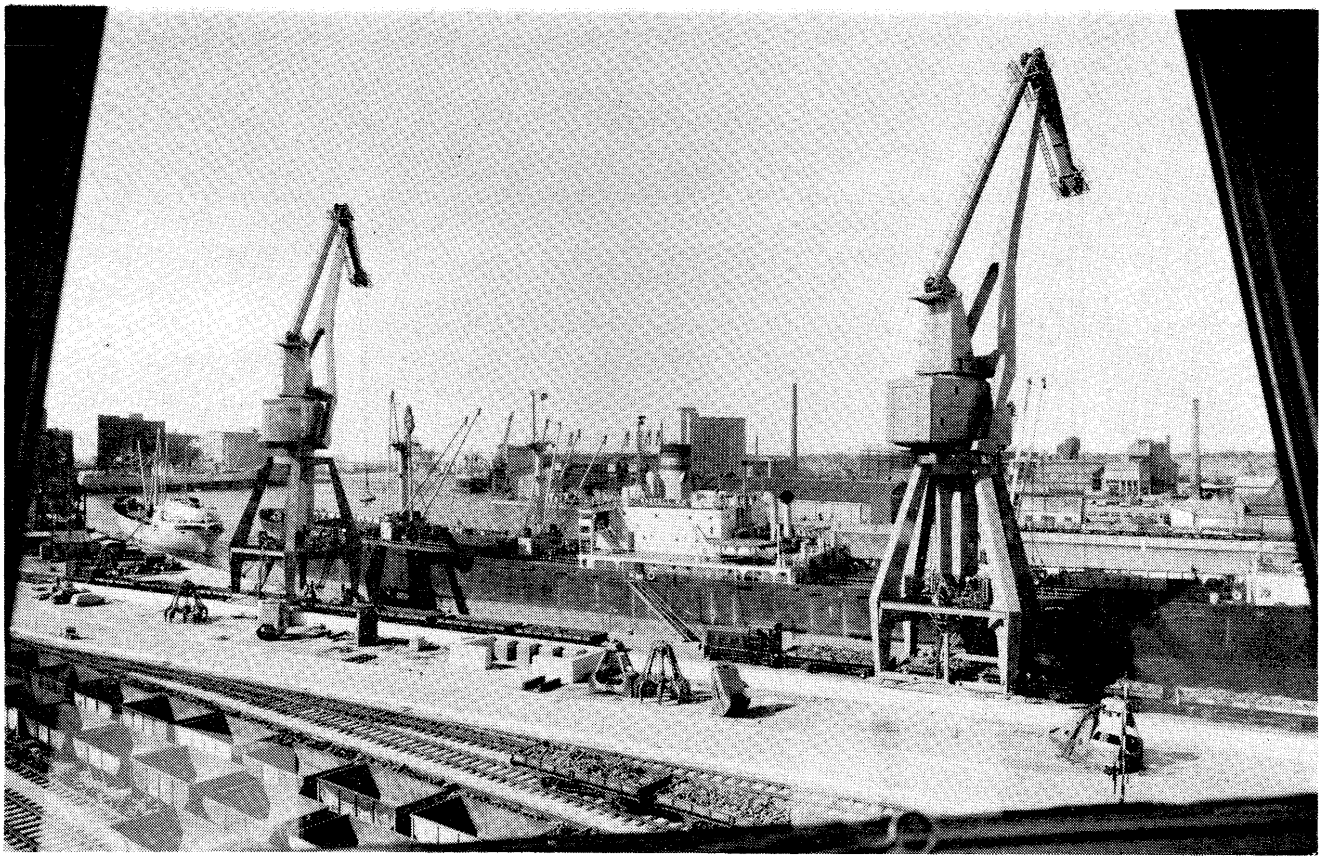
Three new export berths designed specifically for the Far East trade.

and pilotage as well.

The immensity of the work involved in a Port the size of Liverpool may be judged from the fact that during the past 20 years or so the cargo handled in the Board's Docks has increased from approximately 20 million tons to almost 30 million tons. During the same period, the net register tonnage of vessels entering and leaving the River Mersey has grown from less than 43 million to over 60 million tons.

Historically, the Port owes its origins to King John who sought a base from which to further his conquest of Ireland. The Port of Chester, then the principle Port of the North West Coast, was too much under the influence of its powerful Earl, the political opponent of the King, to usefully serve his purpose. In the small fishing village of Liverpool King John found the answer to his problem and consequently granted the citizens a Royal Charter in 1207. The early growth of the Port was slow. In the main, corn, tallow, iron and wine, were the principle items of trade. Gradually, however, commerce expanded and by the 16th century there are records of trade in "much Irish yarn that Manchester do buy". The succeeding century accelerated progress and there were projects for improving the natural Harbour or Pool during the reign of Charles II. The intention was to extend and deepen the Pool in order to make it navigable with the provision of sluices to flush the channel clear of silt and debris. It was not, however, until early in the 18th century that Parliamentary approval was obtained for such work.

The Dock subsequently built by Thomas Steer, a prominent Engineer of the day, was of National as well as local importance. Not only was it the first Dock in Liverpool and therefore the source of local prosperity, but it was also the first commercial wet dock in the Country. The significance of the Old Dock, as it was called, cannot be overstated, for it set out the general principle upon which the Port of Liverpool and other great tidal Ports operate today. Opened in 1715, although not completed until 1720, the Dock, in a comparatively short time became insufficient for the growing commerce of the Port, and was eventually closed in 1826. A second Dock, Salthouse Dock, was opened in 1753 and is still in existence today. These Docks were the centre of a mesh of Docks and basins which grew along the Banks of the Mersey.



Discharging iron ore and scrap metals at a new berth in Birkenhead Docks.

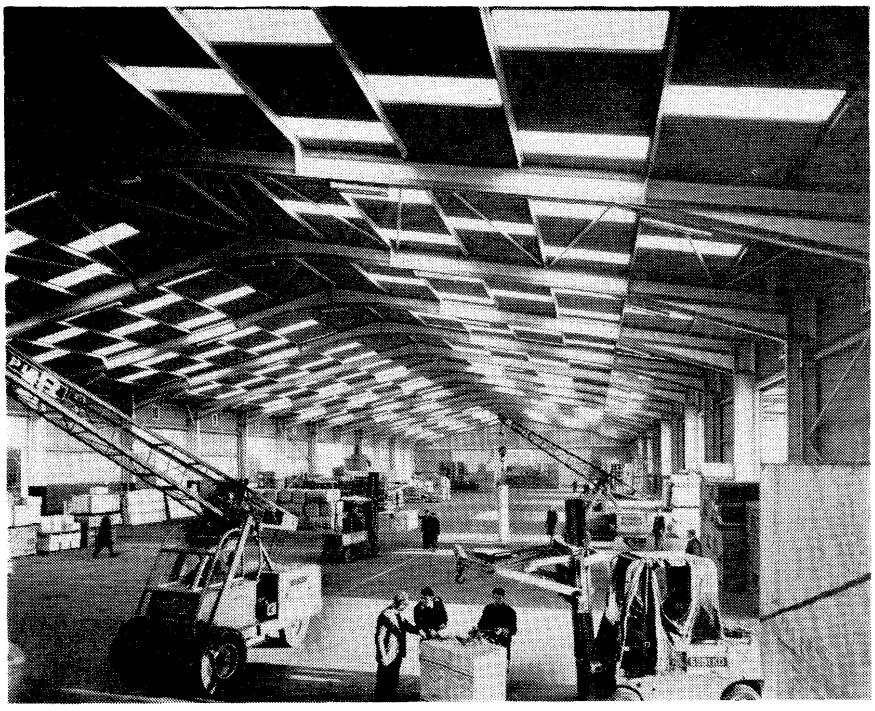
They were the start of an unprecedented era of great engineering works which stretch almost continuously from the 18th to the 20th century. From the use of granite, timber and cast iron to concrete, steel and fibre glass. Today there are no less than 39 separate Dock Systems in the Port.

It is clear that Liverpool's development as a Port is closely linked with the Industrial Revolution. During this era of expansion the construction of road, canal and railway systems contributed to a greater degree of mobility within the Country. People, materials, and goods could be moved quicker and further than ever before. The North and Midlands of England—the natural Hinterland of the Port, particularly were the scene of many new ideas and methods resulting in an outflow of manufactured goods. The growing population of the new industrial towns played havoc with the economy a Nation largely geared to an agricultural system. It was inevitable, therefore, that food should be high on the list of imports.

The emergence of Britain as an imperial power had a bearing on the establishment of the Port of Liverpool as a centre for International Trade. The newly found colonies in the Western Hemisphere, Australia and Africa used Liverpool as the focal point for the importation of their natural products. Raw materials for the factories and food for many millions of the inhabitants of this Country flowed in an ever swelling stream across the quays of the expanding Port. For some decades slaving and cotton were too predominant. Gradually, however, their supremity gave way to a greater variety of goods. The turn of the 19th century saw the Port firmly established and flourishing at the heart of the most renowned maritime power on earth.

60 years on, the general pattern is much the same although there have been very many changes. The Port is larger, so are the ships using it, and also is the amount of cargo they carry. The changes from sail to steam and from steam to sail; from horse and cart to rail and lorry; from hand operations to fork lift trucks have all taken place painlessly. Yet there is a continuity with the past. Liverpool remains basically a general cargo Port, despite nearly 40% of bulk traffic. The great manufacturing centres of the North and Midlands of Britain remain its natural hinterland although better roads and more powerful vehicles have tended to spread this area towards the South and West and North and East of the Country. Raw materials for the factories, foodstuffs for a still expanding population and exports to every part of the World continue to be handled in increasing quantities. The Empire may have gone, but trade with the newly independent Commonwealth Nations continues to flourish.

Liverpool has, however, never lived in the past. The Mersey Docks and Harbour Board has always planned ahead of its day and generation. With such a forward looking policy the future holds, perhaps, the most exciting prospect of all. Since the end of the War great strides have been made in providing the deep water accommodation essential for the larger vessels coming into service. Over



Interior of the transit shed at south side, Vittoria Dock. Assembling export cargo for the Far East.

£53 million has, in fact, been spent to match Port facilities to the needs of the Port users. The Improvement Scheme at the Langton/ Canada Docks, completed in 1962, has alone provided seven modern cargo berths and a first-class River Entrance in the place of a Dock System ravaged by the wartime blitz. In addition to such major schemes, new transit sheds including over 150 quayside cranes have been provided at some 50 berths throughout the Port.

The development of facilities for bulk cargo has been quite outstanding. The construction of the Tranmere Oil Stages, which are capable of taking the largest oil tankers and have a potential throughput of 14 million tons of crude oil a year, established Liverpool as one of the principle oil Ports in the World. Today, modern berths at Birkenhead for discharging iron ore destined for the Steel Works of John Summers & Son, at Shotton, Flintshire, play an increasing part in the economy of the whole of the North West. In the Liverpool Docks more than 750,000 tons of bulk sugar are handled by grab cranes and conveyor belts for the Tate & Lyle Refinery. Grain, one of the oldest bulk commodities, remains a predominant item of trade and new facilities for storage and handling this important cargo will be brought into being.

With so much already achieved it would be natural to expect a period of rest and re-assessment. Unfortunately, such a break in progress tends towards stagnation. This would not be acceptable to Liverpool. Plans are, therefore, already being made to extend the Northern limit of the Port beyond the boundary of Gladstone Dock. The proposed new Port System will be built on over 600 acres of foreshore, a site which, for purposes of comparison, could contain the whole of Wembley Stadium four times over. The scheme envisages the development of this area which, on completion, could provide a total additional Port capacity to foot the needs of trade for many years to come. The overall plan would probably provide for the whole water area to be enclosed on the seaward side so that berths could be built as and when trade and shipping trends dictated.

While this new work will occupy the attentions of engineers for several years to come it will not be the only major development of the future. There are many ways in which the Port can be developed within its present limits. For example, new facilities for the great bulk trades, will be provided when the time is right. These may well take the form of additional berths and additional storage facilities of perhaps revolutionary design. But the needs of the general cargo trade will also not be forgotten. There are still a number of berths at which transit sheds are below the standard set in the other parts of the Port and are unsuitable for modern working conditions. The work of replacing such sheds with others designed specifically for the new mechanised cargo handling techniques is already taking place and as time progresses will be accelerated.

The most outstanding development at the present time is a recently completed major scheme which provides three new berths and transit sheds for the Blue Funnel Line's Far Eastern export services, at the Vittoria Dock, Birkenhead. Each of the new transit sheds is 460 ft long by 135 ft wide, giving 63,000 square feet of cargo accommodation. The sections are joined by a covered way where railway traffic can be handled. Each berth is 526 ft long and the quayside has a width of 35 ft. Improved handling facilities are also provided for road vehicles, which are kept in a marshalling area until called forward to the appropriate transit shed. A continuous canopy has been built alongside the sheds, so that vehicles can load and unload under cover. The lorry park is equipped with a canteen and rest facilities for the drivers, as well as a direct telephone link with the shipping company's new administration block.

In short the Port of Liverpool, borne out of political expediency, nurtured on the fruits of the industrial revolution, is in maturity fully capable of bearing its responsibilities as a principle Port of the Commonwealth. Today, it is now fully equipped to meet all the demands of trade and will be further equipped for every conceivable future requirement. Its ability to do so is of vital importance, not only to the economy of the North West of England, but eventually to the economy of Western Europe.

DEVELOPMENT–

(Continued From Page 10)

capital raised by sale of the bonds is used to finance various projects.

The wise expenditure of these limited funds is further complicated by the diversity of the port's holdings and operations, by the rapidity with which innovations are sweeping through the transportation industry.

For example, which would be more important at any given moment—a facility for air cargo at the airport, or a new pier or transit shed?

Within the port's limited financial resources, perhaps only one can be selected.

We are also well aware of the growth potential of the air freight business.

As the air transport of goods becomes more popular, what will happen to established trade patterns? Will the maritime industry lose a substantial portion of its tonnage to the air lanes?

If this loss does occur, what new trade patterns, perhaps requiring new facilities, will be developed by steamship operators as they replace the cargoes lost to air transport?

New passenger aircraft being developed are going to create staggering airport problems. Solutions to these problems, though expensive, will be a necessity if these craft are to be utilized to their greatest potential.

Some of the new planes may carry 800 passengers, the capacity of many of our present luxury liners. How will all of these passengers, and their luggage, be handled at the speeds to which the air traveler has become accustomed? Only by the investment of large sums of money in new facilities, much of which has yet to appear on the drawing board.

The move to containerization is generating many problems. Almost overnight, it seems, some transit sheds are beginning to lose their usefulness. Even though they may not have yet paid for themselves, perhaps they must be demolished to create the land required for a container terminal.

Fortunately, the Port of Oakland has ample land for container operations.

But the massive and proper investment of funds to develop a container terminal is another matter.

As I pointed out, the port is developing a 140-acre marine terminal, which will cost an estimated $30 million.

Though we expect much of the cargo which will be handled by this facility to be in containers, we must still retain the flexibility for break-bulk cargoes, and palletized and unitized cargoes.

At this point it is impossible to determine accurately how much of any given type of cargo will be handled in coming years. Consequently, it is necessary to build facilities that will not become obsolete before their time, nor require substantial amounts of capital for alteration.

So there are many aspects to financing the development of a port such as ours. At times we find it difficult to operate within our limitations.

We accept these limitations, however, in view of the political freedom we enjoy. For it is through this autonomy that we can best determine how our funds are to be spent.

This in turn results in a port with excellent facilities, compatibly planned, capable of bringing a sound return to the City.

Forty years ago the people of the City of Oakland charged us with the judicious use of this freedom, and we think the port's rate of development has justified their decision.

MINNESOTA–

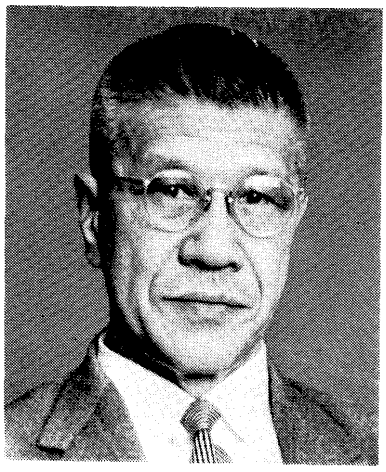
(Continued From Page 21)

vessel agents continues to deprive us of our inherent rights.

Our Authority, an agency of the State of Minnesota, by law, is controlled by seven commissioners, all sound business and professional men who are serving in the interest of the public. Their services are voluntary and they receive no compensation for their efforts. Regardless of their philanthropic generosity, they have specific responsibilites prescribed by laws of the State of Minnesota as they apply to development of commerce through the Port of Duluth. Briefly, the laws call for the commissioners to promote or provide necessary facilities and services needed for the handling and care of commerce, and to do so at reasonable terms. Being cognizant of the organized resistance that is preventing their compliance with mandates of the laws, they have decided on a bold course of action — "become vessel operators." A complete study is under way on two methods of obtaining vessels — one by time charter, the other a joint working agreement with an owner of suitable vessels. He furnishes the vessels — we, the cargo and operating organization. Profits or losses divided on a percentage basis. Our present planning calls for bi-monthly sailings between Duluth and Hamburg, Bremen, Copenhagen, Stockholm, Gotenburg, Oslo, London/Havre. It will be an express service, serving Duluth only, and offering freight rates equal to or less than those now applying to Lake Michigan ports.

We are prepared both in Duluth and overseas for an immediate inauguration of the service. We have our own funds of financing, and we have the courage of our convictions. For those who believe this is a colossal bluff, we remind them of our determination for equality in progressing Federal Maritime Commission Docket 1135. For the benefit of those not familiar with this proceeding, it was another flagrant case of discrimination against our port by the very ones keeping us from scheduled services today. Briefly, it involved the payment of certain terminal charges at Duluth by importers and exporters while being relieved of the expense at all other Great Lakes Ports.

Frankly, we are tired of fighting for our inherent rights, but if we must continue — be sure we will.



Gaku Matsumoto, Secretary General

Secretary General and Members of the Central Secretariat of IAPH send Best Wishes for the New Year

Left to right—(Front) Hiroko Ishihara, Typist; Toshio Kanchi, Senior Under-Secretary; Kimi Harada, Typist; (Back) Yoshio Hayashi, Editor; Kenichi Kishimoto, Treasurer; Yonekichi Takei, Registrar.

All we seek is fair pay — no favors — with an equal opportunity to compete with other ports on the basis that efficinecy, economy, service, and facilities should be the deciding factors in determining the use of our Port.

If this statement has aroused your sense of fair play, please contact us. We will suggest means that will make your support heard.

Since going to press, we received an announcement that the Japanese "K" Line will provide us with a monthly schedule of sailings to and from Japanese ports and Hong Kong at the same freight rates as available to Lake Michigan ports. We have also been advised that the Mediterranean-U.S.A. Great Lakes Westbound Freight Conference has posted the same tariffs for Duluth as Lake Michigan ports on westbound shipments. We hope that through good support by our industries, we can convince other vessel operators Duluth has good traffic availability.

Hamburg –

(Continued From Page 19)

of inland transport, with its mounting traffic figures, demands a further improvement in the internal road- and rail-way network of the port.

Hamburg can therefore without self deception view the future with confidence. Its port with its 25 sq km of expansion area offers the possibility to establish not only with new handling and warehousing installations but also industry-plants. Should it be necessary in the future, there is available 8,000 hectare of flats at the mouth of the Elbe for the construction of an outer harbour. Even this pleasant, almost utopian opportunity shows that a port can only carry out its role as a focal point of the world trade if its planners set their sights not only on tomorrow, but the day after tomorrow.

Kubota manufactures 50% of Japan's mobile cranes!

Kubota manufactures 50% of the mobile cranes made in Japan. Included in Kubota's line of mobile cranes are the agile KM36 (with a hoisting capacity of 4.5 tons), the all-purpose KM60 and KM100 (6.0 tons and 10.0 tons), and the massive KM200 (24.0 tons). Kubota also manufactures truck cranes, Models KTC36 (4.8 tons), and KTC-180 (20.0 tons), as well as other equipment such as pneumatic conveyors and overhead travelling cranes. Through the use of such equipment, Kubota, a member of ICHICA, contributes significantly to the efficient transport and leading of material in all parts of the world.

KUBOTA IRON & MACHINERY WORKS, LTD.

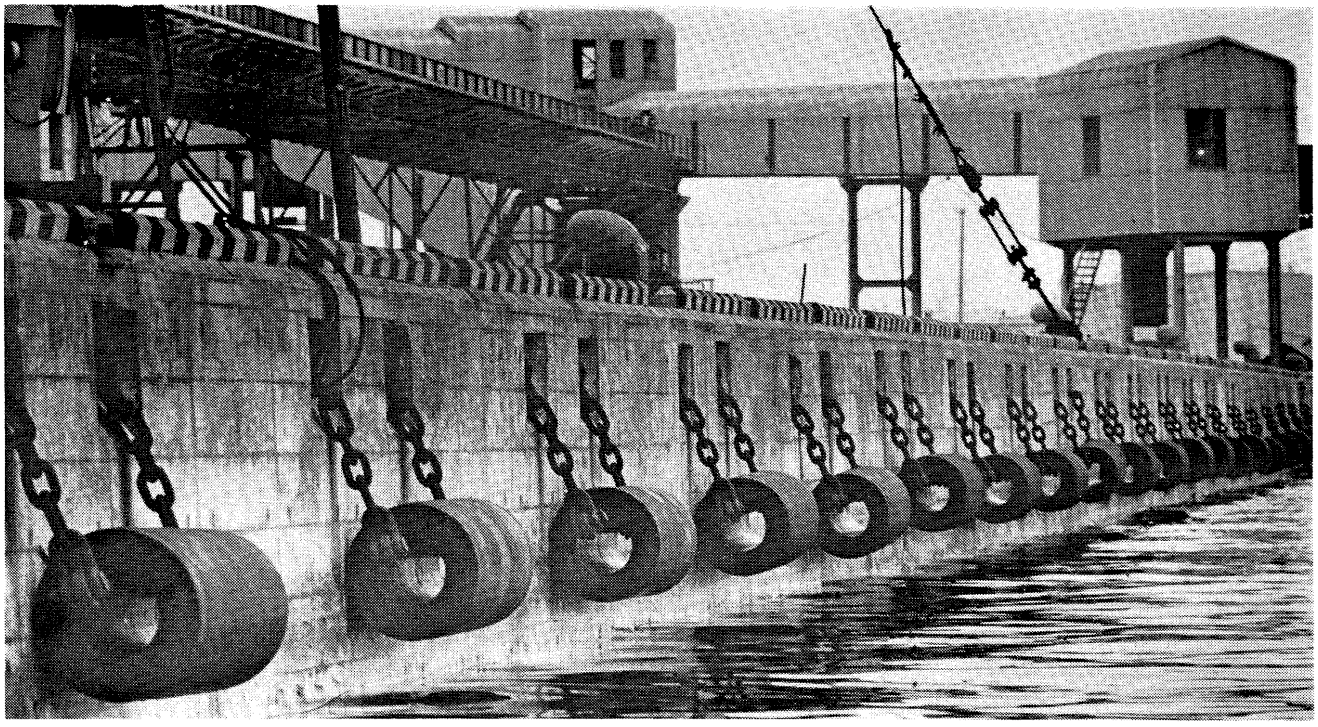
MACHINERY DEPARTMENT

22, Funade-cho 2-chome, Naniwa-ku, Osaka, Japan

KUBOTA
IRON & MACHINERY WORKS, LTD.

Main Fields: Material handling equipment/waterworks and irrigation systems/agricultural machinery/construction and other heavy machinery/construction materials/marine power.

Superior quality Bridgestone Cylindrical Dock Fenders for utility and versatility



Flexibility and versatility have been the key problems in the development of Japan's harbor facilities, stretching over several thousand miles of coastline. No wonder, then, that BRIDGESTONE, the largest manufacturer in the Orient of rubber products, has had such a wide experience in the design and manufacture of cylindrical dock fenders. They are particularly suitable for dolphin-type wharves.

Flexible in application as they are, however, cylindrical fenders are called on for a wide range of heavy-duty service where it is important to know that the fenders to be installed are the right ones for the job. This is automatically taken-care of when a BRIDGESTONE product is specified. They are manufactured to rigid specifications, with particular emphasis on the quality of the basic materials used in the finished product.

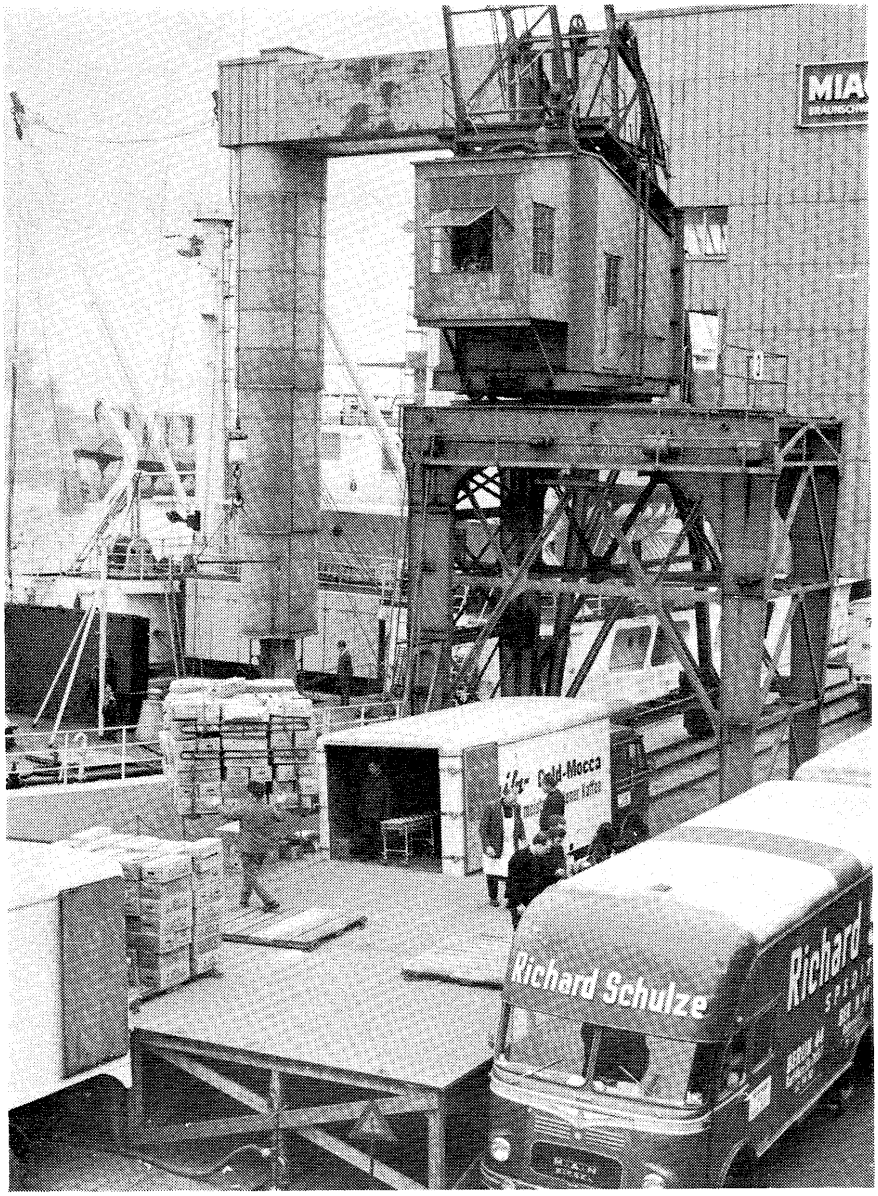
Sizes and quality of materials are selected to give the maximum energy absorption with the minimum reactive force. Uniformity of structure provides greater protection for both the wharf walls and ship hulls.

Highly resistant to oil and abrasive action, BRIDGESTONE cylindrical dock fenders are designed for maximum service at minimum cost. For wharves that require additional diversified protection the BRIDGESTONE Super Arch Dock Fender is also available.

You can plan with

BS BRIDGESTONE

BRIDGESTONE TIRE CO., LTD. 1-1 Kyobashi Chuo-ku, Tokyo, Japan Tel. 567-0111



Port of Hamburg

Central Secretariat of the International Association of Ports and Harbors

Mori Bldg. 7th, 2, Tomoe-cho, Shiba,
Minato-ku, Tokyo, Japan