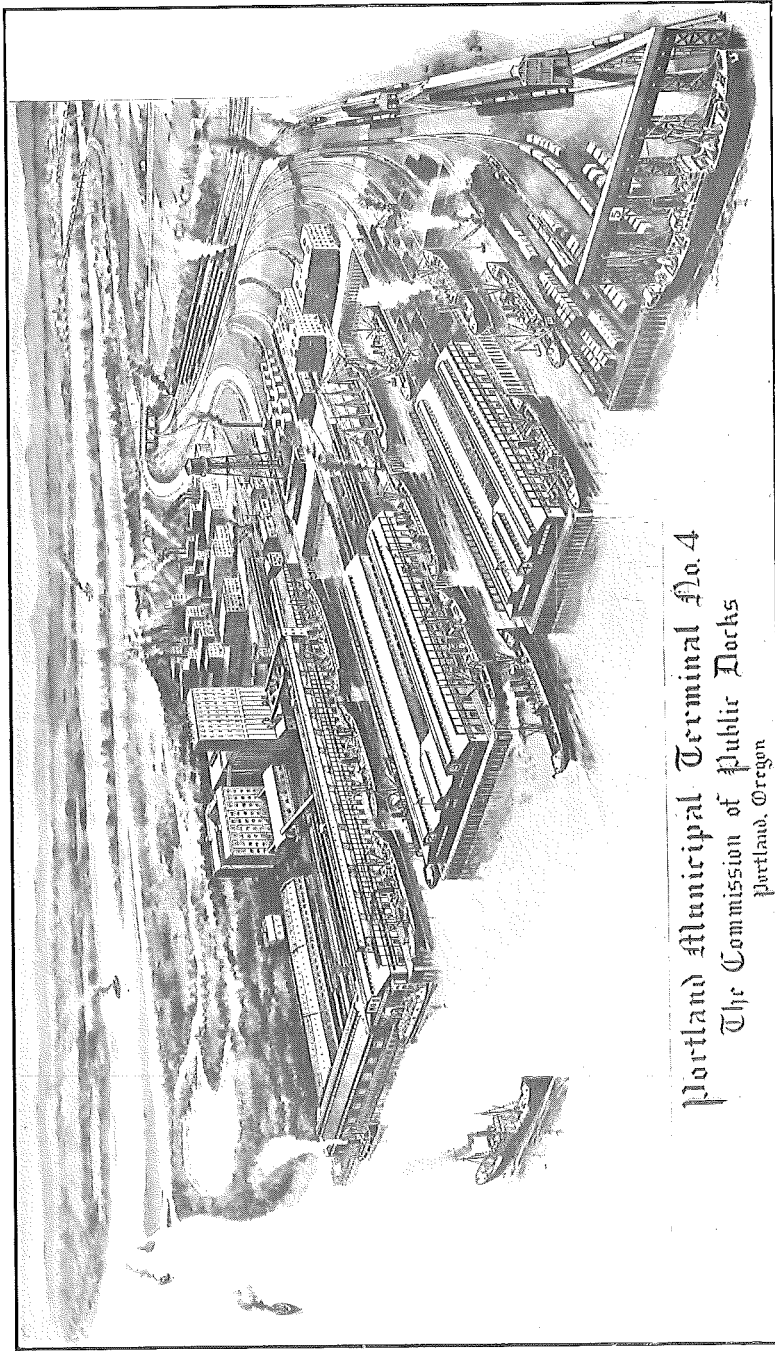


ANNUAL REPORT
OF
THE COMMISSION OF
PUBLIC DOCKS
OF THE
CITY OF PORTLAND
OREGON

1923 STATISTICS

YEAR ENDED NOVEMBER 30, 1923



Portland Municipal Terminal No. 4
The Commission of Public Docks
Portland, Oregon

ARTIST'S DRAWING OF MUNICIPAL TERMINAL NO. 4
Piers Numbered 1, 2 and 5, with Grain Elevator, Cold and Ventilated Storage Warehouses, Flour Mill, Oil Storage Plants and Bulk Storage Plant, together with Trackage are now completed. Piers Numbered 3 and 4 Remain to be Constructed

Annual Report
of
The Commission of
Public Docks
of
Portland, Oregon

YEAR ENDED NOVEMBER 30

1923

The Commission of Public Docks of Portland, Oregon

COMMISSIONERS

JOHN H. BURGARD, Chairman
F. C. KNAPP, Vice-Chairman
A. H. AVERILL
C. C. HINDMAN
IRA F. POWERS

Chief Engineer and Secretary
G. B. HEGARDT

PROPERTIES

MUNICIPAL TERMINAL NO. 1
FOOT OF FIFTEENTH STREET

MUNICIPAL TERMINAL NO. 2
FOOT OF EAST WASHINGTON STREET

MUNICIPAL TERMINAL NO. 3
FOOT OF PITTSBURG STREET

MUNICIPAL TERMINAL NO. 4
FOOT OF KELLOGG STREET

MUNICIPAL BOAT LANDING
FOOT OF WOODWARD AVENUE

MUNICIPAL STREET RAILWAY
JERSEY AND FESSENDEN STREETS TO
MUNICIPAL TERMINAL NO. 4

MUNICIPAL BOAT LANDING AND EXECUTIVE OFFICES
FOOT OF STARK STREET

Annual Report of the Commission of Public, Docks

Hon. George L. Baker, Mayor of the City of Portland, Oregon.

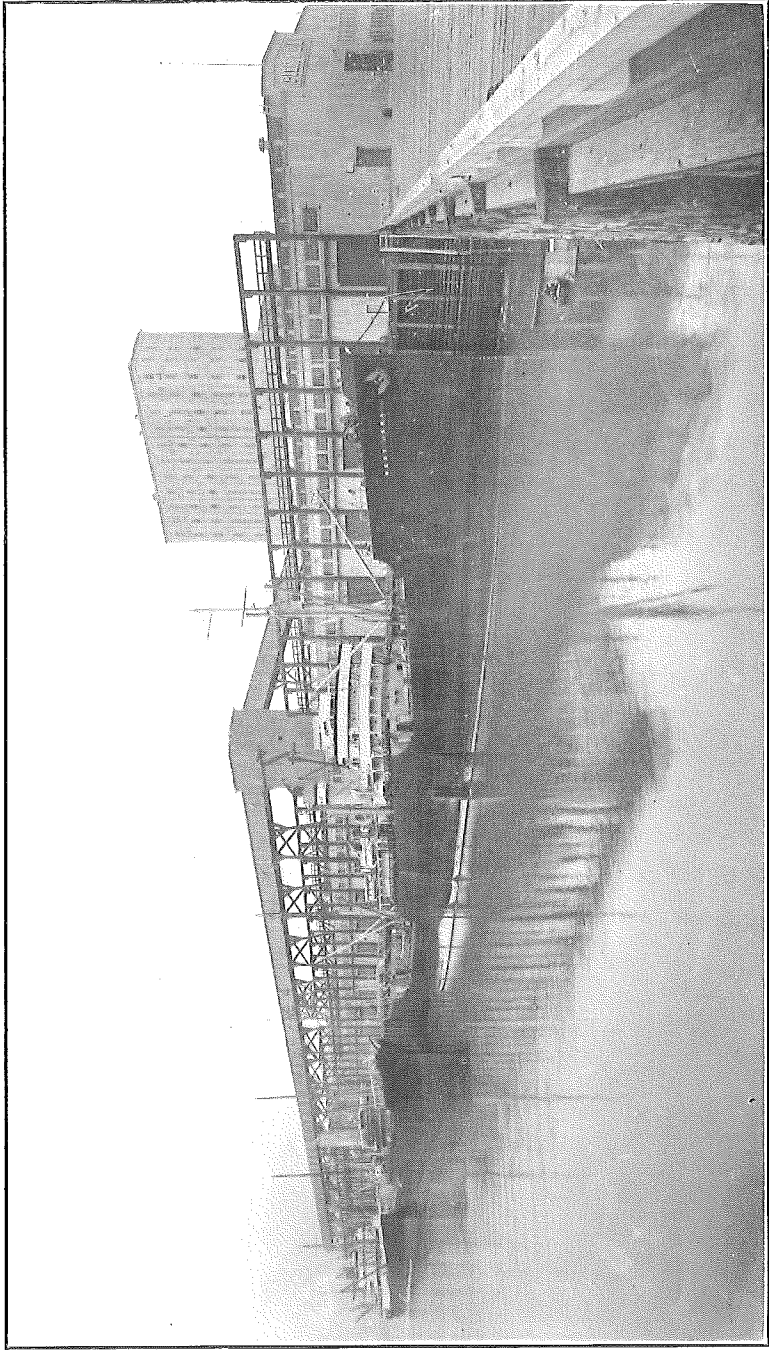
Sir: The Commission of Public Docks, in compliance with law, herewith submits its thirteenth annual report, for the fiscal year ending November 30, 1923.

The organization of The Commission of Public Docks, at the close of the fiscal year, consists of the following commissioners: John H. Burgard, Chairman; F. C. Knapp, Vice-Chairman; A. H. Averill, C. C. Hindman and Ira F. Powers. Mr. Burgard, whose term of office expired December 7, 1922, was, by you, appointed to succeed himself.

At the close of the fiscal year the Commission had disposed of \$2,400,200.00 of the \$2,500,000.00 Dock Bonds authorized by the electorate on November 8, 1910; all of the \$3,000,000.00 Elevator Bonds authorized at the election held June 4, 1918, and all of the \$5,000,000.00 Harbor Development Bonds authorized at the election held November 5, 1918, leaving at this time \$99,800.00 of the Dock Bonds unsold. The total authorized bond issues for the provision of municipal, commercial port facilities have, therefore, been \$10,500,000.00. Of this amount there has been expended to December 1, 1923, in the acquisition of terminal sites, dredging and filling operations, construction, equipment and for all other purposes, \$9,686,814.72. At this time the Commission had available, in its Capital Fund \$655,000.00 Port of Portland, 20-year Series "D" Port Improvement and Equipment Bonds, \$58,385.28 in the Construction Fund and \$99,800.00 of unsold Dock Bonds, or a total of \$813,185.28 for construction purposes.

It is gratifying to the Commission to be able to state that the waterborne commerce of the port has continued to increase at a very satisfactory rate, and that the business done during the year was the greatest in the history of the port. With the increase in business, the municipal terminals were, at times, taxed to their full capacity, but by careful supervision in berthing and the handling of cargo there was practically no congestion or delay to vessels. As this applied equally as well to private facilities, the port as a whole gave all vessels excellent dispatch.

While there have been no great changes in the municipal and private waterfront facilities during the year, the Commission deems it advisable to continue the custom of listing in its report a complete description of all of the shipping facilities of the port, for the information of the extensive and constantly growing shipping interests using the port, and, as part of other and important port information, a general statement is also included herein giving the entrance and ship channel conditions between Portland and the sea, as showing the excellent and permanent channel depths available for the accommodation of the shipping of the port.



PIER NO. 1, MUNICIPAL TERMINAL NO. 4, WITH MILLION BUSHEL GRAIN ELEVATOR IN REAR

No extensive construction work was undertaken by the Commission during the year, but necessary steps were taken to meet the demands for increased facilities of the Intercoastal and European trade, and for this purpose the Commission acquired additional waterfrontage at Terminal No. 1, on which to construct another pier. This property, which adjoins Pier "B" of this terminal, has a harbor frontage of 303 lineal feet and a depth of 588 lineal feet, which will, in connection with other property available at this terminal, permit the construction of a pier 569 feet long, with transit shed 172 feet wide and a slip the full depth of the property 180 feet wide. The purchase price of this property was \$152,500.00.

While, as stated, no very large construction work was undertaken at the municipal terminals, some very important additions and improvements were made, which have been of great benefit to the general operation of the port facilities. The more important of these improvements were:

Terminal No. 1: As originally constructed, the transit shed of the quay dock, 955 feet long, had a width of only 100 feet, which, in operation, was found inadequate to accommodate the large amount of cargo which had constantly to be handled over it, without serious congestion. To remedy these conditions, the Commission authorized the widening of this transit shed 47 feet, giving the enlarged shed a width of 147 feet for its entire length, at a cost of \$73,075.00. In connection with this transit shed improvement, all railroad tracks in rear of the quay dock and Pier A were planked and a circulating roadway constructed adjoining these tracks, enabling trucks to receive and deliver their freight over the rear platforms, thus relieving congestion in the sheds and interference with ship loading and unloading operations. The efficiency as well as capacity of this terminal has been greatly increased by these improvements.

With the view of being in readiness to proceed with the early construction of the additional pier—Pier C—on the property recently purchased and adjoining Pier "B" of Terminal No. 1, the Commission, near the close of the fiscal year, made arrangements with the Port of Portland Commission for excavation of the 180 feet wide slip, which is to be used jointly by the Commission and the Eastern and Western Lumber Company. The dredging of the slip, which includes the construction of bulkheads and necessary fills, is expected to be completed early in March, 1924, after which construction of pier may be proceeded with, whenever needed.

Terminal No. 4: Last year there was constructed a ventilated storage warehouse 610 feet long and 120 feet wide for the handling and storage of apples shipped through the port from the producing sections in Oregon and Washington. While this storage warehouse was, by the Commission, considered an adequate and suitable facility for storing and handling the large apple crop yearly exported through the port, the apple growers for a period of over two years on numerous occasions had taken up with the Commission the necessity of providing cold storage facilities at this



ENTRANCE TO MUNICIPAL TERMINAL NO. 4
Slip No. 1 with Piers Nos. 1, 2 and Grain Elevator in Background, Administration and Welfare Buildings and Restaurant in Foreground.
Street Car Service is Maintained Directly to the Terminal

export terminal, where apples could be assembled and kept in storage in readiness for quick shipment by refrigerated vessels when price conditions in the European markets were favorable. These negotiations were concluded in August, when the Apple Growers Associations of Hood River formally agreed to enter into contract with the Commission for cold storage of 300,000 boxes of apples, per year, or as much thereof as the Commission could supply space, for a period of five years, at a stipulated rate of 20c per box for season storage.

Construction of a cold storage plant was then immediately undertaken by the Commission, the easterly 200 feet by 120 feet of the ventilated apple storage warehouse being the space utilized for this purpose. The cost of insulation and brine refrigerating machinery was, approximately, \$96,000. All of the insulating material and the machinery for the cold storage plant were furnished and installed by local concerns.

A 150,000 gallon elevated steel, secondary supply water tank was constructed, which effected a reduction in insurance rates of Piers 1 and 2, office and other buildings, and contents of about 24 per cent.

Through the courtesy of the City Council, the Commission obtained the loan of a steam fire engine, which was housed and installed at a central point of the terminal, and is in charge of the Commission's Fire Marshal as an emergency protection, in the event that the City's nearest fire equipment should be away from its station when a fire occurred at this terminal.

An important addition to the facilities of this large trans-shipping terminal was the construction, by H. N. Leckenby, of a United States Licensed Fumigating plant, on a small parcel of land leased by the Commission, in rear of Pier No. 2.

MUNICIPAL PORT FACILITIES

The Commission has completed and has in operation the following terminal facilities:

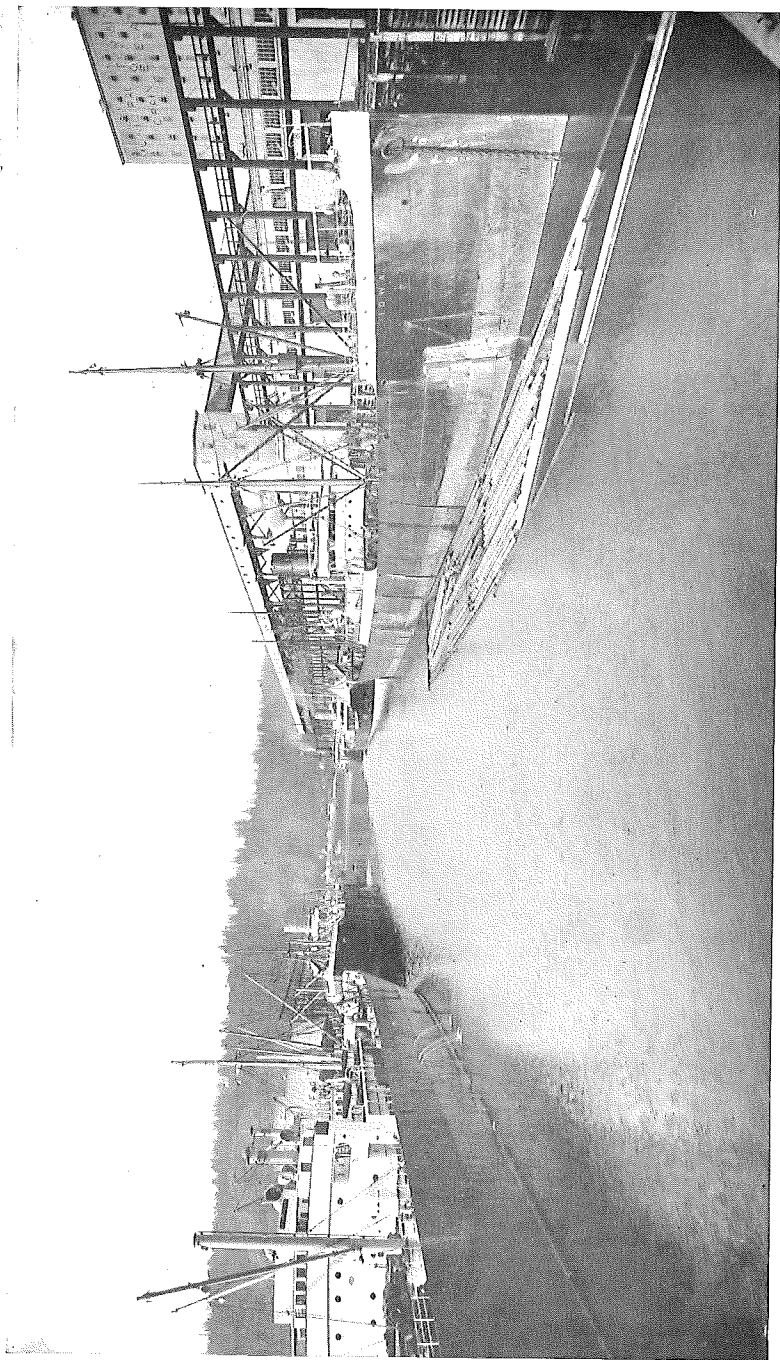
Municipal Terminal No. 1: This terminal, which has an area of 19 acres, consists of a quay dock 955 feet long, 300 feet of which has two levels, with a transit shed 935 feet long and 147 feet wide.

Pier A—484 feet long, with transit shed 176 feet wide.

Pier B—500 feet long, with transit shed 187 feet wide.

Warehouse No. 1: One-story structure approximately 190 feet by 200 feet, having a covered area of 37,600 square feet.

Available berthing space at this terminal is 2391 lineal feet, area under shed 349,600 square feet, and open storage 78,500 square feet. This terminal, located in the central railroad terminal and warehouse district, has trackage accommodations for 140 standard railroad cars. The mechanical equipment consists of one 20-ton locomotive crane, four electric dock winches, cargo hoists on both quay dock and piers, electric freight elevators, adjustable ramps, electric and gasoline tractors, gravity conveyors, freight piling machines and four-wheeled trucks or tractors up



SILIP NO. 1, MUNICIPAL TERMINAL NO. 4, WITH SIX VESSELS BERTHED

to 6 tons capacity. All structures are provided with automatic sprinkler systems and secondary water supply tank. This terminal is used mostly in connection with Intercoastal shipping.

Municipal Terminal No. 2: A two level quay dock 526 feet long, with transit shed 100 feet wide and a trackage for the placement of twenty cars. This terminal is provided with cargo masts, electric elevators, adjustable ramps, a 5-ton derrick and freight piling machine. The entire structure is automatically sprinklered. Terminal contains 3.64 acres, open storage in rear of quay dock 50,000 square feet. Intercoastal and Coastwise shipping is handled at this terminal.

Municipal Terminal No. 3: A quay dock 560 feet long, transit shed 100 feet wide and trackage for 27 cars. This terminal is used mostly for storage of slow moving commodities for which space is not available at the other municipal terminals. This terminal has an area of 3.04 acres.

Municipal Terminal No. 4: This is the largest and most important of the municipal terminals. The site contains 165 acres, with a harbor frontage of 3035 lineal feet, on which there has been constructed the following facilities:

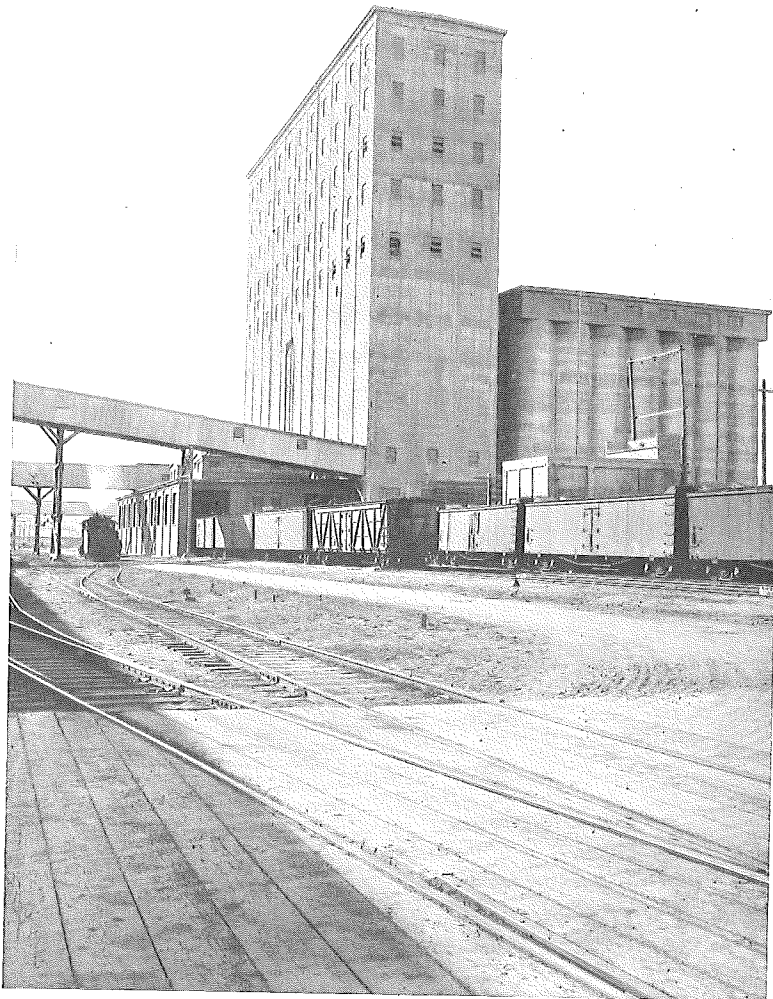
Pier No. 1: This pier has a length along slip No. 1 of 1500 feet and is 221 feet wide, the outer end being a two level structure for a length of 615 feet. The harbor face of this pier has a frontage of 605 feet, which gives a total berthing space of Pier No. 1 of 2105 lineal feet. The main transit shed on the pier is 1500 feet long and 180 feet wide, and on the harbor face extension it is 150 feet wide, a total cargo storage area under shed of 401,440 square feet, which with proper allowance for gangways and trucking space, permits the handling of 40,000 tons of general cargo or 64,000 tons of grain and flour at one time.

The outer, or grain section of Pier No. 1, has six sacking bins, filled from the elevator by the shipping belts. Under the pier shed floor there is a conveyor belt running the full length of the pier, onto which grain from sacks stored on the pier can be cut in and carried to the elevator for cleaning or smutting and storage, if so required. From the two-belt shipping gallery along the front of the pier, with four movable trippers and thirteen spouts, two vessels can be loaded with bulk grain at one time.

Track facilities are provided in both front and rear of the pier, the tracks in rear having placement for 105 cars, a third track having been added during the year.

The pier has cargo masts along its entire face, two electric elevators and two electrically operated ramps, or inclines, for handling freight to and from river steamers and barges and is automatically sprinklered.

Pier No. 2: This pier, which also is 1500 feet long, and has a width of 214 feet, is covered with a transit shed, on its outer half, 715 feet long and 166 feet wide. The inner, one-half open pier is used mostly for the handling of bulk freight and lumber. Trackage is provided both at the front and rear of the pier, the rear tracks accommodating 100 cars. The



1,000,000 BUSHEL GRAIN ELEVATOR, MUNICIPAL TERMINAL NO. 4

cargo capacity of the shedded portion of the pier is proportionally the same as that of Pier No. 1. This pier has automatic sprinkler system, cargo masts and electric freight elevator. Slip No. 1, which serves Piers Nos. 1 and 2, is 1500 feet long and 280 feet wide.

Pier No. 5: This pier has a total berthing space of 1565 lineal feet, of which 665 feet is along the quay portion of the pier and 900 feet along the slip. In rear of the quay dock is constructed the large bulk storage plant for handling of coal, phosphate rock, and on an area of filled ground back of the pier and quay dock, consisting of approximately three and one-half acres, storage space is available for lumber, logs, sulphur, steel, etc.

A trackage of nearly two miles has been provided on this pier and the filled ground. Piers Nos. 4 and 5 are served by Slip No. 3 which is 1000 feet long and 220 feet wide.

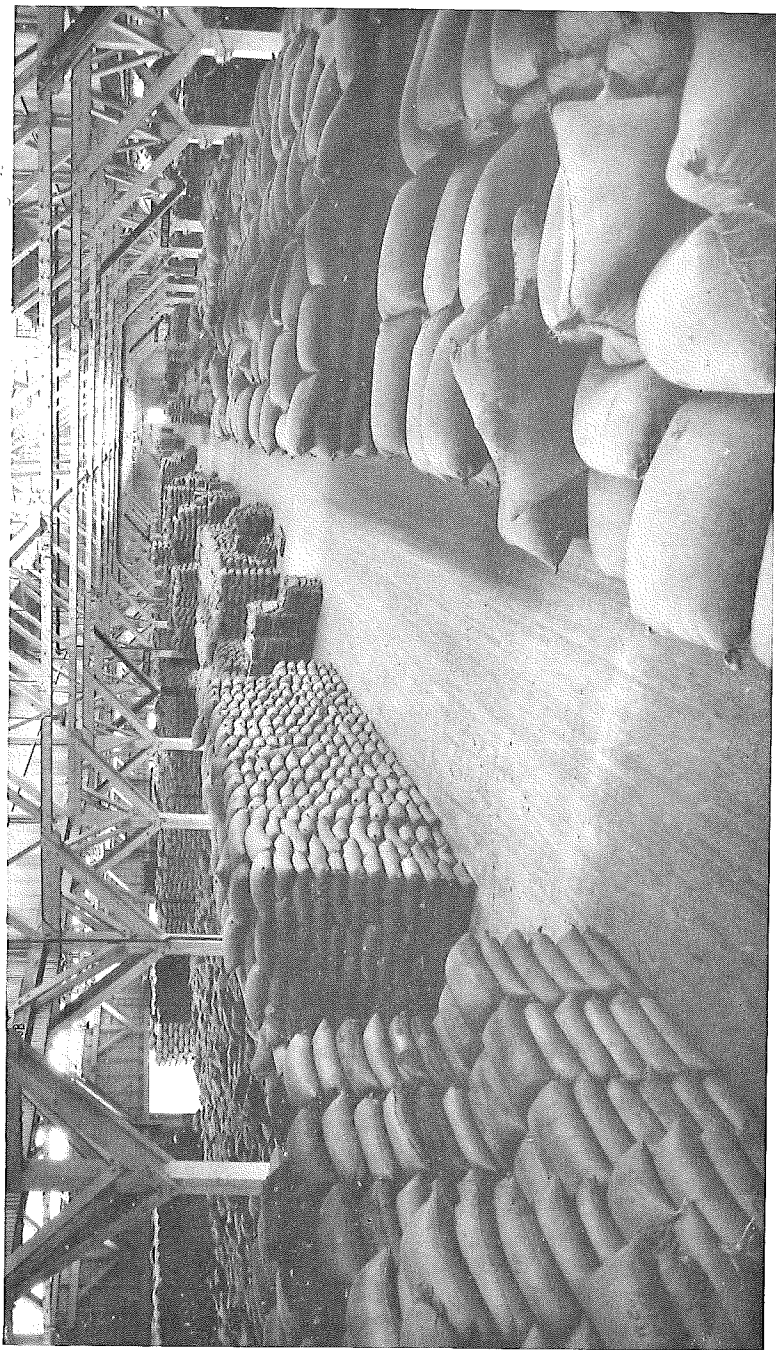
Grain Elevator: This elevator, which is of fireproof construction throughout, was completed in 1920. It was designed especially with the view of successfully handling and cleaning wheat of the many grades and varieties produced in the Pacific Northwest. The general details of this elevator are as follows:

It consists of a track shed, operating house and storage annex. The shed is 151 feet in length; the operating house, 166 feet in length, 46 feet in width and 182 feet in height; and the storage annex, 136 feet in length, 105 feet in width, and 100 feet in height. Reinforced concrete construction is used throughout, and the present capacity is 1,053,800 bushels.

The track shed has six power shovels for unloading bulk grain into six track hoppers, with an unloading capacity of about 120,000 bushels per day of 8 hours. For the convenient unloading of sacked grain, of which a very considerable quantity is brought in from the producing sections, from cars in the track shed, a concrete platform has been provided between the two unloading tracks, on which the sacks are piled and later cut into the track hoppers for transfer and storage in the elevator, and this is done without slowing up the unloading of bulk wheat from cars. Two car pullers operate to handle cars on either of the two tracks passing through the unloading shed.

The operating house is divided into 79 bins, varying in capacity from 300 to 5,150 bushels. Fifty of these bins have a capacity of more than 4,000 bushels. The total capacity of the operating house bins is 298,700 bushels. The operating house and its machinery were designed of sufficient capacity to handle a proposed 1,000,000 bushel additional storage.

The storage annex has 63 bins 15 feet in diameter and 85 feet in height, of a capacity varying 12,200 bushels to 10,300 bushels, and 36 interspace bins, each holding 2,200 bushels, or a total bin capacity of 755,100 bushels in the annex.



CARGOES OF SACKED GRAIN ASSEMBLED ON PIER NO. 1, MUNICIPAL TERMINAL NO. 4

The elevator equipment as now installed consists of the following, to which it is proposed later to add wheat washing machines:

3 receiving legs	12,000 bu. per hr. each
2 receiving legs, handling grain from pier shed	6,000 bu. per hr. each
3 shipping legs	12,000 bu. per hr. each
2 separator legs	6,000 bu. per hr. each
2 smutter legs	4,000 bu. per hr. each
3 receiving conveyor belts	12,000 bu. per hr. each
3 shipping conveyors belts under annex	12,000 bu. per hr. each
2 conveyor gallery shipping belts...	10,000 bu. per hr. each
3 distributing conveyor belts over annex	10,000 bu. per hr. each
2 distributing conveyor belts operating house cupola	10,000 bu. per hr. each
5 smutters	
2 separators	
2 aspirating separators	
9 hopper scales	2,000 bu. capacity
1 hopper scale	1,000 bu. capacity
1 passenger elevator	
1 Humphrey elevator	
13 ship delivery spouts	
Dust collecting system	
Sweeper system	

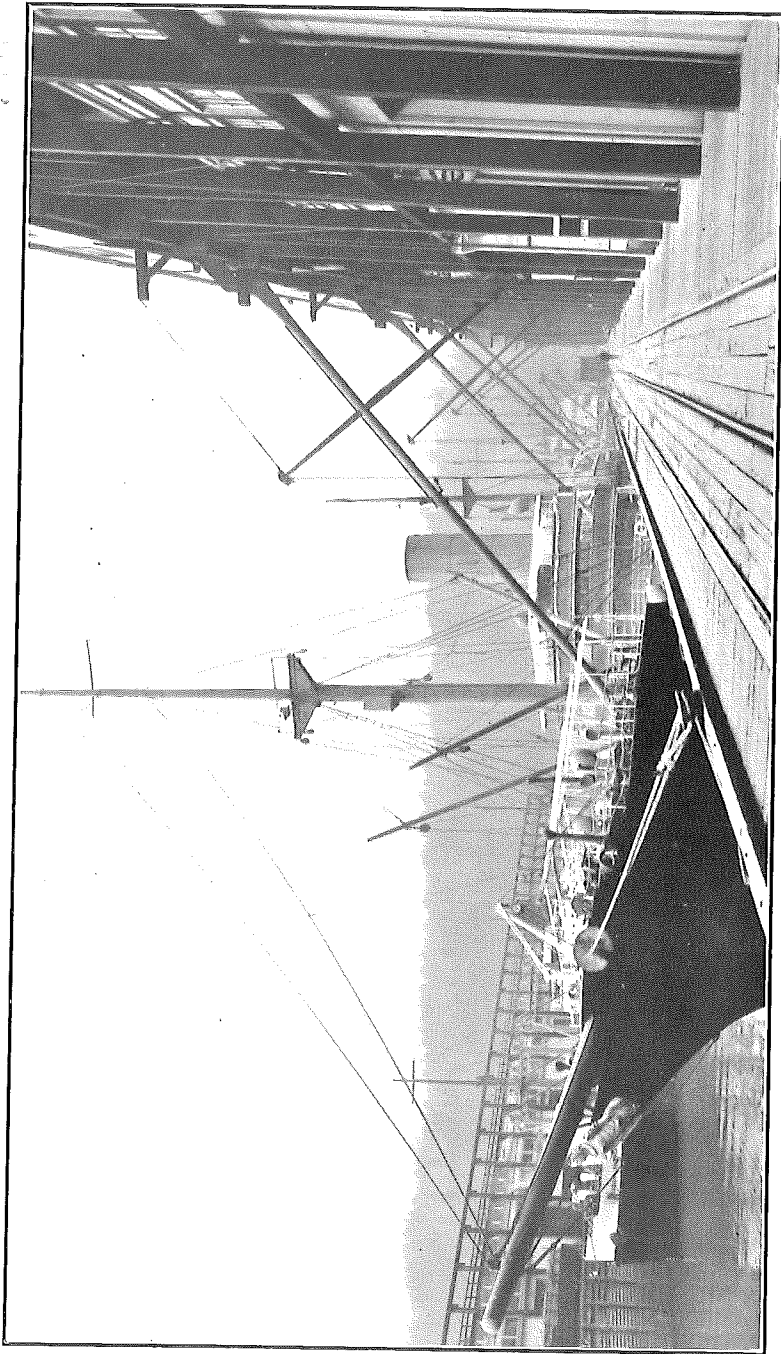
Electric power is used in operation, each operating unit being independently motored, with electric signals and telephones throughout the plant.

Loading bulk grain to ships is at the rate of 30,000 bushels per hour.

Oil Bulk Storage Plant: For the handling and storage of vegetable oils and molasses, eleven steel tanks, on concrete foundation, are constructed and have a combined capacity of 1,092,000 gallons. Four of these tanks were designed especially heavy for storage of molasses, which commodity is shipped in as full cargoes from Hawaiian Islands. To furnish the necessary facilities for weighing oil and molasses as it is being pumped from vessels to the tanks, there are installed two tank scales, each of a capacity of 60 tons. The bulk storage plant is fully equipped with pumping mains from Piers Nos. 1 and 2, hot water, steam and compressed air pipes, tank car cleaning, filling and barreling facilities. Ten tank cars can be filled at one time. Electric and steam operated pumps are provided for pumping molasses and vegetable oils from vessels tanks through the oil storage pipe lines.

Due to the increasing molasses and vegetable oil business, the Commission has ordered the construction of two additional steel tanks, which will give a total capacity to this plant of 1,381,800 gallons.

Bulk Storage Plant: This plant, constructed on Pier No. 5, was com-



BULK GRAIN FROM GRAIN ELEVATOR BEING LOADED ABOARD STEAMER AT PIER NO. 1, MUNICIPAL TERMINAL NO. 4.
THIRTEEN SPOUTS ARE PROVIDED ON THE PIER FOR THIS PURPOSE

pleted in May, 1921. The installation consists of covered concrete bunkers, together with necessary car unloading devices and conveyors for handling materials. It was constructed primarily for the purpose of handling bulk phosphate rock, of which immense high grade quantities are available in the Port's tributary territory, but is capable also of taking care of other bulk material, such as coal, ores, etc. The storage facilities consist of eight separate concrete bins which have a combined normal capacity of 18,000 tons of phosphate rock or 9000 tons of coal, with delivery to vessel at the rate of 300 tons of phosphate rock or 200 tons of coal per hour, through two traveling ship's towers operating along the harbor face of Pier No. 5. In addition to an extensive belt conveyor system, a special box car unloader is provided which discharges the contents of a box car into a hopper in about eight minutes.

Cold Storage Plant: The construction of this plant was undertaken late in August and was fully completed by the time the apples to be shipped through the port began to arrive, and was filled to capacity early in the season. About 105,000 boxes can be stored at one time. The plant consists of four cold storage rooms, two of which are 50'x100' in dimension, a third is 20'x100' and the fourth room has a dimension of 100'x120'. The ceiling height in all rooms is 15 feet. The walls, floor and ceiling of all the rooms are insulated with four inches of sheet cork applied in two layers of 2 inches thickness with asphalt. The walls and ceilings are given a cement plaster finish one-half inch in thickness. The flooring above the cork insulation consists of concrete four inches in thickness including a $\frac{3}{4}$ " cement finish with hardened surface. All the rooms are interconnected with standard cold storage doors and in addition thereto there are provided ten small cold storage doors 2'x2'6" in size, permitting the apples to be handled in and out of the cold storage rooms by use of gravity conveyors. With this arrangement of cold storage rooms the fruit is handled with minimum amount of labor and with quick dispatch.

The brine system refrigeration plant consists of two vertical single acting double cylinder enclosed type ammonia compressors of 9" bore and 9" stroke, belted to two 50 H. P. 440 A. C. motors, together with condensers, liquid receiver, accumulator brine tank, with 4600 cu. ft. capacity containing 12,000 ft. of $1\frac{1}{4}$ " ammonia pipe, the brine being agitated by a vertical type agitator powered by a 3 H. P. motor; two four inch brine circulating pumps, one of these pumps being connected to a 15 H. P. gas engine for emergency in case electric power is shut off. There is a total of 35,000 feet of 2" brine coils in the cold storage rooms, arranged in bunkers longitudinally of the rooms, each bunker being provided with drip pans and drains, hung from the ceiling.

The plant is well lighted and is provided with ventilation.

Ventilated Apple Storage Warehouse: As originally built, its dimensions were 610 feet long and 120 feet wide, but this was reduced to 410 feet when a 200-foot section of it was placed under refrigeration. While the ventilated storage warehouse was constructed in 1922, it was not



SPOUTING BULK GRAIN FROM GRAIN ELEVATOR INTO VESSEL'S HOLD AT
PIER NO. 1, MUNICIPAL TERMINAL NO. 4

completed in time to handle but a very small portion of that season's crop and it was, therefore, not possible to thoroughly test out the effectiveness of this facility of apples held in storage for periods varying from 30 to 60 days awaiting shipment. The handling of a considerable portion of the 1923 crop through the ventilated storage warehouse appears to have been entirely successful and to the satisfaction of the growers using it.

The construction of the ventilated storehouse is of the composite, double air space type, with exterior walls and intermediate fire walls of concrete and hollow tile.

Along the foundation walls, at 20-foot intervals, under the unloading platforms 2 by 3 feet openings are provided, with double air space shutters, which permit a regulated supply of air to enter the open space below the floor and provide the means of introducing a regulated air supply into the warehouse proper, and 40 12-inch ventilators installed in the roof complete the natural ventilation system. The maximum capacity of this warehouse is now about 300,000 boxes of apples.

Fumigating Plant: This plant was put in operation in April and has since been used in fumigating all of the oriental cotton arriving in this port, in addition to other commodities received requiring reconditioning. The plant has a capacity of 250 tons per day and is also equipped for reconditioning of rice, peanuts, beans and other foodstuffs.

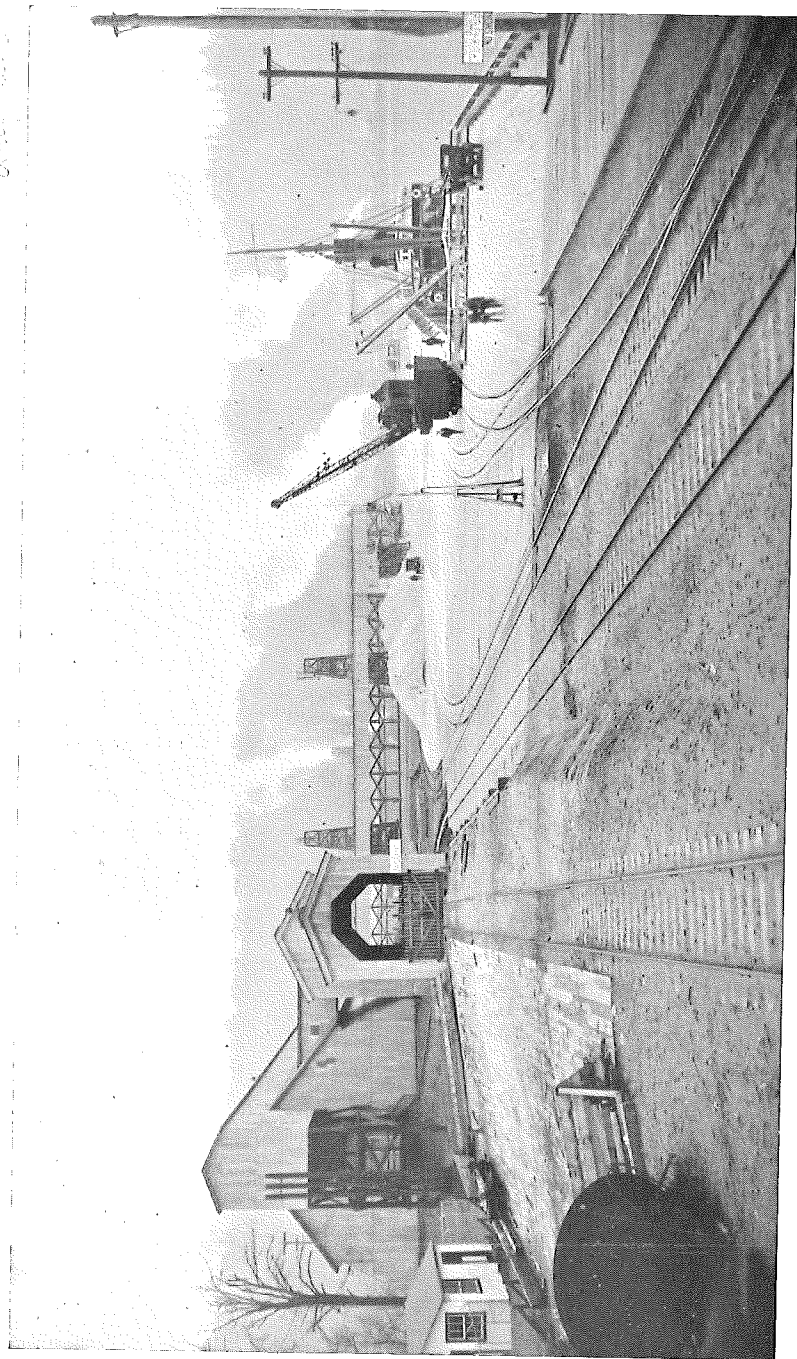
Fuel Oil Tanks: The General Petroleum Corporation has two 55,000-barrel oil tanks in rear of Pier No. 5 and immediately adjoining the terminal site, from which deliveries of fuel oil are made to steamers at two berths of this pier, through 10-inch pipe lines.

Track Scale: To avoid the necessity of having to transport cars to railroad yards, which are some distance from this terminal, to be weighed before being loaded, a 150-ton standard railroad track scale has been installed, and is being operated under the supervision of the Weighing and Inspection Department of the Transcontinental Freight Bureau.

Administration and Other Buildings: For the accommodation of the terminal forces, Government grain research work and branch office of the State Grain Inspection Bureau, a large two story office building was constructed, and for the purpose of enabling employes and others to obtain meals while working at this terminal, the Commission has for several years had a restaurant in operation, seating 200 people, where meals are served at reasonable prices at all hours, when work of loading or discharging vessels is being done. There is also a welfare building, with hot and cold shower baths, lounging rooms, etc.

Street Car Service: The Commission operates a street car line, about 1½ miles long, connecting Terminal No. 4 with the main street car service of the City, cars being operated continuously from 7 A. M. to 7 P. M. Special cars are run at any time thereafter when vessels are working. There is a five cent fare each way on this line.

draw 1000



PIER NO. 5 WITH BULK STORAGE PLANT, MUNICIPAL TERMINAL NO. 4. THE VIEW IS TOWARD THE HARBOR WITH SLIP NO. 3
TO THE RIGHT, SULPHUR CARGO BEING DISCHARGED ON THE PIER BY LOCOMOTIVE CRANE WITH CLAM SHELL BUCKET.

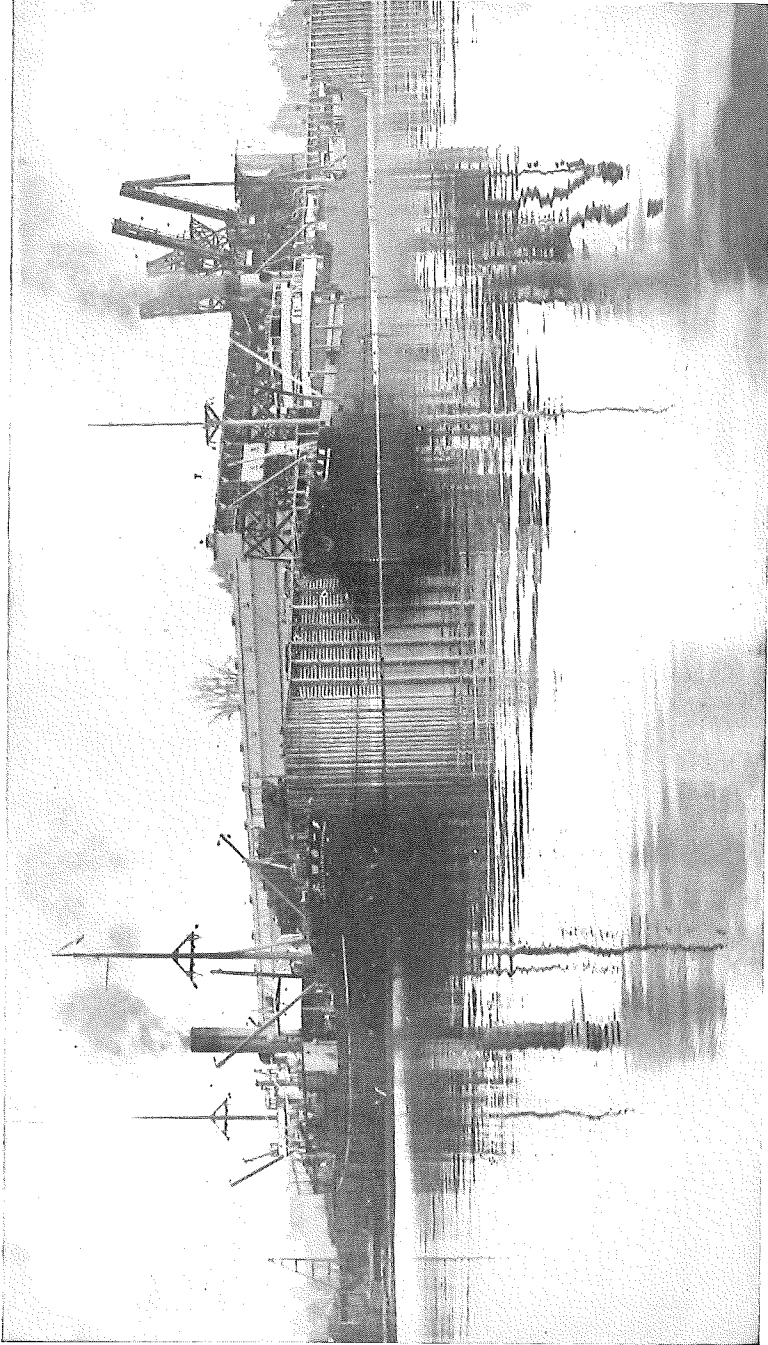
Industrial Section: The only industry which has been so far located on that portion of the terminal site set aside for industrial purposes, is the flour mill of 1500 barrels daily capacity, with adjoining warehouse. These structures are of reinforced concrete and are directly connected with Pier No. 1 by belt conveyors for delivery of the manufactured mill products for water shipments. This mill has been in operation most of the time during the year, the output from which is nearly entirely for export.

Mechanical Cargo Handling Equipment: In addition to the cargo masts or cargo hoists provided along the face of the transit sheds on Piers Nos. 1 and 2, there is available at this terminal one 15-ton and one 20-ton locomotive crane, switch engine with flat and dumpers, electric and gasoline tractors with trailers, electric elevators, freight piling and stacking machines and gravity and powered conveyors, to facilitate the handling, loading and unloading of cargo.

All structures at this terminal, with the exception of the grain elevator, bulk storage plant and the ventilated apple warehouse, are protected by automatic sprinkler systems and, in addition, all pier structures have concrete fire walls, at about 400-foot intervals, extending from low water to several feet above the shed roofs. The terminal has a large equipment of fire extinguishers, both hand and on wheels, fire engine, fire hose, fire trucks, etc., and a Fire Marshal is permanently employed to supervise fire prevention, fire control and fire fighting measures at all of the municipal terminals, where fire drills are regularly held on frequent occasions.

With Piers Nos. 1, 2 and 5 constructed at this terminal there have been at this time provided a berthing space of 5500 lineal feet, with area under shed on Piers Nos. 1 and 2 of 513,160 square feet and 84 acres of open storage on Piers 2 and 5, with a large additional area in rear of these piers. The approved plans for the full development of this terminal call for the construction of five piers and three slips, which will have a combined accommodation for seventeen 500-foot vessels. In anticipation, however, of possible early provision of Piers Nos. 3 and 4, the Commission has already undertaken the construction of necessary bulkheads and fills for these piers, so that no delays will be encountered in completing these piers when a decision is made to proceed with their construction.

The Commission in purchasing this extensive site for this large terminal development had in mind the necessity of supplying a large trackage which would adequately serve the completed piers, elevator, oil and bulk storage and other important facilities included in the approved plans. In the approved terminal it was figured that a total trackage of approximately 30 miles would be required, and of this, about 15 miles have at this time been constructed, which permits in excess of 300 cars being handled at one time without congestion and with ample surplus trackage for convenient intraplant switching and direct handling of cargo from car to ship and vice versa. The general plan of Terminal No. 4, accompanying this report, clearly illustrates this important feature of the ter-



HARBOR VIEW OF PIER NO. 5, MUNICIPAL TERMINAL NO. 4, WHERE MODERN FACILITIES ARE PROVIDED FOR THE HANDLING OF BULK CARGOES

minal trackage. Because of the magnitude of this terminal the trans-continental railroads of the port, the Union Pacific, Northern Pacific, Southern Pacific, and the Great Northern, have established a joint agency there, through which is handled all matters pertaining to billing and routing of the cars passing through the terminal.

General: At all of the municipal terminals vessels are supplied with city water at ship's side. The charge for supplying water to vessels is at the rate of \$1.00 for five thousand gallons or less, and for amounts in excess of five thousand gallons, 20 cents for each one thousand gallons.

For the accommodation of vessels berthed at Terminals Nos. 1, 2 and 4, facilities have been provided for connecting such vessels to the terminal light circuits, the charge for such service being based on meter consumption, and for the convenience of vessels berthed at Terminals Nos. 1 and 4, a number of telephones have been installed along the face of the transit sheds where they are available for the use of the ship's crew at any time.

Dry Docks: Of the two floating dry docks of the port the larger, or 15,000-ton capacity, was originally constructed by The Commission of Public Docks in 1921 and by agreement placed alongside of, and operated in conjunction with the 10,000-ton dry dock of The Port of Portland Commission. This arrangement remained in force until July 23, 1923, when The Commission of Public Docks disposed of its dry dock to the Port of Portland Commission, for the sum of \$950,000.00, thus placing the ownership and operation of both dry docks under the full control of that latter body.

The following is a general description of the dry docks and repair plant facilities provided by the Port of Portland Commission and available for dry docking and repairs to vessels:

Dry Dock No. 1:

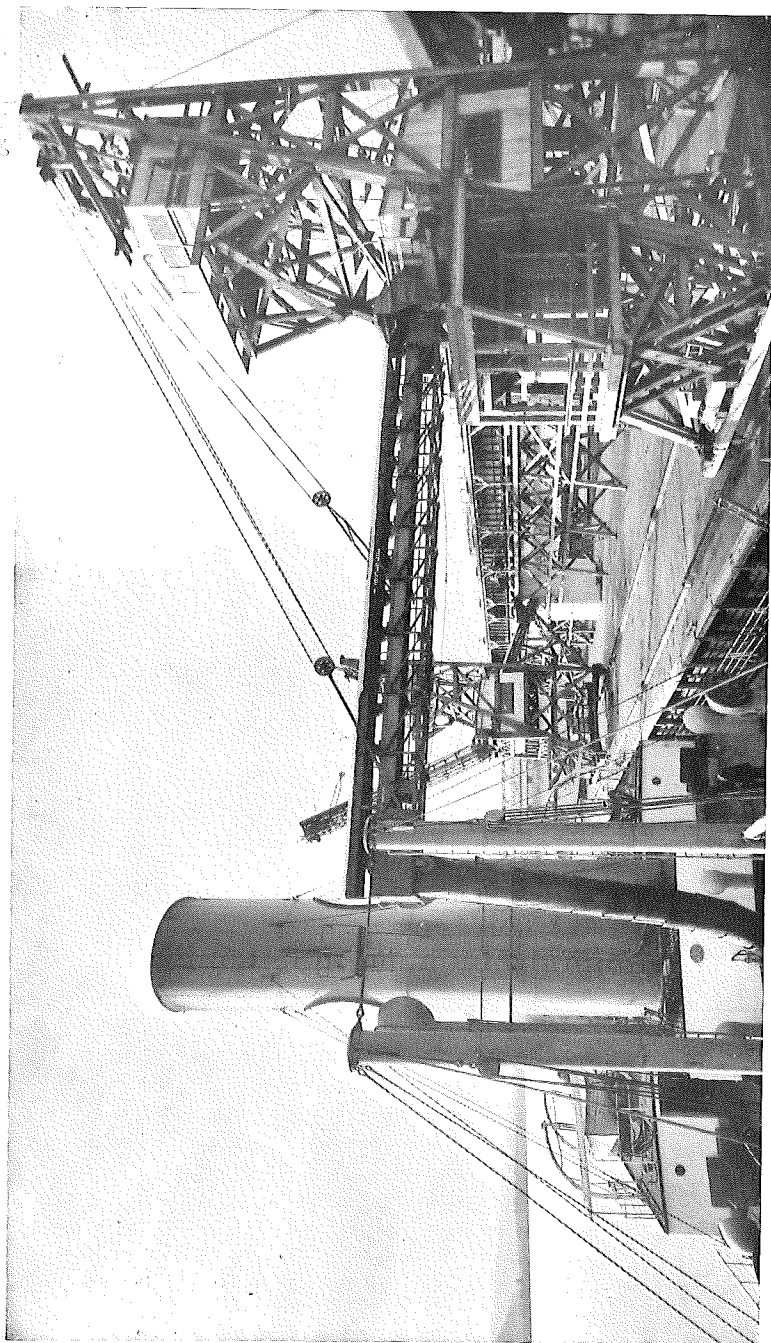
Length	468 feet
Width between wings	82 feet
Depth of water over keel blocks	25 feet
Lifting capacity, deadweight	10,000 tons
Number of pontoons	5

Dry Dock No. 2:

Length	492 feet
Width between wings	94 feet
Depth of water over keel blocks	27 feet
Lifting capacity, deadweight	15,000 tons
Number of pontoons	5

These dry docks are a publicly owned utility. All vessels and ship repairers use the docks on equal terms. The Port of Portland Commission does no work on vessels, but local contractors are equipped to perform all kinds of ship repairs. Competitive bids for repair work can readily be obtained at this port.

In connection with the dry docks, the Port of Portland Commission



HARBOR VIEW OF PIER NO. 5, MUNICIPAL TERMINAL NO. 4, SHOWING TRAVELING CONVEYOR TOWERS DELIVERING BULK CARGO FROM BULK STORAGE PLANT

has available for use by contractor, quite a complete repair plant consisting of locomotive cranes for lifting propellers, tail shafts and for other purposes. Also, air compressors, drills, forges, lathes, shapers and other tools. Compressed air and electric current for operating tools are supplied at current rates.

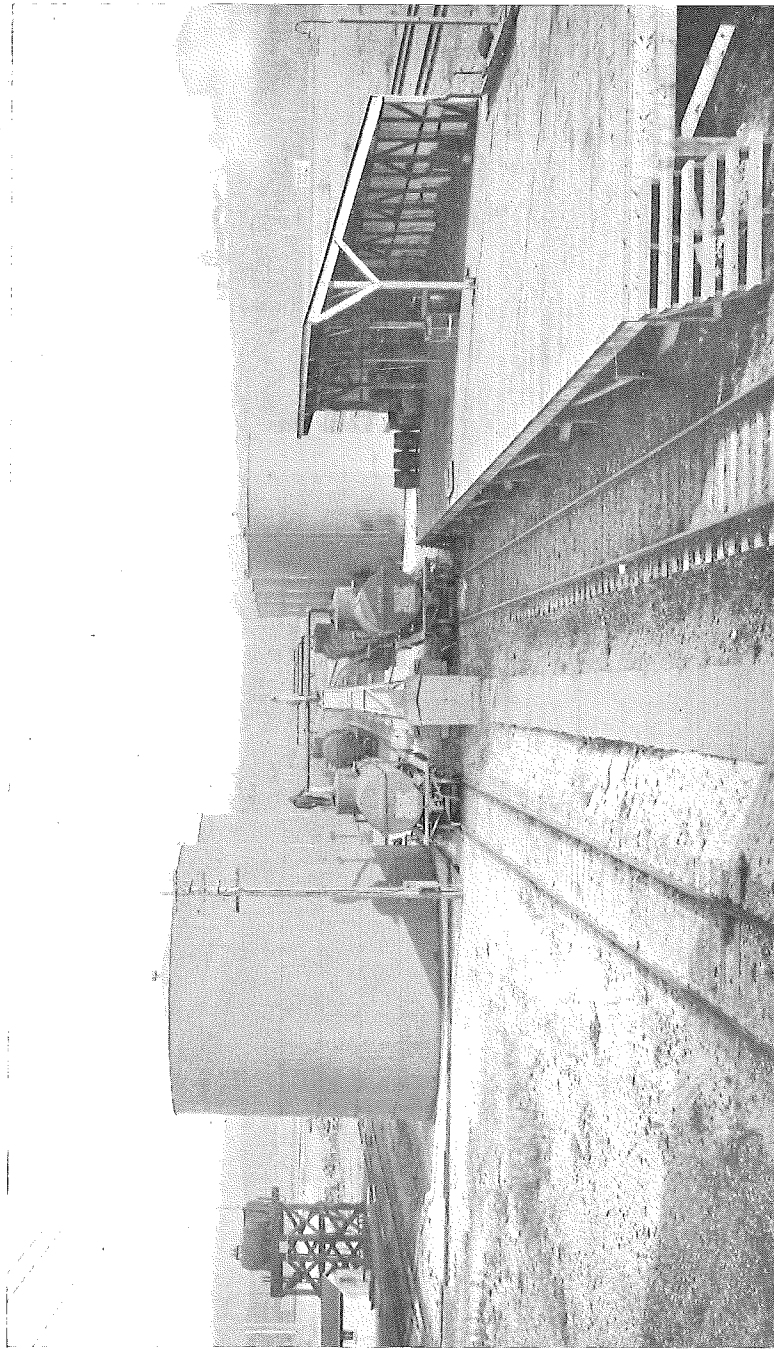
The Luckenbach Steamship Company, which for several years had been berthing its vessels and handled their cargo at Municipal Terminal No. 1, acquired the Montgomery Dock property, which, after having been remodeled and repaired, was in April occupied as the permanent terminal of that company, and in July the Admiral Line—Pacific Steamship Company—vacated Municipal Terminal No. 2, where it had been operating its vessels for several years, and took over the dock of the Spokane, Portland and Seattle Railway Company, having a length of 1000 feet. This move was made necessary by the increased number of vessels which the steamship company was providing for its service between this port and California ports.

The acquisition of these steamship lines of its own terminal facilities to a great extent eliminated the serious congestion which had prevailed at the municipal terminals for a considerable time and thereby enabled the Commission to give a much improved service to the other lines patronizing its own terminals. It also had the effect of, at least temporarily, postponing expenditures for the construction of additional facilities which the Commission had under consideration as necessary at that time, to adequately handle the port's constantly increasing waterborne commerce.

The only municipal facilities for the handling and shipping of grain are those provided at Terminal No. 4, where the 1,000,000-bu. elevator and Pier No. 1 are available for bulk and sack grain. In addition to these physical handling facilities the State Grain Inspection Department permanently maintains a sub-office, which inspects and grades all grain received and shipped at this terminal. This enables the exporters to receive their warehouse receipts and other negotiable documents nearly 24 hours earlier than if this work were performed at the main office of the inspection department. The inspection and grading service of the State is available at any time when work is carried on.

At the time the grain elevator was built it was the general opinion of wheat growers in the port's tributary territory that the use of sacks would gradually be discarded and the wheat handled on the bulk basis, and while for a time it seemed probable that elevator facilities would be provided in the interior for bulk storage, this failed to materialize and it now appears doubtful if anything will be done along these lines in the near future. The proportion of wheat shipped to tidewater in containers, therefore, continued to be large, and the record for the calendar year 1923 shows that 69 per cent of all the wheat received at Terminal No. 4 arrived in sacks and 31 per cent in bulk, and this ratio is practically uniform for the whole port. This is not only an extra expense added to

6-15-1918



AT MUNICIPAL TERMINAL NO. 4 A VERY COMPLETE PLANT IS PROVIDED FOR THE HANDLING AND STORAGE OF VEGETABLE OILS AND MOLASSES, INCLUDING PIPE LINES, TANK SCALES, PUMPS, STEAM PLANT, TANK CAR CLEANING FACILITIES, ETC.

the cost of unloading the wheat, but materially slows up operations during the first couple of months immediately after the harvest, when the annual rush season is on.

The exporting of wheat in bulk is steadily growing, however, and during the calendar year 1923, 78 per cent went out in bulk and only 22 per cent in sacks, which proportion is maintained throughout the port.

Because of the unusually smutty condition of the 1923 wheat crop, it was necessary to operate the scouring machines day and night for nearly two months in order to keep up with the demand for cargo loading, but as the Commission had taken the precaution to install two additional smutting machines early in the season, making a total of five installed, this operation was performed without delay to vessels.

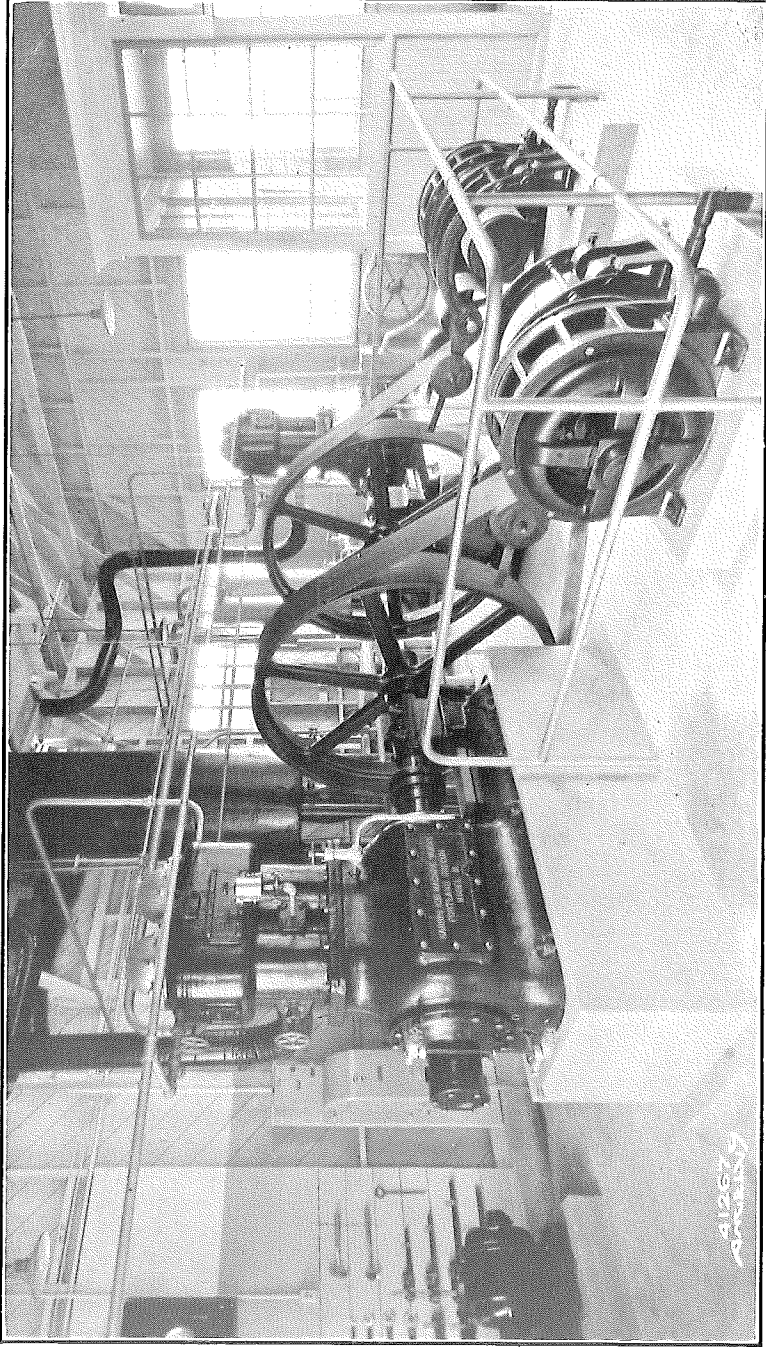
The matter of removing smut from wheat by washing process instead of lime scouring has had the attention of the Commission for some time and in view of the success attained by the use of washing machines at other terminal elevators in this district, the Commission undoubtedly will provide similar equipment in its elevator for use in handling next season's crop.

For a period of about three years the Commission had operated jointly with the Port of Portland Commission a Traffic Bureau, with the object of developing the waterborne commerce of the port, for which purpose representatives were maintained in New York City, the Orient, and South America. The Commission's participation in this work terminated with the close of the fiscal year, the Tax Supervising and Conservation Commission of the County of Multnomah having ruled that this Commission could not legally use its funds for that purpose. The operation of the Traffic Bureau is, however, being continued by the Port of Portland Commission.

At the close of the fiscal year the following steamship lines were maintaining regular service to the port and, in addition, there was a large number of tramp steamers which carried away a considerable portion of the port's local products, such as grain, flour, lumber, etc.

Foreign and Intercoastal—

- American-Hawaiian S. S. Co.
- Argonaut Line
- Asiatic-American S. S. Co.
- Blue Star Line
- Commercial Steamship Lines
- Compagnie Generale Transatlantique
- Dollar Line
- East Asiatic Company
- Elder Mittnacht Steamship Co.
- Ellerman's Wilson Line
- Furness Prince Line
- Garland Line
- General S. S. Company



INTERIOR OF SECTION OF ENGINE ROOM OF COLD STORAGE PLANT AT MUNICIPAL TERMINAL NO. 4

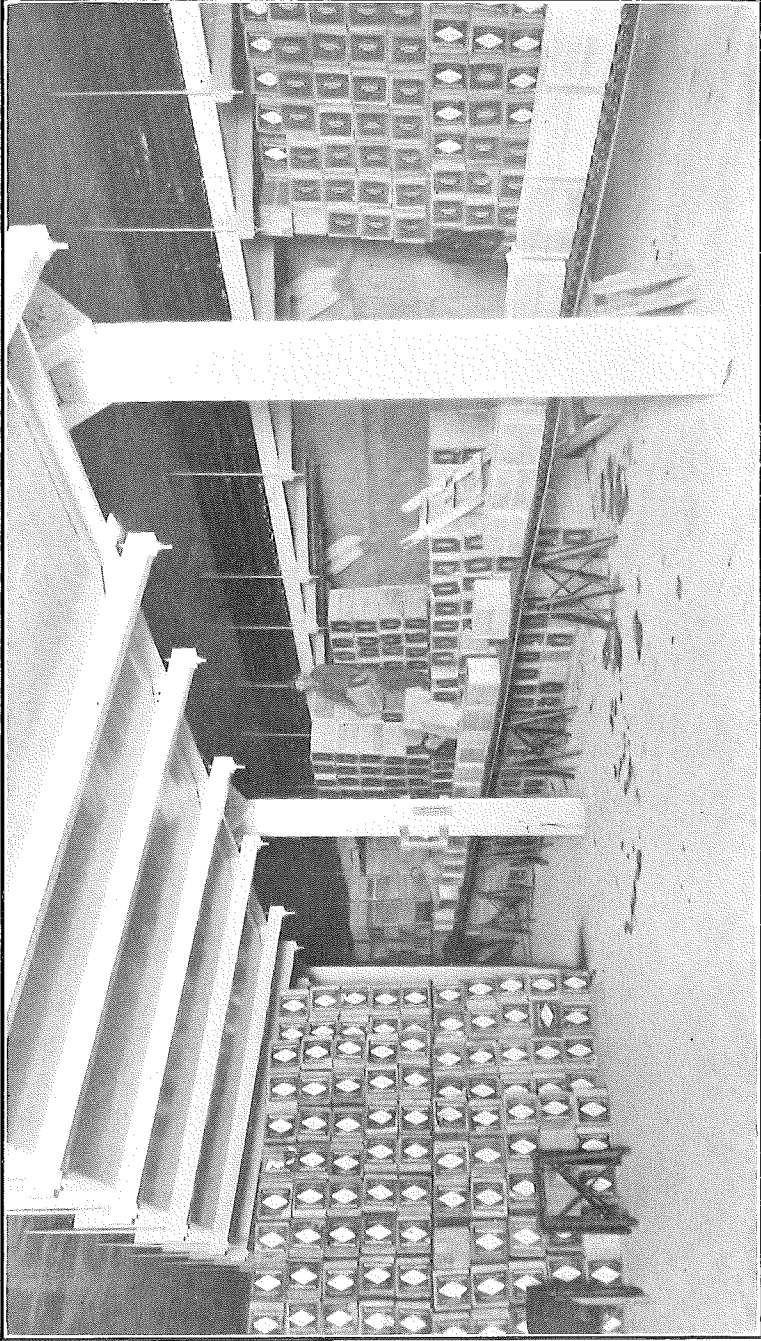
Grace Line
Harrison Direct Line
Holland America Line
Isthmian Line
Johnson Line
"K" Line
Luckenbach Line
Latin America Line
Munson-McCormick Line
Mitsui & Co.
North Atlantic & Western S. S. Co.
North China Line
Norway Pacific Line
Pacific Argentine-Brazil Line
Pacific Australia Line
Pacific Carribbean Gulf Line
Pan Pacific Line
Royal Mail Steam Packet Co.
South China Line
Toyo Kisen Kaisha
Transmarine Lines
United American Lines
Wing & Co.
Yamashita Kisen Korgyo Kaisha

Coastwise—

Admiral Line
Chas. Nelson Line
Columbia Navigation Co.
McCormick S. S. Co.
New Electra Line
Ocean Motorship Co.
San Francisco & Portland S. S. Co.
Siletz Navigation Co.

As will be noted from the comparative figures given herewith, there was a noticeable increase in the business of the port during 1923 as compared with the previous year. In 1923 a total of 1324 ocean-going vessels, of a net registered tonnage of 3,652,619 entered and 1322 vessels of a net tonnage of 3,667,737 cleared from the port. In 1922 these figures were 1160 vessels of 3,151,636 net tonnage entered and 1177 of a net tonnage of 3,175,523 cleared from the port, an average increase of about 14 per cent. Fifty-two per cent of the ocean-going vessels which entered the port in 1923, were accommodated at the municipal terminals, or 683 vessels. In 1922 the number was 739. The amount of tonnage handled over the municipal terminals was, however, greater in 1923 than in 1922, or 853,073 and 674,277 tons, respectively, an increase of about 24 per cent. In the appendixes of this report are given detailed statistics for the fiscal

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FOUR COLD STORAGE ROOMS WITH CAPACITY OF 105,000 BOXES OF APPLES ARE PROVIDED IN THE COLD STORAGE PLANT AT MUNICIPAL TERMINAL NO. 4

year 1923 and several previous years, of commodities and foreign and domestic imports and exports, from which comparisons are readily made as to the steadily increasing business and growth of the port.

The following statistics give the principal commodities handled through the port for the years 1922 and 1923:

Apples: 1922—623,238 boxes; 1923—742,708 boxes, an increase of 19 per cent.

Prunes: 1922—15,627 tons; 1923—11,735 tons, a decrease of 24 per cent.

Lumber—Foreign: 1922—239,904,839 ft. B. M.; 1923—323,615,423 ft. B. M., an increase of 35 per cent.

Lumber—Domestic: 1922—96,241,432 ft. B. M.; 1923—210,843,000 ft. B. M., an increase of 119 per cent.

Wheat—Foreign Exports: 1922—23,601,755 bushels; 1923—17,732,996 bushels, a decrease of 25 per cent.

Wheat—Domestic Exports: 1922—45,125 bushels; 1923—1,051,525 bushels, an increase of 2,235 per cent.

Flour—Foreign Exports: 1922—1,102,614 barrels; 1923—1,521,575 barrels, an increase of 38 per cent.

Flour—Domestic Exports: 1922—550,707 barrels; 1923—638,064 barrels, an increase of 16 per cent.

Wool: 1922—23,789,484 pounds; 1923—15,020,000 pounds, a decrease of 37 per cent.

Sulphur: 1922—14,524 tons; 1923—15,324 tons, an increase of 6 per cent.

Vegetable Oils: 1922—4089 tons; 1923—11,811 tons, an increase of 189 per cent.

Copra Imports: 1922—17,043 tons; 1923—24,163 tons, an increase of 41 per cent.

Doors—Foreign Exports: 1922—5,550 doors; 1923—60,500 doors, an increase of 990 per cent.

Doors—Domestic Exports: 1922—248,050 doors; 1923—361,500 doors, an increase of 46 per cent.

Cement—Foreign Imports: 1922—none; 1923—68,815 barrels.

Cement—Domestic Imports: 1922—160,541 barrels; 1923—121,484 barrels, a decrease of 24 per cent.

Hemp—Foreign Imports: 1922—7,980 bales; 1923—42,864 bales, an increase of 437 per cent.

Linseed—Foreign Imports: 1922—48,907 bags; 1923—105,613 bags, an increase of 116 per cent.

Glass—Foreign Imports: 1922—70,845 cases; 1923—84,851 cases, an increase of 20 per cent.

Total Imports and Exports of the Port:—

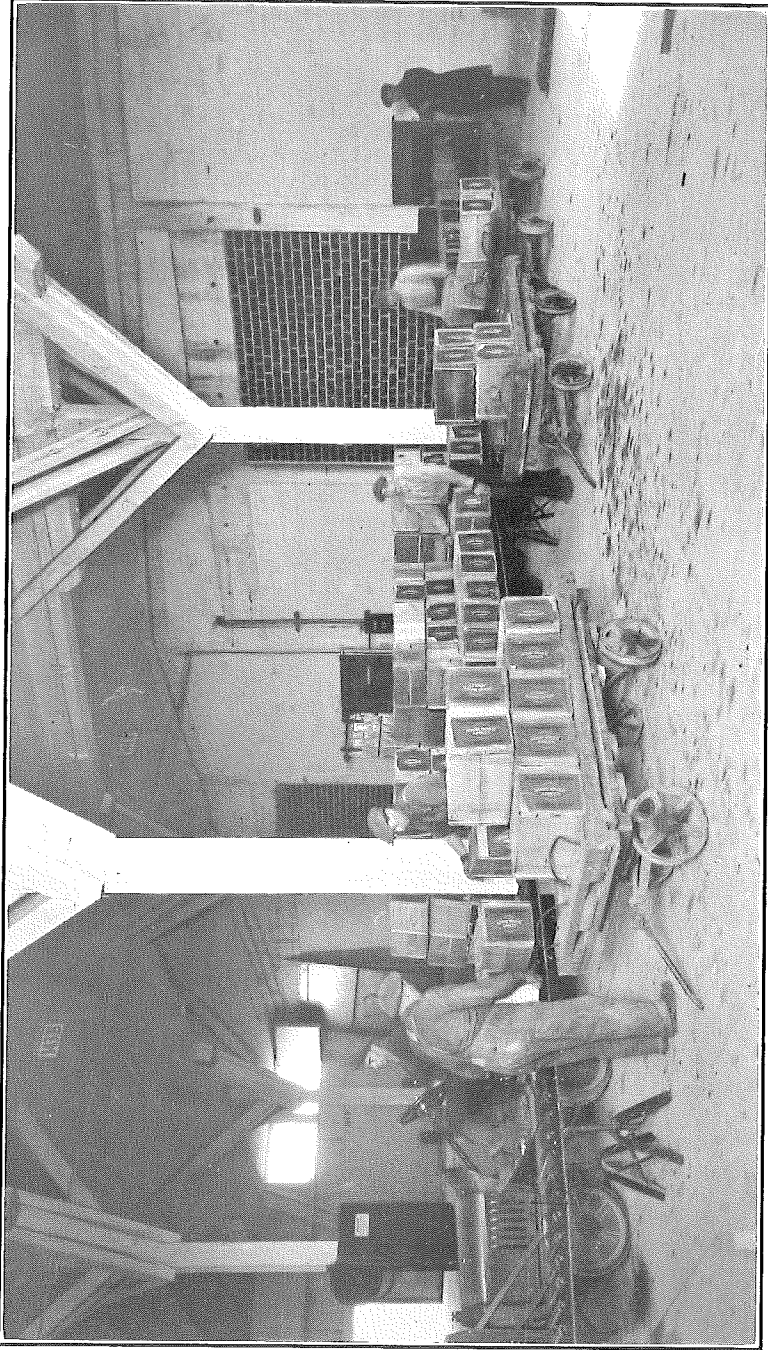
Foreign Imports: 1922—62,442 tons; 1923—105,453 tons, an increase of 69 per cent.

Domestic Imports: 1922—1,456,019 tons; 1923—1,900,188 tons, an increase of 30 per cent.

Foreign Exports: 1922—1,299,516 tons; 1923—1,261,615 tons, a decrease of 3 per cent.

Domestic Exports: 1922—434,132 tons; 1923—705,037 tons, an increase of 62 per cent.

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APPLES FOR EXPORT SHIPMENT BEING LOADED ON CARGO BOARDS FROM GRAVITY CONVEYORS LEADING OUT FROM COLD STORAGE ROOMS AT TERMINAL NO. 4 FOR DIRECT TRANSFER TO SHIP'S SLINGS

PORTLAND MUNICIPAL TERMINAL No 4

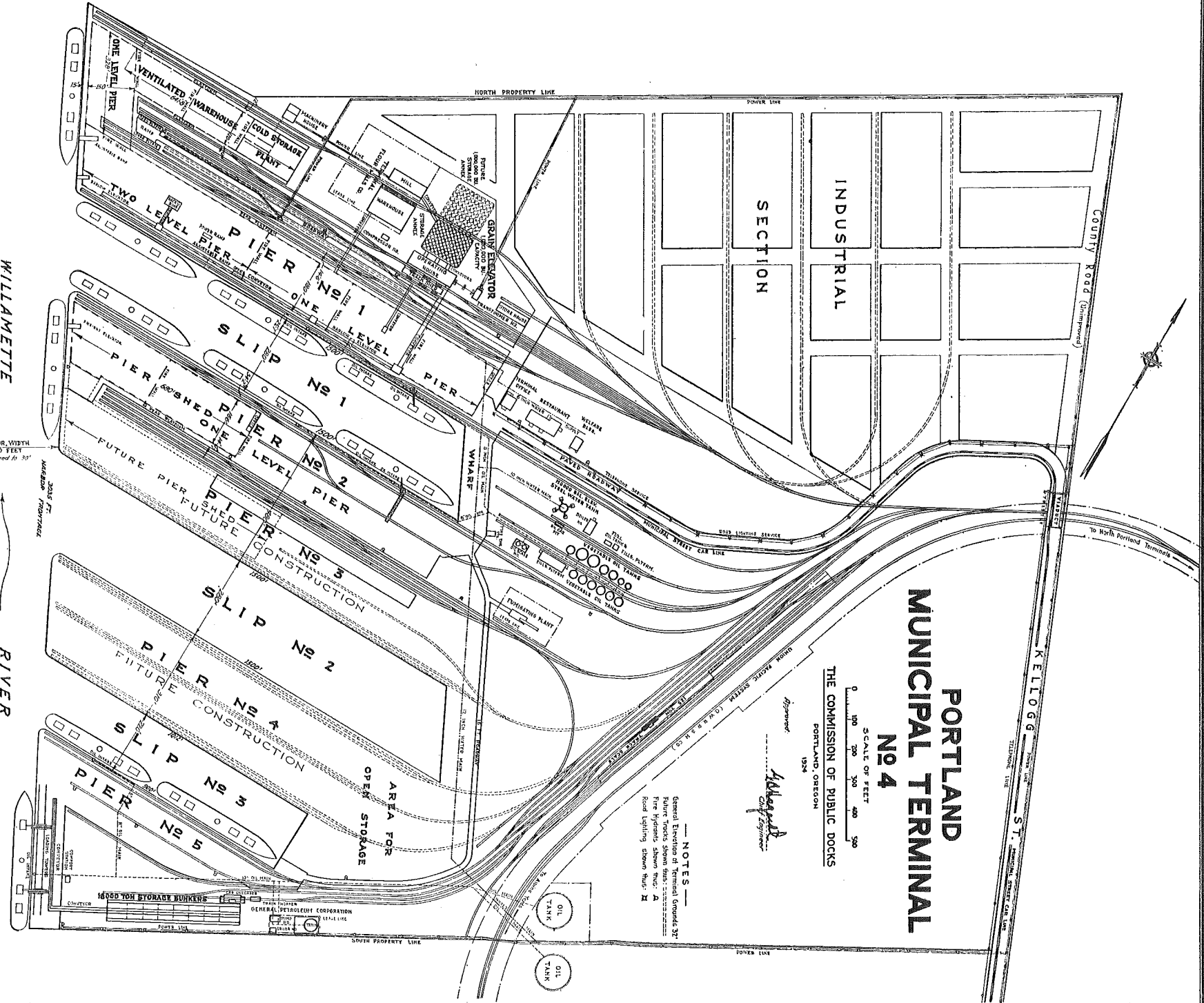
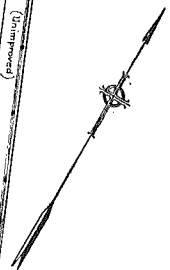
THE COMMISSION OF PUBLIC DOCKS
PORTLAND, OREGON
1934

SCALE OF FEET
0 100 200 300 400 500

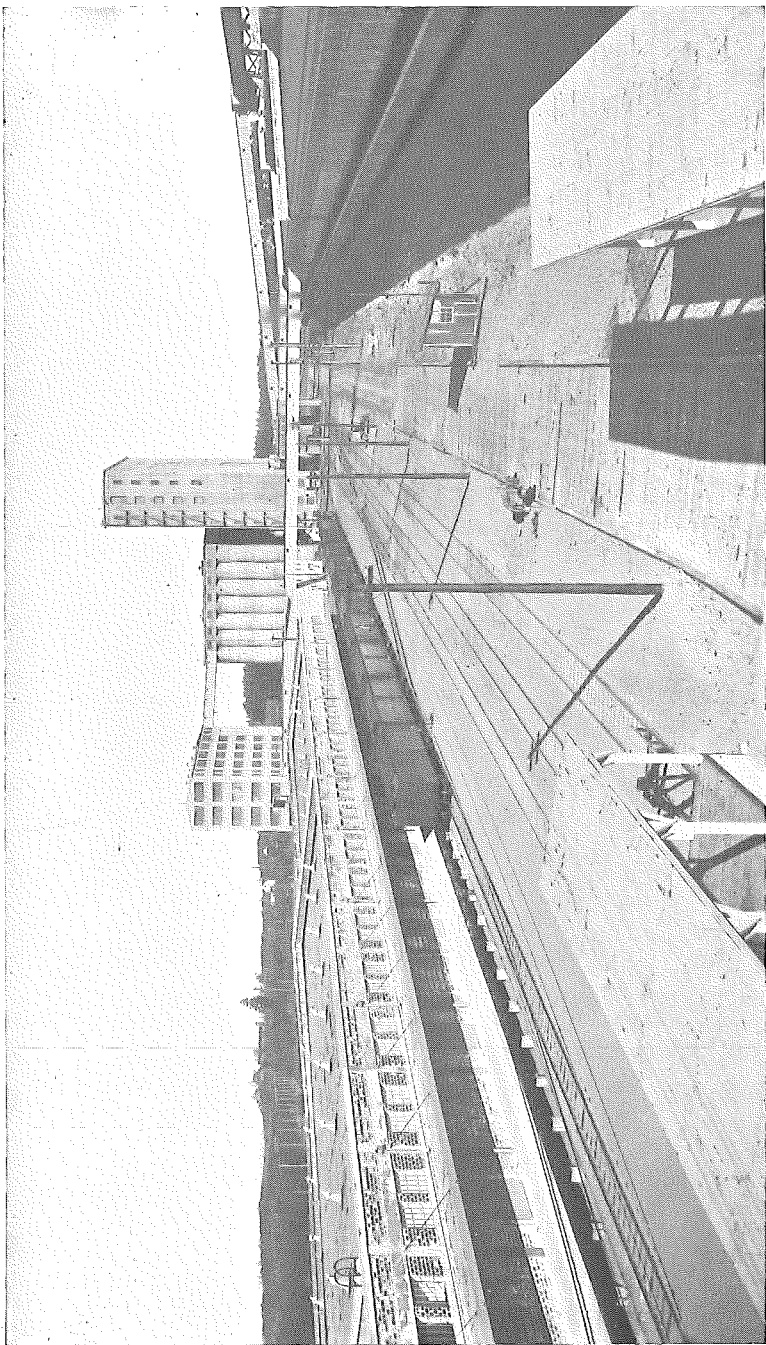
NOTES —

General Elevation of Terminal Grounds 32'
Future tracks shown thus: ————
Fire Hydrants shown thus: A
Road Lighting shown thus: H

Approved: *Alfred J. ...*
City Engineer



duplicate



VIEW IN REAR OF PIER NO. 1, MUNICIPAL TERMINAL NO. 4, VENTILATED AND COLD STORAGE WAREHOUSE AT LEFT, GRAIN ELEVATOR AND TERMINAL FLOUR MILLS IN BACKGROUND WITH CONVEYORS LEADING TO PIER NO. 1

A further channel advantage is that the ordinary period of low fresh water flow and minimum navigable depths occur only during the months of September and October, but extend occasionally beyond this period. During the remainder of the year the Willamette and Columbia Rivers, at the mouth of the Willamette River, average 8 feet in height above datum, being highest during the freshet period, May to June, inclusive. The increase in depth due to fresh water flow diminishes to zero at the mouth of the Columbia River, where the mean tidal range is 7.5 feet. At low water stages in the river, there is a tidal effect of about 2 feet at Portland. The normal low water depth in the ship channel and along the docks and piers in the harbor may, therefore, be considered as at least 34 feet.

PRIVATE WATERFRONT FACILITIES

As already noted, private interests have developed a considerable portion of the port's improved waterfrontage. As a general proposition it may be stated that the majority of these waterfront structures, those used in connection with deep sea shipping, were mostly constructed for a particular purpose, that of caring for the grain, flour and lumber trade, the principal commodities produced locally or in the port's tributary territory. These docks are well constructed and provided with the handling facilities best suited for the class of cargo passing over them and compare favorably with similar docks available at other Pacific Coast ports. For a better description of these facilities, they will be divided into four classes—General Cargo Docks, Grain Docks, Lumber Docks and Fuel Docks, excluding river steamers and industrial docks.

GENERAL CARGO DOCKS

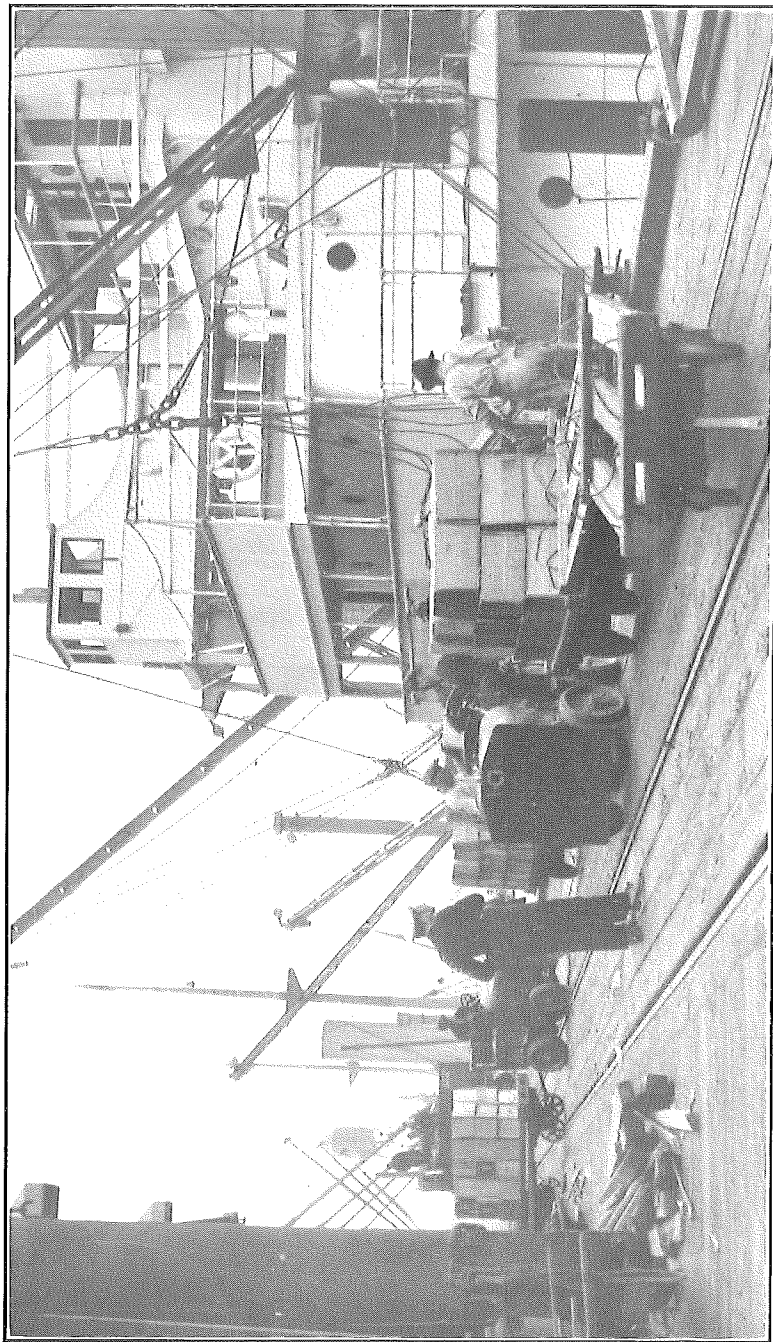
Oregon-Washington Dock (Union Pacific). Quay dock 420 feet long, with cargo space under shed of 49,000 square feet and trackage for 20 cars.

Ainsworth Dock (Union Pacific): Quay dock 1000 feet long, partly two-level, with cargo space under shed of 139,000 square feet and trackage for 20 cars. Dock has adjustable ramps for side port loading and unloading.

Albers Dock No. 1: Quay dock, 310 feet long, partly two level, with a total cargo space under shed of 64,000 square feet and trackage for 6 cars.

Albers Dock No. 3: Quay dock 305 feet long, partly two level, with total cargo space under shed of 79,200 square feet and trackage for six cars. Ample berthing space for this dock for large vessels by over-lapping on Albers Dock No. 2.

Couch Street Dock: Quay dock, 260 feet long, two level, with total cargo space under shed of 47,300 square feet. Used only by the smaller type of Coastwise vessels.



DELIVERING APPLES FOR EXPORT SHIPMENT FROM STORAGE TO VESSEL AT PIER NO. 1, TERMINAL NO. 4

Supple's Dock: Plant consists of two slips, each 310 feet long and 110 feet wide and one pier 310 feet long and 125 feet wide, covered with shed 100 feet by 295 feet.

Admiral Line Terminal—Pacific Steamship Company (Spokane, Portland & Seattle Railway): Quay dock, 1000 feet long, two level, with total cargo space under shed of 304,200 square feet, and trackage for 150 cars.

Luckenbach Terminal: Quay dock, 550 feet long, with total cargo space under shed of 145,600 square feet and trackage for 33 cars.

GRAIN DOCKS (ALSO FLOUR)

Portland Flouring Mills Dock: Two-level quay dock, 560 feet long with total cargo space under shed of 86,000 square feet and trackage for 40 cars.

Pacific Coast Elevator Dock: Quay dock, 560 feet long, with total cargo space under shed of 58,000 square feet and trackage for 30 cars.

Albina Dock: Quay dock, 775 feet long with total cargo space under shed of 66,700 square feet and trackage for 30 cars.

Crown Mills Dock: Two-level quay dock, 400 feet long, with total cargo space under shed of 71,000 square feet and trackage for eight cars.

Mersey Dock: Two-level quay dock, 325 feet long, with total cargo space under shed of 83,300 square feet and trackage for eight cars.

Albers Dock No. 2: Two-level quay dock, 178 feet long with a total cargo space under shed of 41,200 square feet and trackage for eight cars. Ample berthing space at this dock for large vessels by overlapping on Albers Dock No. 3.

Columbia Dock No. 1: Two-level quay dock, 355 feet long, with a total area under shed of 95,600 square feet and trackage for eight cars.

Irving Dock: Quay dock, 400 feet long, with total cargo space under shed of 101,000 square feet and trackage for 10 cars.

Globe Milling & Elevator Dock: Two-level quay dock, 380 feet long, with total cargo space under shed of 66,500 square feet and trackage for 32 cars.

Northwestern Dock (Union Pacific): Quay dock 580 feet long with total area under shed of 67,200 square feet and trackage for 28 cars.

These private general cargo and grain docks have a combined cargo capacity of 234,900 tons at one time. The grain docks are provided with cleaning facilities and electrical conveyors for delivering sacked grain and flour to vessels.

PRIVATE GRAIN ELEVATORS

Kerr-Gifford Company (operators): Elevator of fire-proof construction of 250,000 bushels capacity for bulk grain, with ship loading facilities.



INTERIOR VENTILATED WAREHOUSE FOR APPLE STORAGE, MUNICIPAL TERMINAL NO. 4. COMPLETE POWER AND GRAVITY CONVEYOR SYSTEMS ARE PROVIDED FOR ECONOMICAL HANDLING

Strauss & Company (operators): Elevator with capacity for bulk grain of 300,000 bushels, with two ship loading spouts. This elevator was constructed during the year and began operations in October.

LUMBER DOCKS

West Oregon Lumber Company Dock: Quay dock, 370 feet long and 134 feet wide.

Beaver Linnton Mills Co. Dock: Quay dock 300 feet long and 75 feet wide.

St. Johns Lumber Company Dock: Quay dock, 670 feet long and 90 feet wide.

Clark & Wilson Lumber Company Dock: Quay dock 980 feet long and 90 feet wide.

Peninsula Lumber Company Dock: Quay dock 1012 feet long and 125 feet wide.

Duluth-Oregon Lumber Company Dock: Quay dock 650 feet long and 105 feet wide.

Eastern & Western Lumber Company Dock: Quay dock 655 feet long and 156 feet wide, and Pier 100 feet wide with slip frontage of 598 feet.

Portland Lumber Company Dock: Quay dock 455 feet long and 138 feet wide.

Inman Poulsen Lumber Company Dock: Quay dock 1170 feet long and 188 feet wide.

Harvey Dock: Lumber storage and shipping, quay dock 620 feet long and 200 feet wide.

The Shanghai Building Company Dock: Quay dock 571 feet long and 110 feet wide.

FUEL DOCKS

Associated Oil Company: Quay dock 395 feet long. Tank storage capacity:

Crude oil	6,720,000 gallons
Refined oil	430,920 gallons

Standard Oil Company: Quay dock 400 feet long. Tank storage capacity:

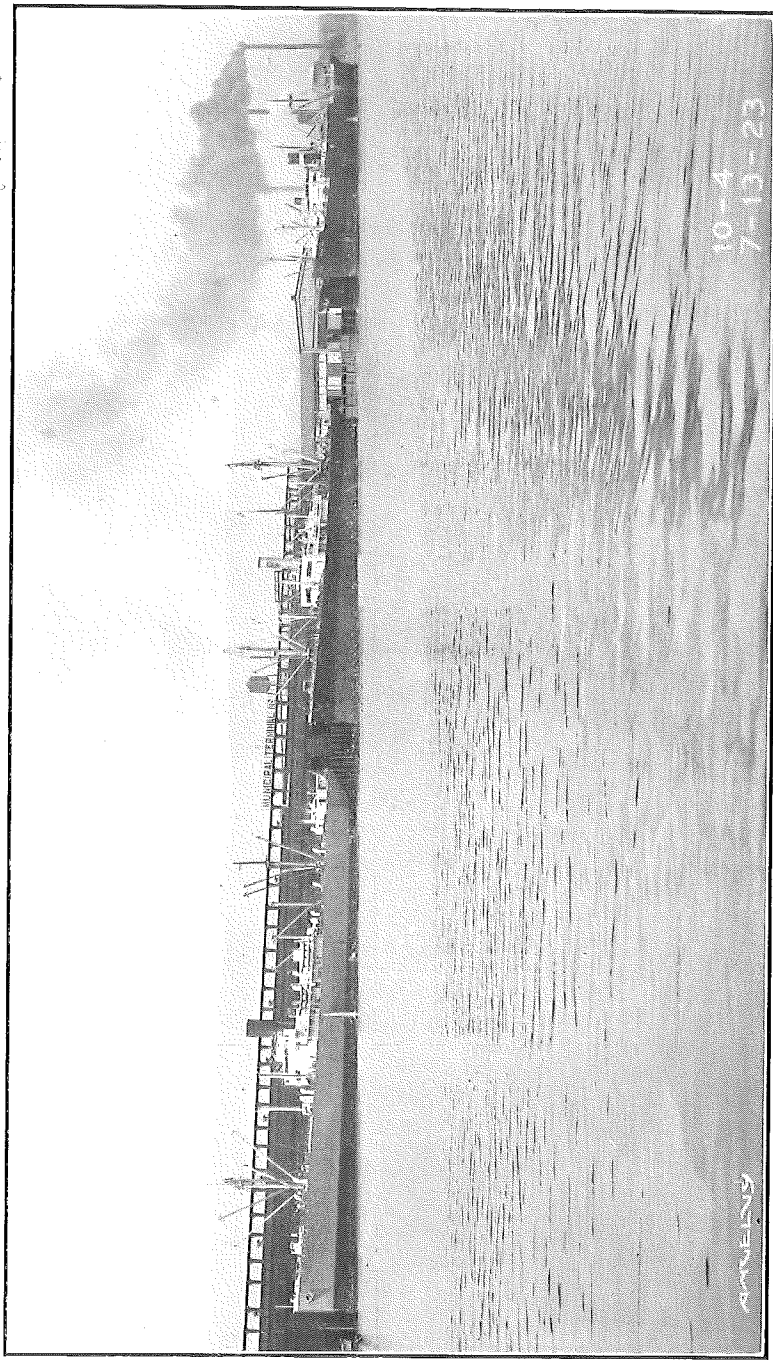
Crude oil	2,726,346 gallons
Refined oil	3,191,958 gallons

Union Oil Company of California: Quay dock 397 feet long. Tank storage capacity:

Crude oil	3,690,000 gallons
Refined oil	840,000 gallons

The Shell Company: Quay dock 350 feet long. Tank storage capacity:

Crude oil	4,620,000 gallons
Refined oil	2,100,000 gallons



HARBOR VIEW MUNICIPAL TERMINAL NO. 1

General Petroleum Corporation: This concern acquired the lease from the Union Pacific of a 55,000 barrel tank, located immediately adjacent to Municipal Terminal No. 4 and constructed another of the same capacity adjoining the Union Pacific tank for receiving fuel oil from tankers and also for delivering fuel oil to vessels, is under special agreement with the Commission, utilizing Pier No. 5, two berths being available for that purpose.

Crude oil4,620,000 gallons

When the large coal ship coaling plant belonging to the Pacific Coast Coal Company was destroyed by fire the latter part of November, this company transferred its coal bunkering activities to Municipal Terminal No. 4 where they are using the bulk storage plant, located on Pier No. 5 for assembling and delivering their ship bunkering coal. This plant delivers about 200 tons of coal per hour to vessels. Besides these fixed coal fueling facilities there are available in the port a large number of lighters or barges for coaling vessels while at berth, discharging or receiving cargo. For delivering fuel oil to vessels, two barges, one of 168,000 and the other of 84,000 gallons capacity are available, each barge being equipped with pumps delivering oil to vessels at the rate of 42,000 gallons per hour.

Crane Facilities: In addition to locomotive crane and derrick facilities at the municipal terminals and dry docks, a 75-ton sheerleg and a 35-ton stiff leg derrick are available for commercial work, centrally located in the harbor.

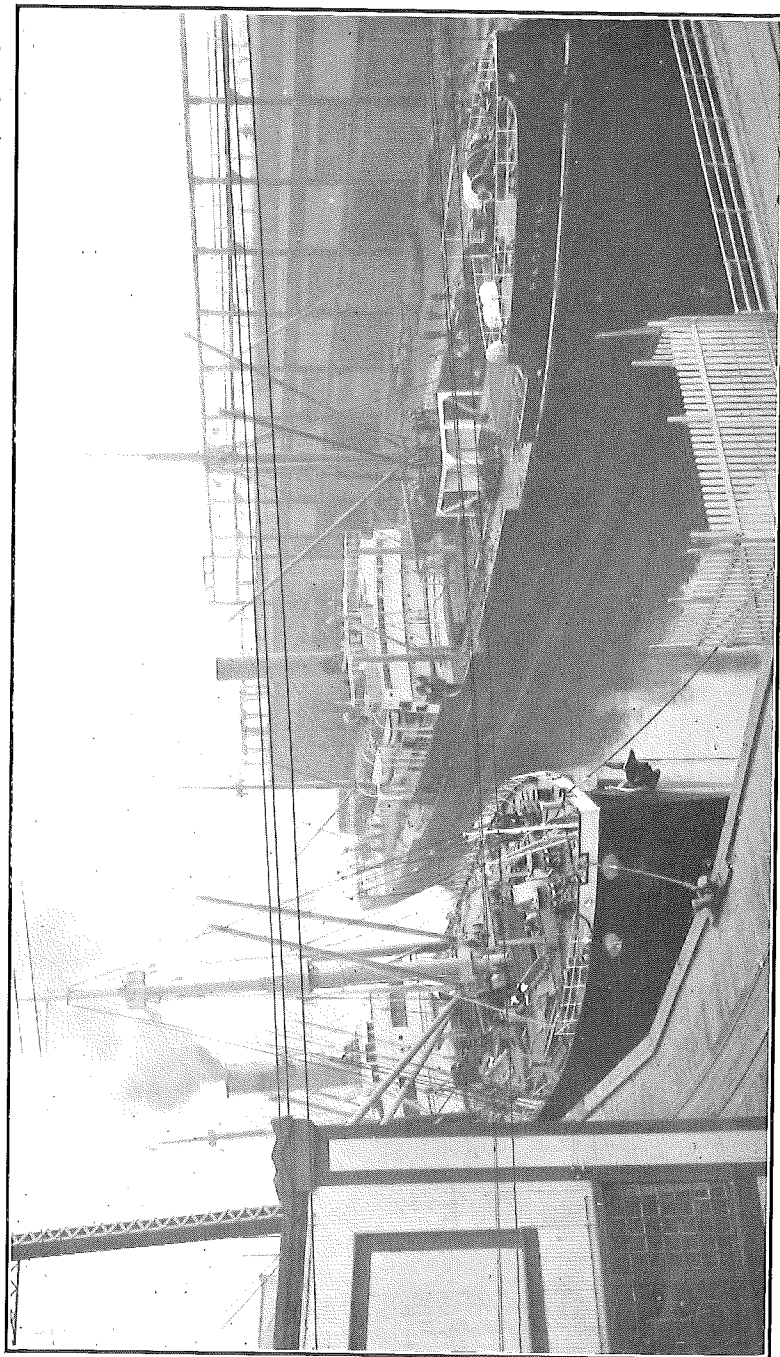
Harbor Protection: The harbor is under the protection of an efficient day and night patrol, acting under the direction of the harbormaster. Two powerful fire boats, maintained by the City, are always available for immediate use.

The revenues accruing from the operation of the municipal terminals have been very satisfying, as shown by the attached financial statement.

The municipal terminals of the port are directly operated by the Commission of Public Docks and not leased, being thus available to all users on equal terms. Dock loading and unloading and other charges are established by tariff and, as a general proposition, they are maintained at a parity with other Pacific Northwest ports so that terminal charges at these ports are for all practical purposes, equal.

Pursuant to Subdivision "K" Section 163 of the City Charter and to the statutes of the State of Oregon, and more particularly Section 8 of Chapter 208 of the general laws of Oregon for 1921, the Commission of Public Docks notified the County Clerk and the County Assessor that the tax levy of the department for the fiscal year ending November 30, 1923 had been fixed at \$710,220.83.

CLIP 303



SLIP NO. 1 AT MUNICIPAL TERMINAL NO. 1. PIER "A" IS AT RIGHT, PIER "B" AT LEFT

Pursuant to Section 163 of the Charter of the city of Portland as revised by the Council August 19, 1914, there is submitted herewith an itemized account of the receipts and disbursements of the current year.

All ordinances passed by The Commission of Public Docks are matters of public record and are on file in the office of the Auditor of the City of Portland, and also in the office of the Commission.

Respectfully submitted,

JOHN H. BURGARD,

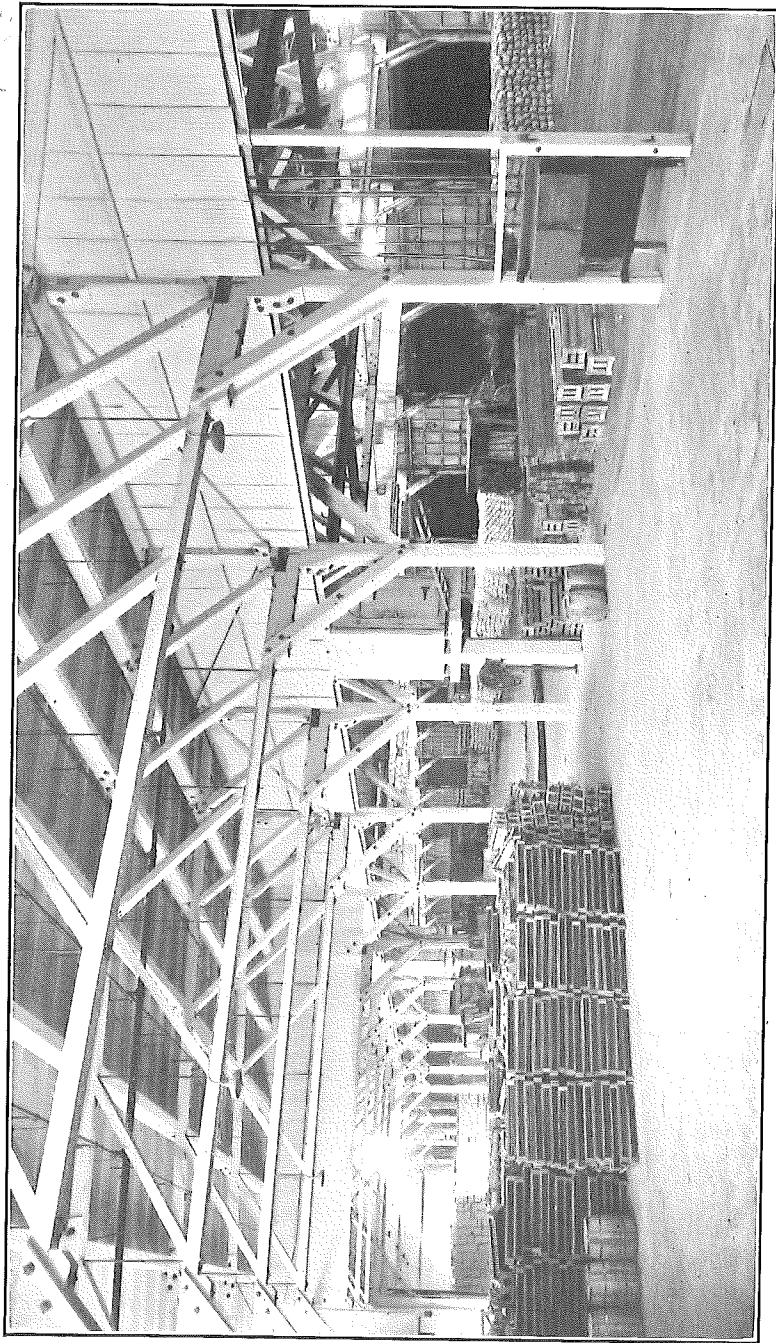
Chairman, The Commission of Public Docks.

BALANCE SHEET—THE COMMISSION OF PUBLIC DOCKS OF THE CITY OF PORTLAND, OREGON,
FISCAL YEAR ENDED NOVEMBER 30, 1923

ASSETS		
Cash:		
General Fund	\$136,304.81	
Construction Fund	58,385.28	
Sinking Funds	9,178.25	
Special Funds	36,272.89	
Contingent Fund	20,000.00	
	\$260,141.23	
Investments:		
Construction Fund Securities	655,000.00	
Sinking Fund Securities	639,147.05	
Special Fund Securities	53,000.00	
	\$1,347,147.05	
Accounts Receivable		
Taxes Receivable	83,344.93	
	102,431.89	
Real Estate:		
Municipal Terminal No. 1	1,310,914.26	
Municipal Terminal No. 2	355,531.27	
Municipal Terminal No. 3	41,118.40	
Municipal Terminal No. 4	150,574.74	
Public Levee	655.00	
Ferry Landing	10.00	
	\$1,858,803.67	
Plant:		
Municipal Terminal No. 1	865,222.54	
Municipal Terminal No. 2	292,769.88	
Municipal Terminal No. 3	58,335.37	
Municipal Terminal No. 4	5,650,928.59	
Municipal Street Railway	63,537.96	
Municipal Boat Landing	46,196.88	
Woodward Ave.	4,740.27	
	\$6,981,725.49	
Equipment:		
Municipal Terminal No. 1	26,681.80	
Municipal Terminal No. 2	3,334.26	
Municipal Terminal No. 3	1,597.27	
Municipal Terminal No. 4	107,628.85	
General	11,368.79	
	\$150,610.97	
Deferred Charges:		
Prepaid Insurance	20,064.53	
Bond Discount	438,957.50	
	\$459,022.03	
Amort. of Discount & Premium on Bonds Sold		
Less Suspended Charges to Surplus	106,221.02	
	106,221.02	
Total Assets		
	\$11,243,227.26	

BALANCE SHEET—THE COMMISSION OF PUBLIC DOCKS OF THE CITY OF PORTLAND, OREGON,
FISCAL YEAR ENDED NOVEMBER 30, 1923—Continued

LIABILITIES				
Accounts Payable				\$40,622.30
Bonded Debt:				
Issue	Amount	Unsold	Redeemed	Balance
Dock Bonds	\$2,500,000.00	\$99,800.00	\$ 200.00	\$2,400,000.00
Elevator Bonds	3,000,000.00		305,000.00	2,695,000.00
Harbor Bonds	5,000,000.00		210,000.00	4,790,000.00
St. Johns Bonds	60,000.00			60,000.00
				<u>\$ 9,945,000.00</u>
Deferred Credits:				
Premiums on Bonds Sold				23,018.40
Total Liabilities				<u>\$10,008,640.70</u>
RESERVES				SURPLUS
Reserve:				
For Unpaid Taxes	\$ 99,991.49		Surplus A—Free Surplus	\$ 146,331.05
For Maintenance	109,570.19		(Emergency Fund)	
For Insurance	22,120.03		Surplus B—Redemption Account	515,200.00
For Bad Accounts	4,000.00		Less Loss on Dry Dock	292,418.12
For Advance Taxes	2,440.40			<u>\$ 222,781.88</u>
For Uncalled for Checks	462.05			
	<u>\$ 238,584.16</u>		Surplus C—Operating Funds	12,879.97
Sinking Funds (Bond Redemption)	614,009.50		Transferred to Capital Account...	<u>\$ 381,992.90</u>
Total Reserves	<u>\$852,593.66</u>		Total Surplus	
			Total Liabilities, Reserves	\$11,243,227.26
			and Surplus	



INTERIOR OF NORTHERLY SECTION OF QUAY DOCK AT MUNICIPAL TERMINAL NO. 1

**REVENUE AND EXPENSE—THE COMMISSION OF PUBLIC DOCKS OF THE CITY OF PORTLAND,
OREGON, FISCAL YEAR ENDED NOVEMBER 30, 1923**

OPERATING ACCOUNT

REVENUE		EXPENSE	
Tax Receipts:		Administration:	
Delinquent	\$ 50,280.78	Personal service	\$ 50,315.55
1923 Tax Roll	641,609.65	Office supplies	4,604.23
1924 Tax Roll	2,440.40	Subscriptions	1,480.18
		Travel expense	3,890.88
		Supplies for boat landing	460.34
		Engineering supplies	443.59
		Sundry expense	6,888.25
Used for debt purposes	694,330.83	Joint traffic expense	37,307.03
		Emergency	35.00
		Insurance	1,032.76
		Maintenance	963.84
Interest on daily bank balances....		Equipment depreciation	97.97
		Reserve for bad debts—less recoveries	103.38
			\$107,643.00
Operating Revenue:		Terminal Operation:	
Terminal No. 1:		Terminal No. 1:	
Services furnished others	54,414.81	Services furnished others	37,701.37
Wharfage	92,192.04	Personal service	30,931.88
Dockage	212.60	Office supplies	533.34
Storage	12,621.87	Dock supplies	2,115.78
Rental of equipment	13,796.38	Fire protection—A. D. T. System	535.00
Space rental	1,470.11	Telephone, electric current, water, heat	4,185.57
Public scales	68.00	Sundry expense	1,325.95
Electric current	45.58	Emergency	5.97
Water	755.10	Insurance	2,618.67
		Maintenance	25,003.48
		Depreciation of equipment	1,945.95
			107,202.96
Terminal No. 2:		Terminal No. 2:	
Services furnished others	20,816.81	Services furnished others	12,929.77
Wharfage	30,246.93	Personal service	10,011.02
Dockage	34.98	Office supplies	119.21
Storage	9,173.32	Dock supplies	225.21
Rental of equipment	823.81	Fire protection	174.00
Space rental	1,020.28	Telephone, electric current, water, heat	1,302.43
Electric current	196.71	Sundries	380.94
Water	335.45	Insurance	1,128.62
		Maintenance	1,212.55
		Depreciation of equipment	659.33
			28,143.11

REVENUE AND EXPENSE—THE COMMISSION OF PUBLIC DOCKS OF THE CITY OF PORTLAND,
OREGON, FISCAL YEAR ENDED NOVEMBER 30, 1923—Continued
OPERATING ACCOUNT—Continued

REVENUE		EXPENSE	
Terminal No. 3:		Terminal No. 3:	
Services furnished others	\$ 2,568.25	Services furnished others	\$ 2,101.23
Wharfage	1,439.59	Personal service	4,879.11
Dockage	18.40	Office supplies	31.32
Storage	6,174.08	Dock supplies	27.35
Rental of equipment	2.47	Fire protection	144.00
Water	2.00	Telephone, electric current, water, heat	179.36
		Sundries	13.62
		Insurance	727.95
		Maintenance	200.74
		Depreciation of equipment	377.87
	\$10,204.79		\$8,682.55
Terminal No. 4:		Terminal No. 4:	
Services furnished others	166,242.43	Services furnished others	140,752.68
Wharfage	142,851.64	Personal services	69,070.68
Dockage	586.72	Office supplies	1,273.11
Storage	41,806.98	Dock and elevator supplies	14,892.84
Rental of equipment	6,997.08	Fire protection	1,708.78
Space rental	5,669.50	Telephone, power, water, heat, Leases	12,445.30
Weighing	1,869.81	Sundries	10.00
Water	878.81	Emergency	1,456.56
Electric current	118.60	Insurance	262.82
		Maintenance	21,386.40
		Depreciation of equipment	18,020.11
			3,947.66
	367,021.57		285,156.94
Miscellaneous:		Street Railway:	
Public levee rentals	3,254.64	Operation cost less revenue....	6,491.26
		Sundry maintenance	52.56
		Dry Dock: Insurance	
		Harbor Development: Plans for development of Pier "C" and Dock No. 1, Term. No. 1	5,814.64
	3,254.64	Reserve for Maintenance	1,821.71
		Reserve for Insurance	42,488.06
	\$663,294.27		4,827.26
			\$598,324.05

REVENUE AND EXPENSE—THE COMMISSION OF PUBLIC DOCKS OF THE CITY OF PORTLAND,
OREGON, FISCAL YEAR ENDED NOVEMBER 30, 1923—Continued

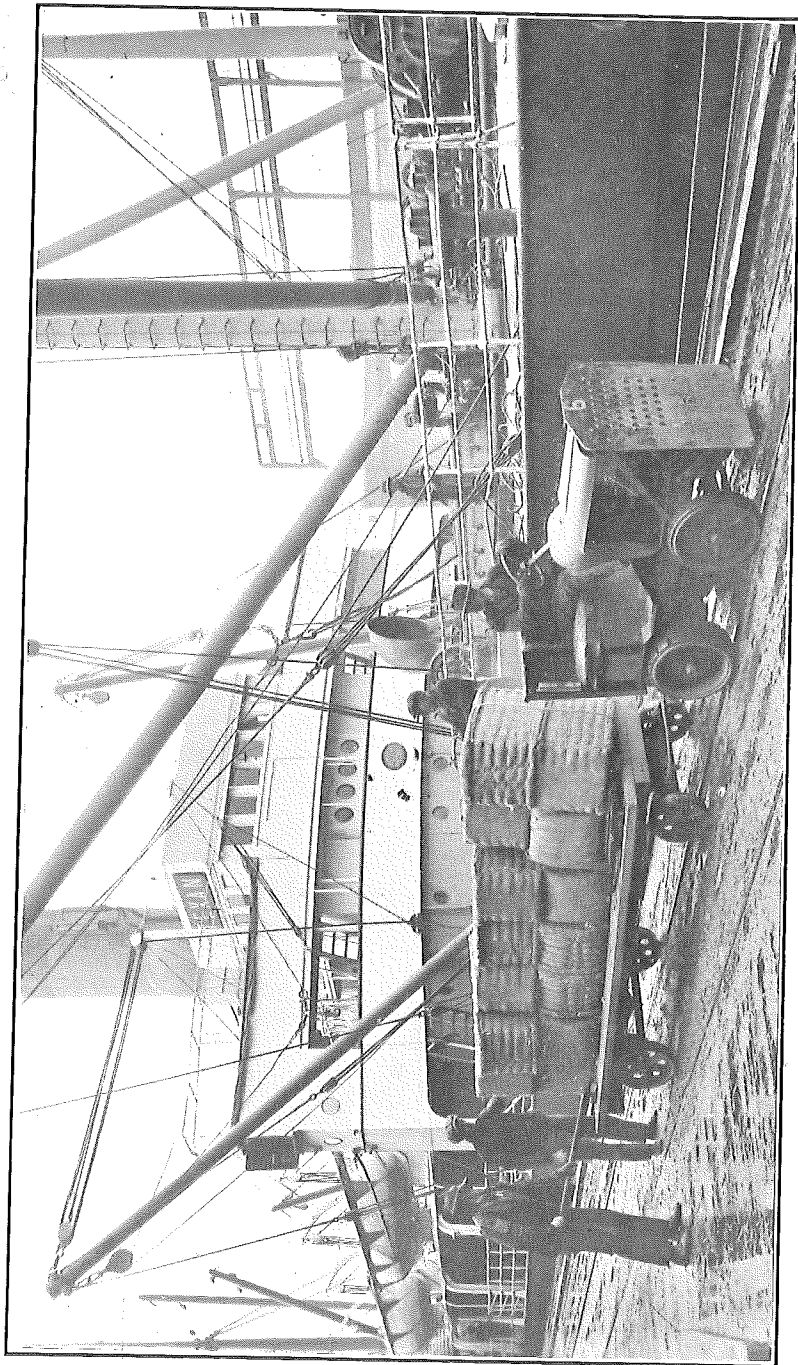
CAPITAL ACCOUNT

Interest earnings	25,001.56
REVENUE	

DEBT ACCOUNT

DEBIT ACCOUNT	
Tax receipts for debt purposes	\$ 658,404.87
Interest earnings	28,512.96
Total Revenue, all sources	1,375,212.96
Interest on bonded debt	\$ 454,097.50
Total Expense, all accounts	1,052,421.55
1923 surplus	322,791.41
	\$1,375,212.96

*See Detail of Surplus Account.—Page 51.



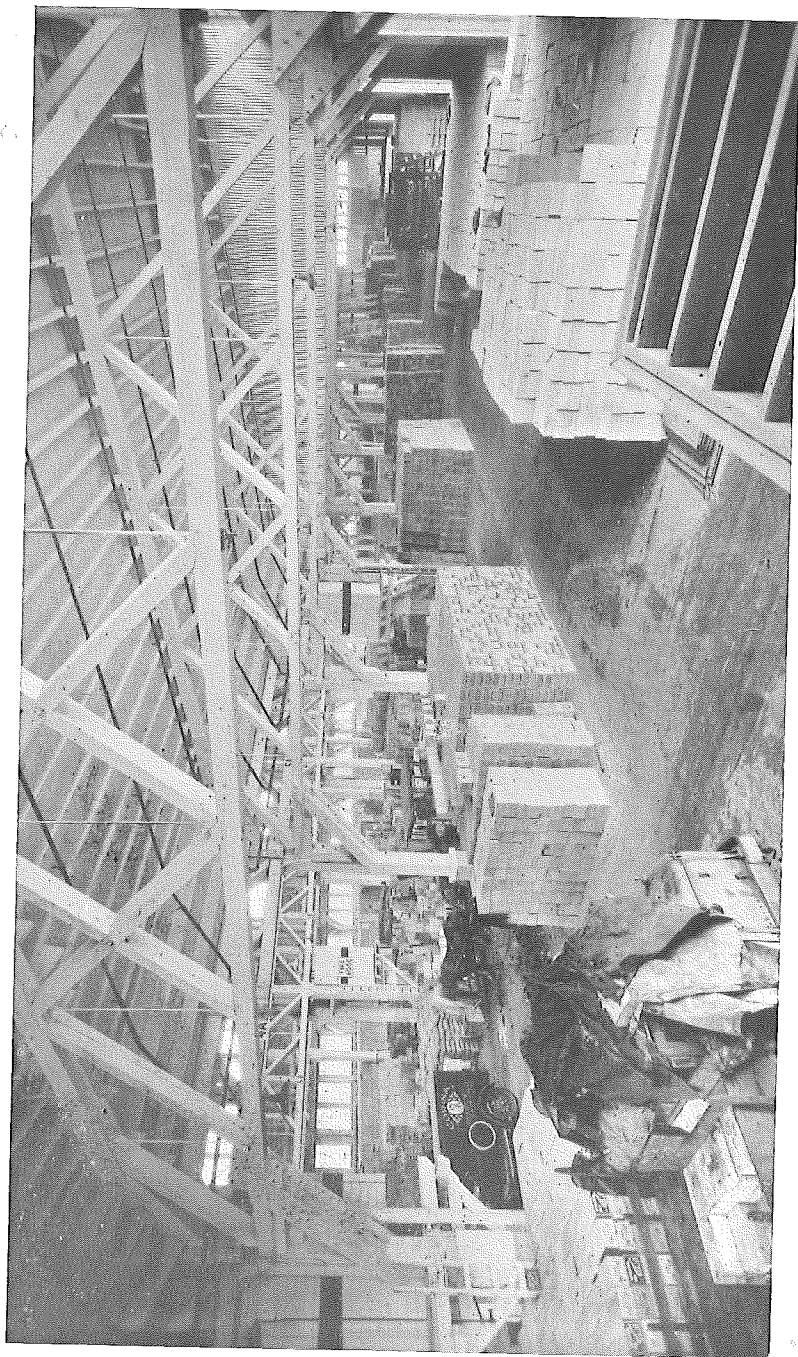
LOADING WOOL AT PIER B, TERMINAL NO. 1. 4 AND 6 TON CAPACITY TRAILERS WITH TRACTORS ARE PROVIDED FOR THE ECONOMICAL HANDLING OF CARGO FROM WAREHOUSE TO VESSELS SLINGS

ADJUSTMENT OF SURPLUS ACCOUNT

Unadjusted surplus account as of Dec. 1, 1922		\$ 515,757.19
Plus Bond Discounts	\$ 438,957.50	
Less Bond Premiums	23,018.40	415,939.10
		<u>\$ 931,696.29</u>
Plus adjustment Reserve for Bad Accounts..	5,521.33	
Plus adjustment Reserve for Bad Accounts..	15,617.84	
Minus adjustment Reserve for Bad Accounts	86.32	21,052.85
		<u>952,749.14</u>
Plus surplus revenue fiscal year 1923		322,791.41
		<u>1,275,540.55</u>
Cost of floating dry dock	1,242,418.12	
Transferred to The Port of Portland	950,000.00	
		<u>292,418.12</u>
Amount written off books		983,122.43
Gross surplus revenue period 1912 to 1923 incl.		

DETAIL OF GROSS SURPLUS REVENUE

Total appropriated for Sinking Funds	\$ 614,009.50
Total of Bonds Redeemed	515,200.00
Free Surplus or Emergency Fund (authorized by Tax Commission)	146,331.05
	<u>1,275,540.55</u>
Less adjustment a/c Dry Dock	292,418.12
Gross surplus revenue period 1912 to 1923 incl.	<u>983,122.43</u>



INTERIOR PIER "B", MUNICIPAL TERMINAL NO. 1

CONSTRUCTION FUND**Receipts**

Sale of Construction Fund Securities	\$144,000.00
Transfer of Construction Fund Securities	151,000.00
Interest on Construction Fund Securities	23,366.25
Interest on Bank Cash	1,635.31

Plant, Terminal No. 4:

Sale of 12" water main from St. Johns to Terminal No. 4 to Water Bureau, City of Portland.	\$ 23,157.15	
Sale of concrete mixer and buggies at Public Auction to O. Ried	575.00	
Refund by P. R. L. & P. Co. of earnings of power transmission line financed by Commission of Public Docks as per contract	6,727.42	30,459.57

Inventory Terminal No. 4:

Refund of expense incurred in setting up and repairing Locomotive Crane purchased from Browning & Company	89.51
---	-------

Real Estate:

Sale at Public Auction of building on site of Pier "C" to F. J. Leary	55.00
	<u>350,605.64</u>

Balance, December 1, 1922	148,820.35
	<u>\$499,425.99</u>

Disbursements**Real Estate, Terminal No. 1:**

Filling Site of Pier "B"	\$ 1,166.25
Purchase Site of Pier "C"	152,500.00
Attorney and Recording Fee—Purchase Pier "C"	151.10

Real Estate, Terminal No. 4:

Dredge fill site of Apple Storage Whse.	2,771.87	
To relieve Real Estate of expense chargeable to Street Railway—Minus	2,064.96—	
		\$154,524.26

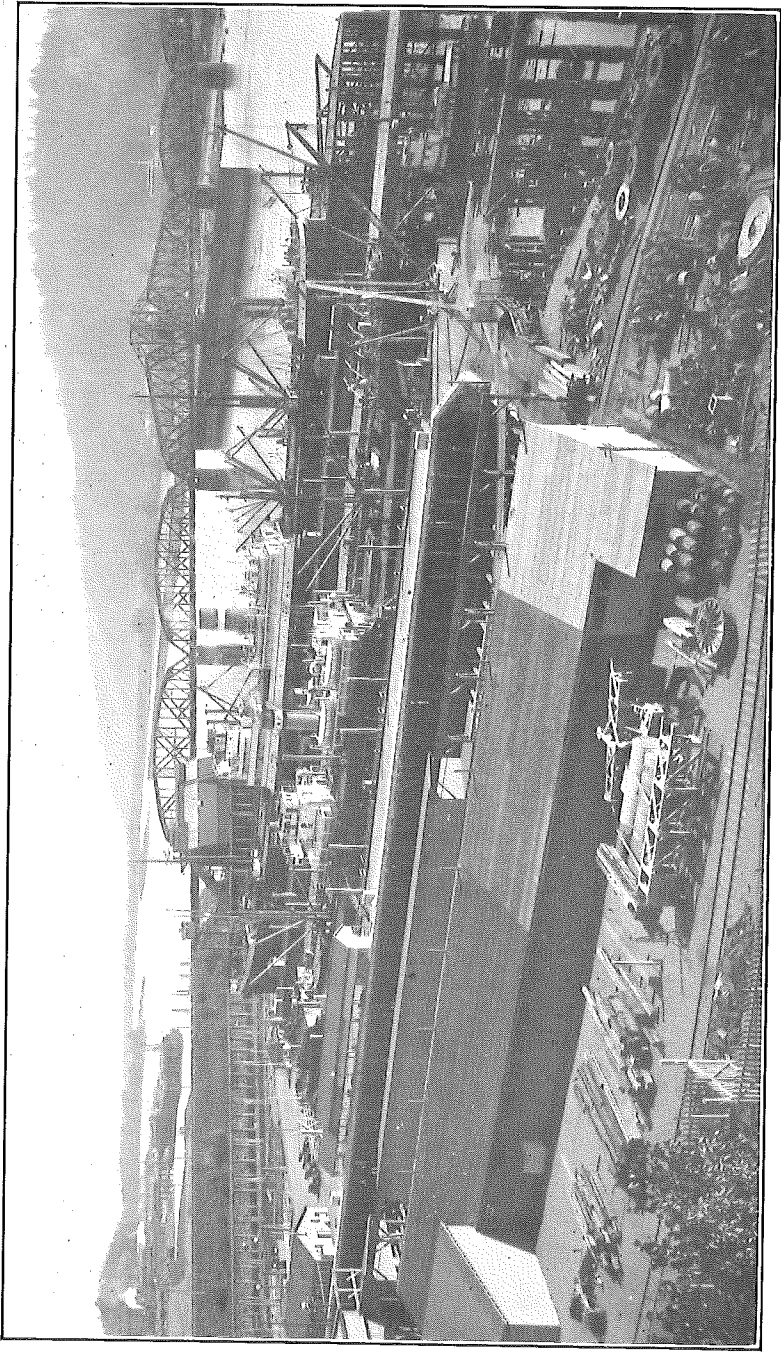
Plant, Terminal No. 1:

Widening Units 1 and 2	15,750.00	
Sundry Betterments	3,704.22	
		<u>19,454.22</u>

Plant, Terminal No. 2:

Sundry Betterments	52.68
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A COMPLETE DRY DOCK PLANT WITH TWO DRY DOCKS WITH LIFTING CAPACITIES OF 15,000 TONS AND 9,000 TONS IS PROVIDED BY THE PORT OF PORTLAND FOR THE CONVENIENCE OF SHIPPING

Plant, Terminal No. 4:

Pier No. 1, Harbor Extension	85,341.23	
Engineering Expense, same	1,393.80	
Ventilated Whse. and Cold Storage	126,534.93	
Engineering Expense, same	2,064.20	
Sprinkler System	1,014.29	
Grain Elevator	7,438.99	
Pier No. 1—Betterments	2,166.54	
Pier No. 2—Betterments	38.55	
Pier No. 3—Betterments	23.70	
Pier No. 5 and Bulk Storage	148.80	
Vegetable Oil Plant	804.95	
Roadways, Walks, Parks, etc.	122.30	
Insurance	41.65	
Trackage	5,465.13	
Engineering Expense, Miscellaneous	20.86	
Miscellaneous	995.09	
		233,615.01

Plant, Municipal Boat Landing:

Sundries	7.10
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Plant, Dry Dock:

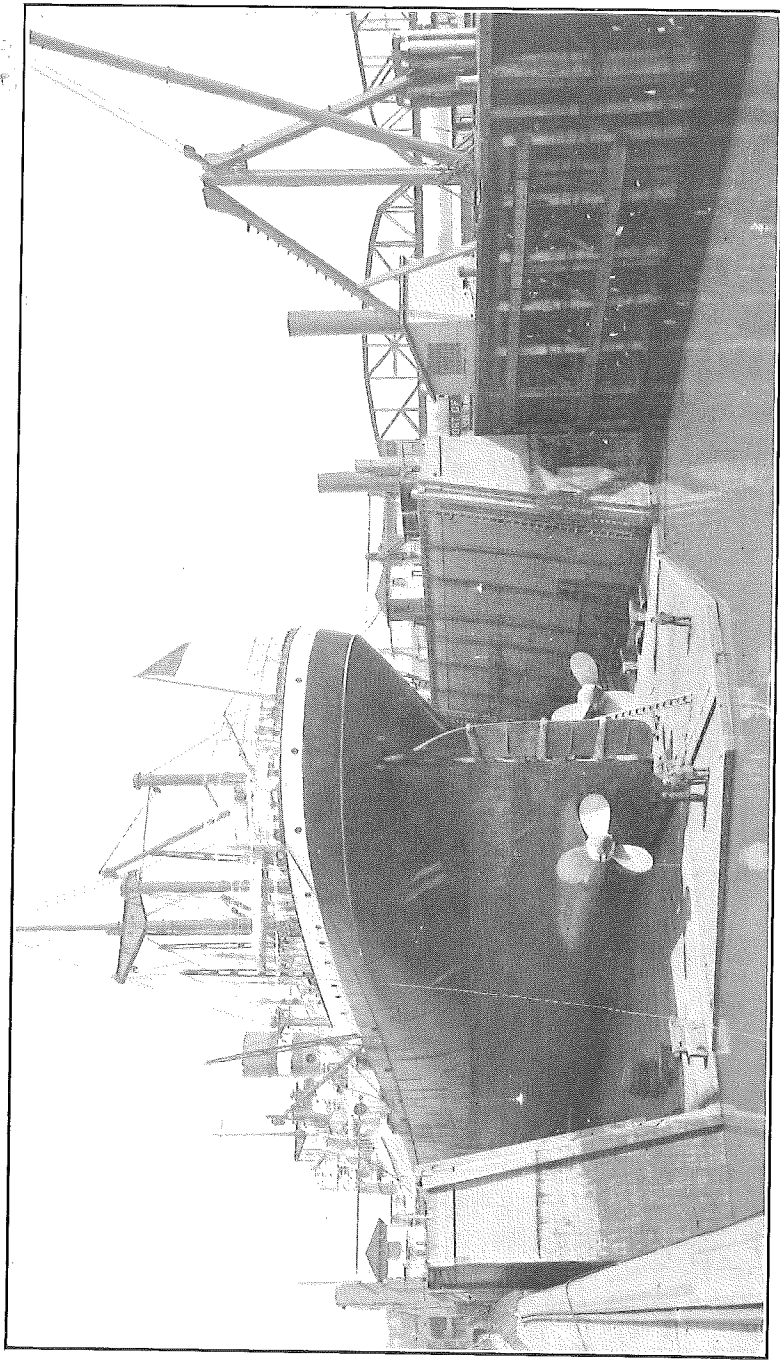
Outfitting	12,914.66
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Plant, Street Railway	2,275.88
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Equipment:

Terminal No. 1	990.16	
Terminal No. 2	8.19	
Terminal No. 4	13,714.70	
General	1,662.14	
		16,375.19
Harbor Development		1,821.71
		441,040.71

Balance, November 30, 1923	58,385.28
	\$499,425.99



M. S. "DINTELDYK" UNDERGOING REPAIRS ON 15,000 TON PORT OF PORTLAND DRY DOCK

GENERAL FUND**Receipts****Revenue From Operation:**

Terminal No. 1	\$187,357.94	
Terminal No. 2	65,999.17	
Terminal No. 3	9,506.32	
Terminal No. 4	314,448.17	
Public Levee	3,850.00	
		<u>\$581,161.60</u>

Interest Earnings:

On Daily Balances	8,632.53
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Taxes:

Current	641,609.65	
Delinquent	50,280.78	
Future	2,440.40	
		<u>694,330.83</u>

Sundries:

Bad Account Collections	634.40	
Accounts Recollectible Paid in	870.12	
Return Premiums on Insurance	1,423.96	
Return on P. R. L. & P. Co. Contract	2,622.02	
Refund—Phone Calls, Sales of Prints and Miscellany	153.44	
		<u>5,703.94</u>

Balance, December 1, 1922	181,249.92
	<u>\$1,471,078.82</u>

Disbursements**Administration:**

Personal Service	\$ 50,134.05	
Joint Traffic	36,641.41	
Supplies and Expense	17,818.47	
		<u>\$104,593.93</u>

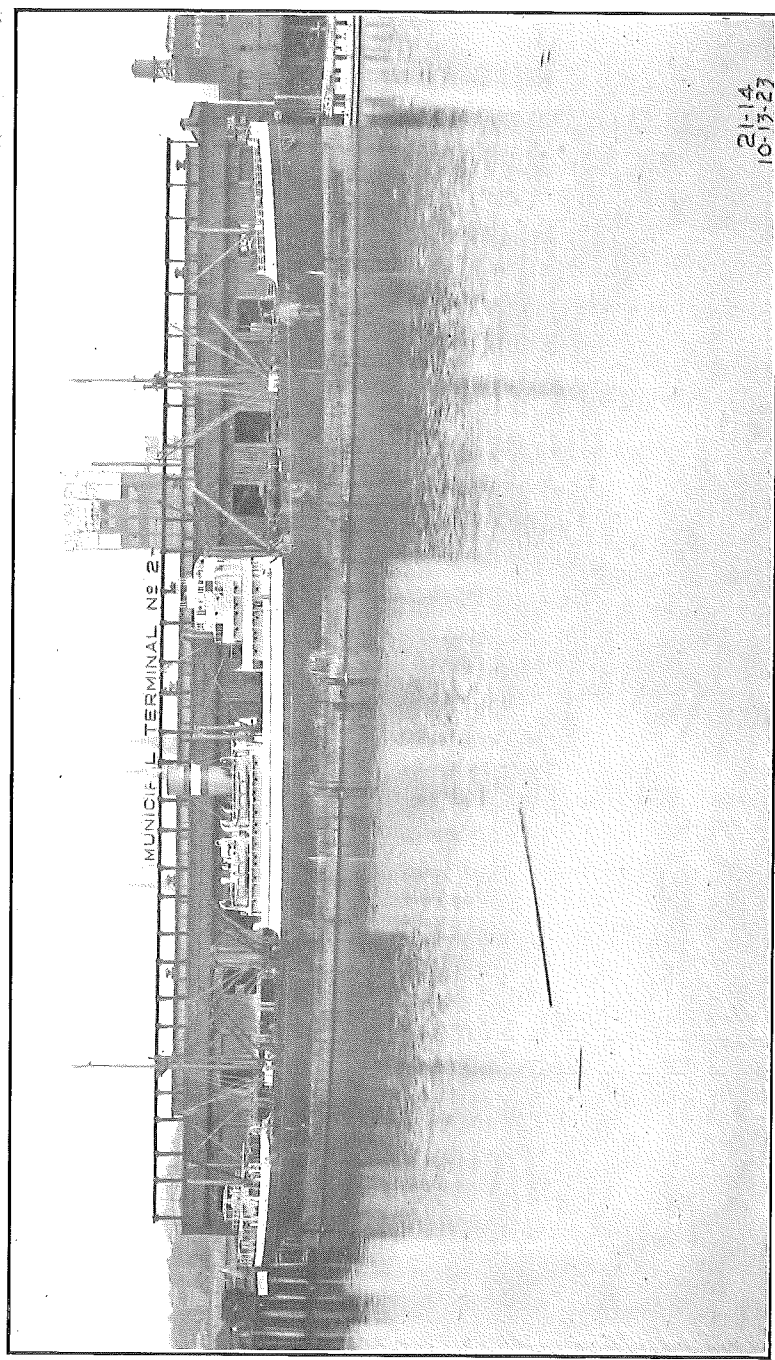
Operation Terminal No. 1:

Operations for Others	37,108.97	
Personal Service	33,092.96	
Supplies and Expense	9,026.07	
		<u>79,228.00</u>

Operation Terminal No. 2:

Operation for Others	13,163.00	
Personal Service	10,226.07	
Supplies and Expense	2,405.74	
		<u>25,794.81</u>

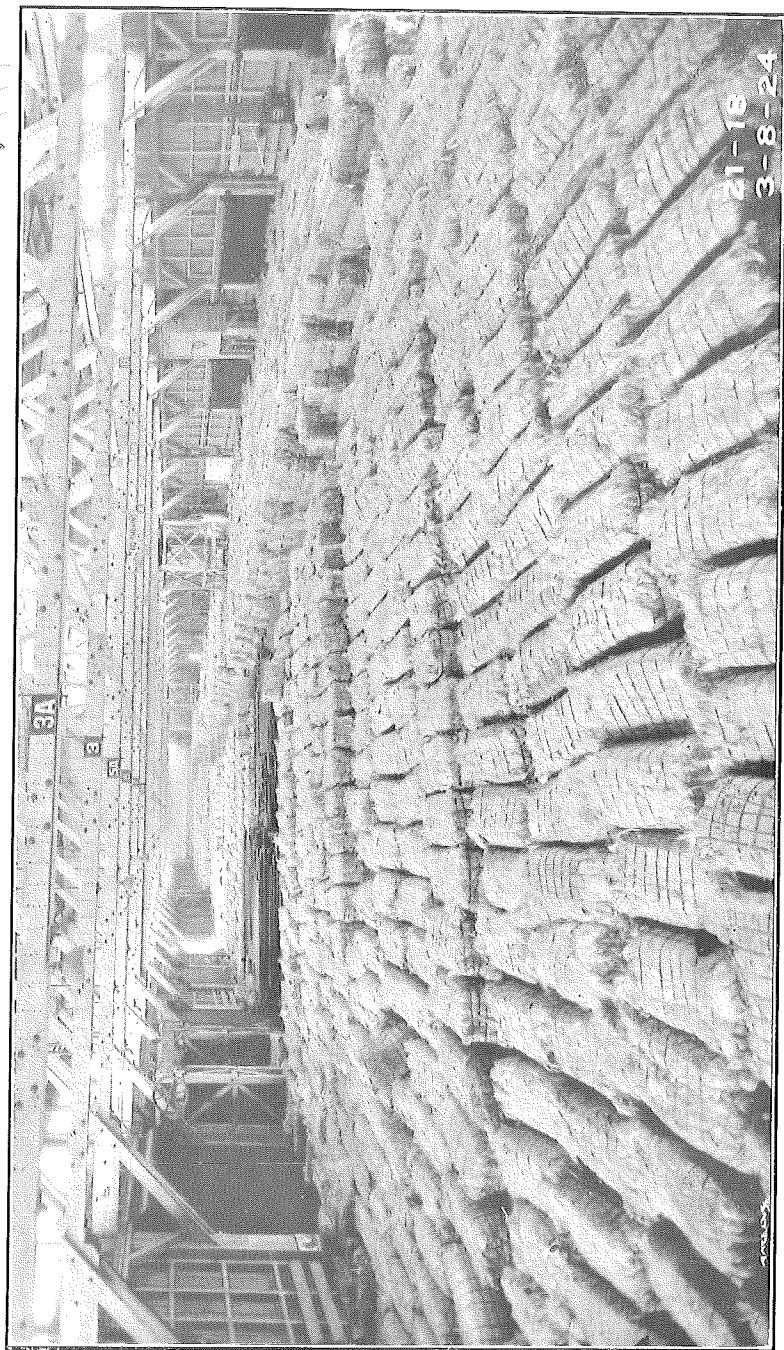
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HARBOR VIEW MUNICIPAL TERMINAL NO. 2. M. S. "DRECHTDYK" DISCHARGING CARGO

Operation Terminal No. 3:		
Operations for Others	2,125.88	
Personal Service	4,906.46	
Supplies and Expense	396.09	
		<u>7,428.43</u>
Operation Terminal No. 4:		
Operations for Others	136,559.96	
Personal Service	69,048.28	
Supplies and Expense	40,578.14	
		<u>246,186.38</u>
Operation Street Railway		6,538.44
Maintenance		32,453.63
Insurance		29,921.70
Bonded Debt:		
Interest	474,347.50	
Serial Redemption	255,200.00	
Sinking Fund Installments	21,450.00	
		<u>750,997.50</u>
Accounts Payable		13.35
Accounts Recollectible		740.43
Refunds and Overpayments		877.41
Transfer to Maintenance Fund		27,000.00
Transfer to Insurance Fund		23,000.00
		<u>1,334,774.01</u>
Balance, November 30, 1923		136,304.81
		<u>\$1,471,078.82</u>

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INTERIOR OF UPPER LEVEL DOCK, TERMINAL NO. 2. SHOWING IMPORT HEMP CARGOES

SINKING FUND "A"**Receipts**

1923 Installment from General Fund	\$1,000.00	
Interest Accretion:		
Earnings on bank cash	44.70	
Earnings on securities	755.58	
Securities Matured	5,000.00	
		<u>\$6,800.28</u>
Balance, December 1, 1922		3,337.46
		<u>\$10,137.74</u>

Disbursements

Securities Bought	9,000.00	
Accrued Interest	227.79	
		<u>9,227.79</u>
Balance, November 30, 1923		909.95
		<u>\$10,137.74</u>

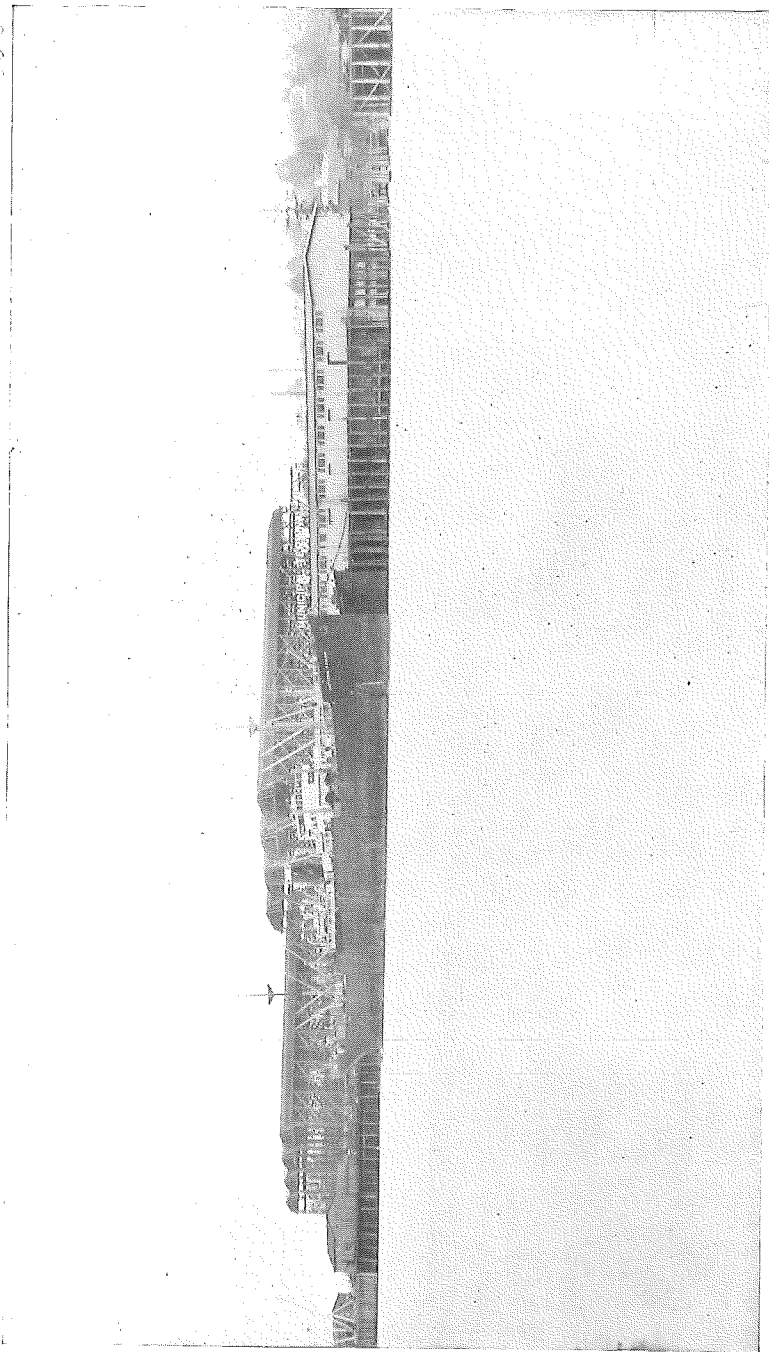
SINKING FUND "B"**Receipts**

Interest Accretion:		
Earnings on bank cash	\$ 305.87	
Earnings on securities	15,550.23	
Securities Matured	67,800.00	
		<u>\$ 83,656.10</u>
Balance, December 1, 1922.....		43,216.71
		<u>\$126,872.81</u>

Disbursements

Securities Bought	121,000.00	
Discount	237.09	
		<u>120,762.91</u>
Accrued Interest	2,532.26	
		<u>123,295.17</u>
Balance, November 30, 1923		3,577.64
		<u>\$126,872.81</u>

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HARBOR VIEW MUNICIPAL TERMINAL NO. 3

SINKING FUND "C"**Receipts**

1923 Installment from General Fund	\$15,000.00	
Interest Accretion:		
Earnings on bank cash	248.10	
Earnings on securities	10,925.19	
Securities Matured	38,134.98	
		<u>\$64,308.27</u>
Balance, December 1, 1922		28,914.49
		<u>\$93,222.76</u>

Disbursements

Securities Bought	88,500.00	
Discount	287.62	
		<u>88,212.38</u>
Accrued Interest	2,974.09	
		<u>91,186.47</u>
Balance, November 30, 1923		2,036.29
		<u>\$93,222.76</u>

SINKING FUND "E"**Receipts**

Interest Accretion:		
Earnings on bank cash	\$ 35.59	
Earnings on securities	1,646.57	
Securities Matured	10,000.00	
		<u>\$11,682.16</u>
Balance, December 1, 1922		2,912.44
		<u>\$14,594.60</u>

Disbursements

Securities Bought	13,000.00	
Accrued Interest	533.26	
		<u>13,533.26</u>
Balance, November 30, 1923		1,061.34
		<u>\$14,594.60</u>

SINKING FUND "F"**Receipts****Interest Accretion:**

Earnings on bank cash	\$ 19.86	
Earnings on securities	1,105.00	
Securities Matured	3,000.00	
Balance, December 1, 1922		\$4,124.86
		1,032.11

\$5,156.97**Disbursements**

Securities Bought	4,000.00	
Accrued Interest	310.67	
Balance, November 30, 1923		4,310.67
		846.30
		\$5,156.97

SINKING FUND NO. 1**Receipts**

1923 Installment from General Fund	\$ 5,450.00	
Interest Accretion:		
Earnings on bank cash	53.89	
Earnings on securities	2,057.79	
Securities Matured	19,000.00	
Balance, December 1, 1922		\$26,561.68
		1,879.06
		\$28,440.74

Disbursements

Securities Bought	27,000.00	
Accrued Interest	694.01	
Balance, November 30, 1923		27,694.01
		746.73
		\$28,440.74

SPECIAL FUND "A"

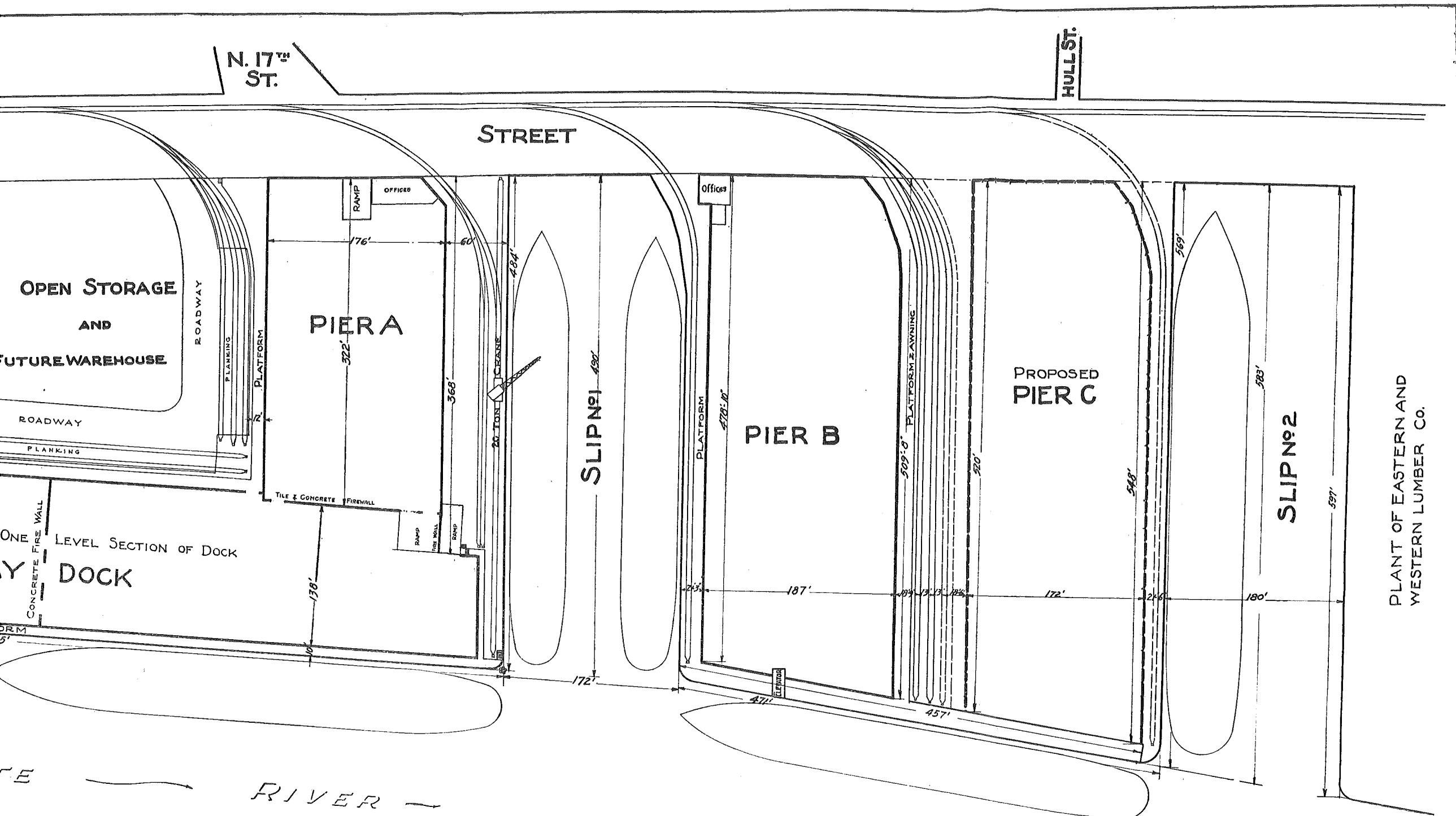
(Reserve Fund for Future Maintenance)

Receipts

1923 Transfer from General Fund	\$27,000.00	
Interest Accretion:		
Earnings on bank cash	1,021.33	
Earnings on securities	462.50	
Securities Matured	10,000.00	
Balance, December 1, 1922		\$38,483.83
		34,855.49
		\$73,339.32

Disbursements

Securities Bought	35,000.00	
Accrued Interest	556.32	
Maintenance Expense for Year	12,193.99	
Balance, November 30, 1923		47,750.31
		25,589.01
		\$73,339.32



PLANT OF EASTERN AND
WESTERN LUMBER CO.

PORTLAND MUNICIPAL TERMINAL NO 1

THE COMMISSION OF PUBLIC DOCKS
PORTLAND ORE.
1924

N. 17th
ST.

STREET

PAVED RAMP TO LOWER DOCK

OFFICES

SCALE

WAREHOUSE No.

OPEN STORAGE AND FUTURE WAREHOUSE

PIERA

SLIP NO. 1207

PIER B

TWO LEVEL SECTION OF DOCK

ONE
FIRE
QUAY DOCK LEVEL SECTION OF DOCK

CONCRETE FIRE WALL

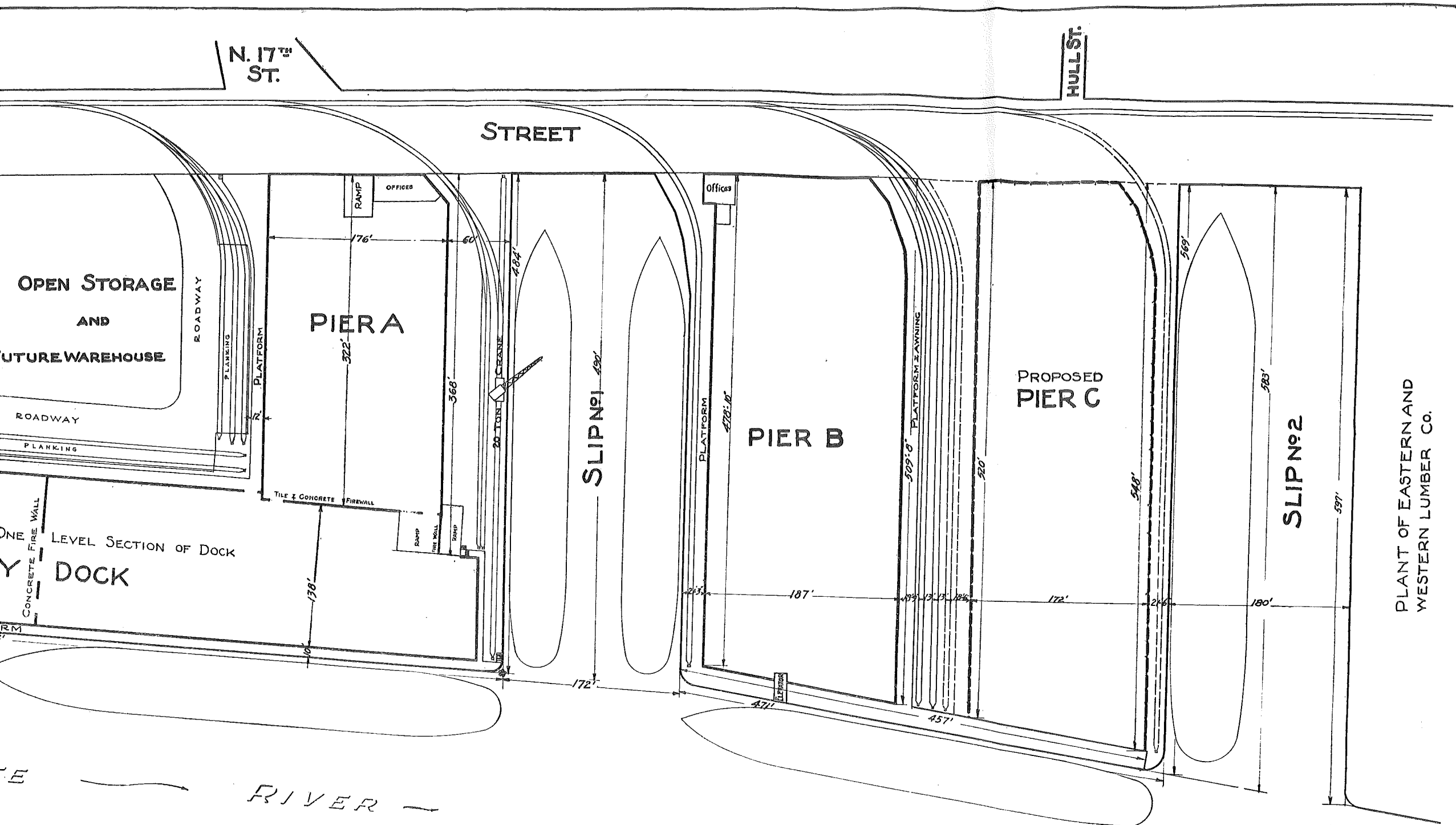
LEVEL SECTION OF DOCK

TILE & CONCRETE FIREWALL

— WILLAMETTE — RIVER —

PORTLAND MUNICIPAL TERMINAL No 1

GENERAL PLAN OF MUNICIPAL TERMINAL NO. 1



PLANT OF EASTERN AND
WESTERN LUMBER CO.

UPSHUR
ST.

N. 17TH
ST.

FRONT

STREET

PLANT OF AMERICAN CAN CO.

PAVED RAMP TO LOWER DOCK

OFFICES

SCALE

RAMP

TWO LEVEL SECTION OF DOCK

RAMP

RAMP

303'

WILLAMETTE

ONE LEVEL SECTION OF DOCK
QUAY DOCK

PLATFORM
955'

CONCRETE FIRE WALL

OPEN STORAGE
AND
FUTURE WAREHOUSE

ROADWAY

PLANKING

REMOVABLE BRIDGE

ROADWAY

PLATFORM
206'

WAREHOUSE NO. 1

RAMP

230'

20'

30'

ROADWAY

PLANKING

PLATFORM

PIER A

322'

176'

60'

TILE & CONCRETE FIREWALL

138'

DUMP

WALL

DUMP

20 TON CRANE

SLIP NO. 1 490'

172'

OFFICES

PLATFORM

PIER B

478'-0"

187'

471'

RIVER

PORTLAND MUNICIPAL TERMINAL NO. 1

SCALE OF FEET
0 10 20 30 40 50 60 70 80 90 100

GENERAL PLAN OF MUNICIPAL TERMINAL NO. 1

SPECIAL FUND "E"

(Reserve Fund for Fire Emergency)

Receipts

1923 Transfer from General Fund	\$23,000.00	
Interest Accretion:		
Earnings on bank cash	431.87	
Earnings on securities	1,065.00	
		\$24,496.87
Balance, December 1, 1922		2,023.49
		<u>\$26,520.36</u>

Disbursements

Securities Bought	5,000.00	
Accrued Interest	83.76	
Expense for Water Tower	11,214.77	
		16,298.53
Balance, November 30, 1923		10,221.83
		<u>\$26,520.36</u>

SPECIAL FUND "F"

(Special Deposit of Uncalled for Checks)

Receipts

Checks Deposited	\$117.52
Balance, December 1, 1922	344.53
	<u>\$462.05</u>

Disbursements

Balance, November 30, 1923	\$462.05
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CONTINGENT FUND

(Revolving Fund for Emergency Requirement)

Balance, December 1, 1922	\$20,000 00
Balance, November 30, 1923	\$20,000 00

CONSTRUCTION FUND SECURITIES**Receipts**

From Sale of Dry Dock 950—\$1000 Port of Portland Improvement and Equipment Bonds dated Jan. 1, 1923	\$950,000.00	
Interest	23,366.25	
Total Receipts		\$973,366.25

Disbursements

Sale of Bonds and investment in Sinking Funds ..	295,000.00	
Transfer of interest to Construction Fund	23,366.25	
Total Disbursements		318,366 25
Balance, November 30, 1923		655,000.00
		<u>\$973,366.25</u>

INVESTMENT INVENTORY, NOVEMBER 30, 1923

Sinking Fund "A" Securities:

Par Value

Dock Bonds, Series "E", dated Oct. 1, 1914; 25-year, 4½ per cent, denomination \$1,000.00, numbers 1 to 3 inclusive	\$3,000.00	
City of Portland Improvement Bond, dated March 1, 1921; 10-year optional 3 years; 6 per cent; denomination \$500.00, number 34863	500.00	
City of Portland Improvement Bonds, dated November 1, 1920; 10-year; 6 per cent; denomination \$1,000.00; numbers 33490-491...	2,000.00	
City of Portland Improvement Bonds, dated October 1, 1921; 6 per cent; denomination \$1,000.00; numbers 36349 and 35972	2,000.00	
City of Portland Refunding Bonds, dated Dec. 1, 1898; 5 per cent; denomination \$1,000.00; numbers 68 and 69	2,000.00	
U. S. Treasury Notes Series "B" 1927; dated May 15, 1923; 4¾ per cent; denomination \$5,000.00; number 4912	5,000.00	
		\$14,500.00

Sinking Fund "B" Securities:

Dock Bonds, Series "E", dated Oct. 1, 1914; 25-year; 4½ per cent; denomination \$1,000.00; numbers 4 to 32, inclusive; 52 to 78, inclusive	56,000.00	
U. S. Liberty 2ds Converted, dated Nov. 15, 1918; 25-year; 4¼ per cent; denomination \$1,000.00; numbers 00475873-80, inclusive; 00006154-00475882-902, inclusive	30,000.00	
U. S. Liberty Loan, 4th Issue Converted; dated Oct. 24, 1918; 20-year; 4¼ per cent; denomination \$50.00; numbers 00210098-100 inclusive; 0021263-9, inclusive	500.00	
U. S. 4th Issue Converted; dated Oct. 24, 1918; 20-year; 4¼ per cent; denomination \$5,000.00; numbers 00026322-00026810-4, inclusive	30,000.00	
City of Portland Improvement Bonds, dated March 1, 1921; 10-year; optional 3-year; 6 per cent; denomination \$1,000.00; numbers 34842-7, inclusive	6,000.00	
City of Portland Improvement Bonds, dated Nov. 1, 1920; 10-year; 6 per cent; denomination \$1,000.00; numbers 33425-89, inclusive	65,000.00	
City of Portland Refunding Bonds, dated May 1, 1903; 25-year; 4 per cent denomination \$500.00; numbers 3-6, inclusive	2,000.00	
State of Oregon Bonus Bonds, dated Oct. 1, 1922; 10-year; 4½ per cent; denomination \$1,000.00; numbers 251 to 255, inclusive....	5,000.00	
State of Oregon Bonus Bonds, dated Oct. 1, 1922; 14-year; 4½ per cent; denomination \$1,000.00; numbers 1126 to 1132, inclusive..	7,000.00	

State of Oregon Bonus Bonds, dated Oct. 1, 1922; 16-year; 4½ per cent; denomination \$1,000.00; numbers 1633 to 1635, inclusive..	3,000.00
City of Portland Municipal Grain Elevator Bonds, Series 2; dated Oct. 1, 1918; 6-year; 4½ per cent; denomination \$1,000.00; number 127	1,000.00
City of Portland Harbor Development Bonds; dated Feb. 2, 1920; 5-year; 4½ per cent; denomination \$1,000.00; numbers 66-71, inclusive	6,000.00
City of Portland Improvement Bonds, dated Feb. 1, 1921; 6 per cent; denomination \$1,000.00; numbers 34219 and 34220	2,000.00
Multnomah County-Oregon School District Bond, dated Dec. 1, 1922; 6 per cent; denomination \$1,000.00; number 8	1,000.00
City of Portland Park & Boulevard Bonds, dated July 1, 1911; 4 per cent; denomination \$1,000.00; numbers 686-90, inclusive....	5,000.00
City of Portland Refund Bonds, dated Dec. 1, 1898; 5 per cent; denomination \$1,000.00; numbers 259-264, inclusive	6,000.00
City of Portland Bridge Bonds, dated Jan. 1, 1909; 4 per cent; denomination \$1,000.00; numbers 346 and 38-42, inclusive	6,000.00
City of Portland Assessment Collection Bond, dated Aug. 1, 1918; 5½ per cent; denomination \$1,000.00; number 418	1,000.00
State of Oregon Veteran's State Aid Bond Series No. 2, dated Oct. 1, 1922; 4¼ per cent; denomination \$1,000.00; number 2231	1,000.00
State of Oregon Bonds, dated Dec. 1, 1921; 4¾ per cent; denomination \$1,000.00; numbers 4 and 8-9, inclusive	3,000.00
City of Portland Improvement Bonds, dated October 1, 1921; 6 per cent; denomination \$1,000.00; numbers 36351-53-55-57-59	5,000.00
City of Portland Improvement Bonds, dated January 1, 1923; 6 per cent; denomination \$1,000.00; numbers 37865-77, inclusive; 37951-54 inclusive	17,000.00
U. S. Treasury Notes Series "B"—1927, dated dated May 15, 1923; 4¾ per cent; denomination \$10,000.00, \$5,000.00 and \$1,000.00; numbers 5096-9 inclusive; 4911, 12156, 12173 and 12192	48,000.00
City of Portland Improvement Bonds, dated January 1, 1921; 6 per cent; denomination \$1,000.00; numbers 34123-4, inclusive	2,000.00
City of Portland Improvement Bonds, dated May 1, 1923; 6 per cent; denomination \$1,000.00; numbers 38083-5, inclusive.....	3,000.00

Port of Portland Improvement and Equipment Bonds, dated Jan. 1, 1923; 4½ per cent; denomi- nation \$1,000.00; numbers 252-6, inclusive	5,000.00	\$316,500.00
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Sinking Fund "C" Securities:

City of Portland Improvement Bonds; dated Nov. 1, 1920; 10-year; 6 per cent; denomi- nation \$500.00; \$451.05; numbers 33610-8, in- clusive	4,451.05	
City of Portland Refunding Bonds, dated May 1, 1903; 25-year; 4 per cent; denomination \$500; numbers 7-8	1,000.00	
City of Portland Fire Dept. Construction Bonds; dated Dec. 1, 1919; 6-year; 5 per cent; denomination \$1,000.00; numbers 7-8	2,000.00	
City of Portland Fire Department Construction Bonds; dated Dec. 1, 1919; 8-year; 5 per cent; denomination \$1,000.00; numbers 11-12	2,000.00	
City of Portland Fire Department Construction Bonds; dated Dec. 1, 1919; 10-year; 5 per cent; denomination \$1,000.00; number 15..	1,000.00	
City of Portland Assessment Collection Bonds; dated May 1, 1920; 10-year; 5½ per cent; denomination \$1,000.00; number 1175	1,000.00	
City of Portland Series "E"; dated Oct. 1, 1914; 25-year; 4½ per cent; denomination \$1,000.00; numbers 33-51, inclusive; 79-97, inclusive	38,000.00	
U. S. Liberty 2ds Converted; dated Nov. 15, 1918; 25-year; 4¼ per cent; denomination \$1,000.00; numbers 00256571-90, inclusive ..	20,000.00	
U. S. Liberty 4th Loan, Converted; dated Oct. 24, 1918; 20-year; 4¼ per cent; denomina- tion \$5,000.00; numbers 00026815-8, inclusive	20,000.00	
City of Portland Improvement Bonds; dated March 1, 1921; optional 3-year; 10-year; 6 per cent; denomination \$1,000.00; numbers 34747-61, inclusive; 34848-55, inclusive, de- nomination \$500.00; numbers 34893-900, in- clusive; denomination \$1,000.00; numbers 34812-6, inclusive	32,000.00	
City of Portland Improvement Bonds; dated Nov. 1, 1920; 10-year; 6 per cent; denomina- tion \$500.00; numbers 33587-609, inclusive..	11,500.00	
Multnomah County High School District No. 2 Bonds; dated Sept. 1, 1922; 5¼ per cent; denomination \$1,000.00; numbers 11-14, in- clusive	4,000.00	
City of Portland Improvement Bonds; dated February 1, 1921; 6 per cent; denomination \$1,000.00; numbers 34253 and 34580	2,000.00	

Port of Portland Dry Dock Bonds, dated July 1, 1903; 4 per cent; denomination \$1,000.00; numbers 105-7, inclusive	3,000.00	
City of Portland Municipal Jail Bond, dated November 1, 1911; 4 per cent; denomination \$1,000.00; number 116	1,000.00	
City of Portland Park Bond, dated October 1, 1912; 4 per cent; denomination \$1,000.00; number 906	1,000.00	
City of Portland Park & Boulevard Bond, dated Dec. 1, 1908; 4 per cent; denomination \$1,000.00; number 239	1,000.00	
Multnomah County School District No. 17 Bond; dated Dec. 1, 1922; 6 per cent; denomination \$1,000.00; number 11	1,000.00	
City of Portland Water Bonds, dated April 1, 1916; 4 per cent; denomination \$1,000.00; numbers 3900-9 inclusive	10,000.00	
Port of Portland Improvement & Equipment Bond, dated July 1, 1921; 6 per cent; denomination \$1,000.00; number 390	1,000.00	
City of Portland Water Bond, dated Feb. 2, 1914; 4 per cent; denomination \$1,000.00; number 3163	1,000.00	
Port of Portland Bonds, dated July 1, 1921; 6 per cent; denomination \$1,000.00; \$500.00; numbers 453, 485 and 647	2,500.00	
City of Portland Improvement Bonds; dated October 1, 1921; 6 per cent; denomination \$1,000.00; numbers 35973-5, inclusive	3,000.00	
City of Portland Improvement Bonds; dated December 1, 1898; 5 per cent; denomination \$1,000.00; numbers 70-81 inclusive	12,000.00	
City of Portland Improvement Bonds; dated May 1, 1923; 6 per cent; denomination \$1,000.00; numbers 38053-72, inclusive	20,000.00	
City of Portland Improvement Bonds; dated February 1, 1921; 6 per cent; denomination \$500.00; numbers 34687-8, inclusive	1,000.00	
U. S. Treasury Notes Series "B" 1927, dated May 15, 1923; 4¾ per cent; denomination \$10,000.00; \$1,000.00; numbers 5100-1, inclusive; 12194-5, inclusive	22,000.00	
Port of Portland Improvement & Equipment Bonds, dated Jan. 1, 1923; 4½ per cent; denomination \$1,000.00; numbers 257-9, inclusive	3,000.00	
		\$221,451.05

Sinking Fund "E" Securities:

City of Portland Series "E" Bonds; dated Oct. 1, 1914; 25-year; 4½ per cent; denomination \$1,000.00; numbers 98-100, inclusive	3,000.00
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U. S. Liberty 2ds Converted; dated Nov. 15, 1918; 25-year; 4¼ per cent; denomination \$1,000.00; numbers 00256591-3, inclusive....	3,000.00	
City of Portland Improvement Bonds; dated March 1, 1921; 10-year; optional 3-year; 6 per cent; denomination \$500.00; numbers 34911-3, inclusive	1,500.00	
City of Portland Improvement Bonds; dated Nov. 1, 1920; 10-year; 6 per cent; denomination \$1,000.00; numbers 33502-7, inclusive	6,000.00	
City of Portland Albina Ferry Bonds; series 1903; dated Jan. 1, 1904; 30-year; 4 per cent; denomination \$500.00; number 10	500.00	
Portland Auditorium Bonds, dated March 1, 1916; 30-year; 4 per cent; denomination \$1,000.00; numbers 449-450	2,000.00	
City of Portland Improvement Bonds; dated Sept. 1, 1920; 10-year; 6 per cent; denomination \$500.00; numbers 183-184-185-186....	2,000.00	
City of Portland Improvement Bonds; dated May 1, 1923; 6 per cent; denomination \$1,000.00; numbers 38095-9, inclusive	5,000.00	
City of Portland Refunding Bond; dated Dec. 1, 1898; 5 per cent; denomination \$1,000.00; number 374	1,000.00	
U. S. Treasury Notes Series "B" 1927, dated May 15, 1923; 4¼ per cent; denomination \$5,000.00; number 4895	5,000.00	
		\$29,000.00

Sinking Fund "F" Securities:

U. S. Liberty 2ds Converted; dated Nov. 15, 1917; 4¼ per cent; denominations \$1,000.00; numbers 00256570-00256699; 25 years	2,000.00	
City of Portland Improvement Bonds; dated March 1, 1921; 10-year; optional 3-year; 6 per cent; denomination \$500.00; number 34914	500.00	
City of Portland Improvement Bonds; dated Nov. 1, 1920; 10-year; 6 per cent; denomination \$1,000.00; numbers 33492-501, inclusive	10,000.00	
Portland Auditorium Bonds; dated March 1, 1916; 3-year; 4 per cent; denomination \$1,000.00; numbers 446-447-448	3,000.00	
City of Portland Improvement Bonds; dated May 1, 1923; 6 per cent; denomination \$1,000.00; numbers 38086-9, inclusive	4,000.00	
		\$19,500.00

Sinking Fund No. 1 Securities:

War Savings Certificate, Series 1919; dated Dec. 1, 1919; 5-year; denomination \$846.00; number 49326	846.00
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U. S. Liberty Bond, dated May 9, 1918; 10-year; 4¼ per cent; denomination \$50.00; numbers 195725-31, inclusive	350.00	
City of Portland Improvement Bonds; dated March 1, 1921; optional 3 years; 10-year; 6 per cent; denomination \$500.00; numbers 34915-6	1,000.00	
City of Portland Improvement Bonds; dated Nov. 1, 1920; 10-year; 6 per cent; denomination \$1,000.00; numbers 33508-16, inclusive..	9,000.00	
City of Portland Reconstruction Bond; dated June 1, 1920; 4-year; 5½ per cent; denomination \$1,000.00; number 12	1,000.00	
City of Portland Refunding Bonds; dated Dec. 1, 1898; 5 per cent; denomination \$1,000.00; numbers 90-4, inclusive	5,000.00	
U. S. Treasury Notes Series "B" 1927; dated May 15, 1923; 4¾ per cent; denomination \$10,000.00; number 5102	10,000.00	
City of Portland Improvement Bonds; dated May 1, 1923; 6 per cent; denomination \$1,000.00; numbers 38090-4, inclusive	5,000.00	
Port of Portland Improvement and Equipment Bonds; dated Jan. 1, 1923; 4½ per cent; denomination \$1,000.00; numbers 260-5, inclusive	6,000.00	
		\$38,196.00
Special Fund "A" Securities:		
U. S. Liberty 2d Converted; dated May 9, 1919; 25-year; 4¼ per cent; denomination \$1,000.00; numbers 00256560-4, inclusive	5,000.00	
Port of Portland Improvement & Equipment Bonds; dated Jan. 1, 1923; 4½ per cent; denomination \$1,000.00; numbers 266-290 inclusive	25,000.00	
		\$30,000.00
Special Fund "E" Securities:		
City of Portland Improvement Bonds; dated Oct. 1, 1921; 6 per cent; 10-year; denomination \$1,000.00; numbers 36260-62-64-66-68-80-82-84-86-88-90-92-94-96-98	15,000.00	
City of Portland Assessment Collection Bonds; dated Aug. 1, 1918; 10-year; denomination \$1,000.00; 5½ per cent; numbers 298, 299, 300	3,000.00	
Port of Portland Improvement & Equipment Bonds; dated Jan. 1, 1923; 4½ per cent; denomination \$1,000.00; numbers 291-5, inclusive	5,000.00	
		\$23,000.00

**COMPARATIVE STATEMENT OF COST OF OPERATION OF
MUNICIPAL STREET RAILWAY**

Expense		1923	1922
Maintenance:			
Way and Structure—Cost plus 10 per cent....	\$	465.94	\$ 274.38
Equipment Cost		1,506.04	1,551.06
		1,971.98	1,825.44
Transportation:			
Platform Men—Cost		3,424.72	3,698.31
Other Expenses—Cost		1,166.94	1,190.80
Power—2 cents per K. W. H.		2,783.36	2,896.40
		7,375.02	7,785.51
Administration:			
General Expenses—Cost		1,184.75	1,430.52
Interest—fixed charge		705.36	705.36
Taxes—Cost		205.20	205.20
		2,095.31	2,341.08
Total Expense		\$11,442.31	\$11,952.03
Revenue			
Passenger Fares		4,951.05	5,155.70
Net Cost		6,491.26	6,796.33

SUMMARY OF RECEIPTS AND DISBURSEMENTS CAPITAL AND OPERATING—YEARS 1912 TO 1923 INCLUSIVE

	Aggregate Total 1912 to 1917 inclusive.	1918	1919	1920	1921	1922	1923	Aggregate
CAPITAL:								
Receipts:								
Bonds sold.....	\$3,775,170.00	939,400.00	1,210,343.75	3,544,117.50	.....	500,000.00	295,000.00	9,969,031.25
Construction Fund Securities.....	547.05	559.39	.....	.....	623.57	5,297.12	35,001.56	32,325.69
Miscellaneous.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	\$3,775,717.05	940,259.39	1,210,343.75	3,544,117.50	623.57	505,297.12	320,001.56	10,296,355.94
Disbursements:								
Harbor Development.....	\$ 33,145.52	.....	.....	4,371.53	26.40	.....	1,821.71	39,365.16
Real Estate.....	1,464,055.94	6,596.50	10.00	1,124.11	3,298.80	184,249.66	154,579.26	1,818,913.67
Construction.....	1,025,018.08	1,274,233.05	1,636,112.01	2,099,892.57	1,588,892.57	406,842.24	255,967.37	8,376,992.10
Miscellaneous.....	4,960.71	2,685.91	1,431.74	4,695.97	39.57	1,315.40	.....	15,179.30
Total.....	\$ 2,527,179.55	1,283,515.46	1,637,603.75	2,110,084.18	1,597,291.65	682,407.30	412,368.34	10,250,450.23
OPERATING:								
Receipts:								
Taxes.....	\$ 700,182.63	247,390.78	298,364.91	356,764.86	635,644.96	581,798.75	694,330.83	3,514,477.72
Interest.....	38,818.60	20,999.91	20,937.47	14,834.49	25,549.20	4,286.70	8,632.53	134,078.99
Operating Revenue.....	124,971.09	102,321.67	218,745.45	355,477.88	428,137.29	578,650.91	581,161.60	2,389,465.52
Miscellaneous.....	16,831.88	448.38	373.80	95.98	.....	15,428.40	.....	32,878.44
Total.....	\$ 880,504.29	371,160.74	538,441.63	727,173.21	1,089,331.38	1,180,164.76	1,284,124.96	6,070,900.97
Disbursements:								
Bond Interest.....	\$ 442,195.00	179,110.00	252,235.00	297,235.00	461,860.00	461,635.00	474,347.50	2,568,617.50
Bond Redemption.....	210,315.60	57,076.60	58,238.00	108,258.00	143,258.00	183,258.00	276,650.00	1,037,074.20
Operating Expense.....	60,334.04	51,681.53	123,183.37	209,036.12	271,876.34	328,686.35	362,400.60	1,406,808.35
General Expense.....	61,868.22	2,371.95	35,100.83	73,722.62	73,306.72	84,641.16	104,593.93	454,605.43
Maintenance.....	23,229.02	5,457.98	13,348.87	17,638.61	57,638.80	45,873.60	59,453.63	224,830.51
Insurance.....	18,829.89	7,781.36	24,732.47	25,715.91	30,640.34	52,107.62	51,497.74	211,305.92
Miscellaneous.....	43.65	447.19	68.44	125.04	.....	.....	126.47	810.79
Total.....	\$ 819,415.42	323,116.60	503,926.98	731,731.30	1,038,580.20	1,156,211.73	1,329,063.87	5,904,052.10

Note—This table shows actual amounts received from sources and disbursed for purposes named and makes no allowance for bond money disbursed for general purposes, nor sinking fund interest accretion, the principal amount only of installments set aside for bond retirement being considered.

*Includes amounts set aside as reserves for future requirements.

FREIGHT RECEIVED AT PORTLAND MUNICIPAL TERMINAL NO. 1
(Tons of 2000 pounds)

	1916	1917	1918	1919	1920	1921	1922	1923
Apples	404	13	.....	.....	.....	.....	5	27
Asphalt	531	210	.....	3,080	3,400	645	.....	.....
Autos and parts	2	.....	28	116	71	284	1,041	1,911
Ballast and gravel .....	.....	600	.....	.....	2,271	269	.....	.....
Books and stationery .....	.....	.....	.....	.....	275	530	1,139	1,236
Building material .....	.....	22	244	75	1,585	1,008	1,162	4,442
Canned goods	4,955	5,187	725	2,199	3,655	14,805	24,424	15,295
Cans and tops	18,189	21,122	13,038	21,115	15,115	9,101	341	44
Casara bark .....	.....	.....	.....	836	83	.....	129	.....
Cement, plaster and lime	1,163	145	.....	214	1,444	1,103	.....	338
Cigars and tobacco .....	.....	.....	.....	.....	38	65	64	117
Cocanut and cocoa meal .....	.....	55	68	121	718	1,423	1,268	.....
Coal .....	.....	.....	30,946	3,005	.....	.....	61	.....
Coffee .....	.....	.....	.....	.....	210	.....	.....	.....
Contractors' equipment .....	.....	.....	649	666	.....	.....	.....	.....
Copra	524	2,919	9,793	5,690	.....	.....	389	1,784
Cordwood .....	.....	107	111	.....	.....	.....	.....	.....
Cotton	77	175	33	10	98	667	223	5
Crates and boxes	434	1,174	22,491	22,002	35,543	12,027	942	188
Doors .....	.....	.....	.....	.....	.....	.....	.....	.....
Drugs and chemicals	14	.....	.....	122	722	3,565	.....	6,268
Dry Goods and merchandise	16	1	7	82	4,313	625	6,672	3,724
Feed, hay and grain	509	58	6	790	265	2,479	1,975	2,928
Fertilizer .....	.....	.....	.....	.....	.....	.....	2,115	76
Flour	167	18	10,642	27,736	836	205	643	72
Fruit and vegetables, fresh	86	26	68	239	257	4,846	13,951	11,319
Glass .....	.....	.....	.....	.....	.....	879	781	8
Groceries and confectionery	139	23	71	594	677	6,062	.....	3,183
Hardware	166	197	36	51	2,146	9,220	5,919	9,220
Hemp and cordage	21	5	16	.....	72	8,070	8,070	17,064
Hides, leather and rubber goods .....	.....	.....	113	6	68	577	1,807	6,798
Hops .....	.....	.....	.....	254	146	1,024	5,027	4,546
Household goods and furniture	90	.....	32	44	1,170	.....	.....	615
						1,213	1,130	3,197

FREIGHT RECEIVED AT PORTLAND MUNICIPAL TERMINAL NO. 1—(Continued)

	1916	1917	1918	1919	1920	1921	1922	1923
Iron and steel	754	2,682	3,243	274	7,783	6,926	18,991	27,731
Livestock .....	.....	3	4	11	2	148	.....	.....
Lumber	5,406	10,211	13,871	13,174	5,690	5,773	7,648	10,782
Machinery	464	1,446	895	901	1,458	4,720	5,674	8,093
Manufactured wares	26	.....	.....	21	3,276	1,558	4,538	320
Metal .....	.....	.....	65	2,014	12	4,474	3,854	5,612
Miscellaneous	378	113	111	825	1,015	6,635	14,838	32,483
Oil and grease .....	.....	.....	.....	.....	3,045	1,794	3,787	4,227
Packing house products .....	.....	147	29	146	29	443	.....	.....
Paints and oils	87	10	552	141	352	1,399	679	1,296
Paper	3,096	451	685	1,802	835	1,378	10,610	7,175
Peanuts .....	.....	.....	.....	.....	.....	.....	.....	481
Piling	256	.....	229	795	2,128	148	2	31
Pipe and plumbers' supplies	176	51	2	114	963	6,894	16,078	18,147
Prunes .....	.....	.....	.....	.....	.....	.....	10,408	7,456
Rugs and matting .....	.....	.....	.....	.....	.....	908	1,365	956
Rags and waste	139	519	59	124	58	72	307	480
Sacks and burlap	6	.....	.....	20	66	.....	849	740
Salt	69	.....	.....	143	29	724	.....	371
Scrap metal	1,422	3,131	303	2,021	1,767	1,151	.....	.....
Seeds, bulbs and spices	82	.....	1,903	16	94	1,900	496	1,521
Ship knees and trenails	20	.....	444	225	.....	.....	.....	.....
Shingles .....	.....	.....	.....	.....	.....	.....	1,256	1,049
Shooks and staves	785	4,262	4,821	1,101	179	1,148	621	3,244
Sugar	153	6	76	425	41	741	280	1,861
Sulphur	3,255	697	.....	.....	.....	.....	.....	185
Tallow .....	.....	.....	.....	.....	.....	222	.....	.....
Tea .....	.....	.....	.....	.....	293	482	354	546
Tinplate	5,177	6,511	10,698	4,477	4,450	780	16,502	17,233
Wheat .....	.....	.....	.....	.....	284	2,586	35	.....
Wire and fencing	26	.....	30	.....	144	2,863	4,003	3,945
Wool	846	1,652	1,078	1,024	168	11,042	13,649	3,734
Totals	50,115	64,019	128,215	118,868	109,289	138,591	216,102	254,103

FREIGHT RECEIVED AT PORTLAND MUNICIPAL TERMINAL NO. 2

(Tons of 2000 pounds)

	1916	1917	1918	1919	1920	1921	1922	1923
Apples	31	329	135	26	.....	.....	633	62
Asphalt	160	1,000	1,229	5,688	3,487	712	18	.....
Autos and parts	5	.....	.....	316	347	399	1,469	994
Books and stationery .....	.....	.....	.....	373	189	371	645	447
Building material .....	.....	.....	.....	220	139	50	593	2,453
Canned milk .....	.....	412	263	1,763	820	.....	.....	.....
Canned goods	1	.....	11	931	2,856	4,994	10,882	7,398
Canned salmon	360	37	.....	40	240	.....	.....	.....
Cement, plaster and lime	1,931	1,434	4,873	16,532	17,815	16,584	13,491	15,776
Cigars and tobacco .....	.....	.....	.....	.....	.....	257	866	485
Coal .....	.....	.....	.....	.....	36	54	12	13
Coffee .....	.....	.....	.....	.....	.....	549	1,002	204
Copra .....	.....	1,440	2,371	.....	.....	.....	.....	.....
Cordwood	2,342	4,493	3,076	.....	3	.....	.....	.....
Cotton .....	.....	.....	.....	.....	83	64	2	.....
Crates and boxes .....	.....	110	32	725	.....	1,229	1,183	8
Drugs and chemicals	5	.....	.....	608	305	756	2,040	738
Drygoods and merchandise .....	.....	.....	2	422	1,283	431	949	1,535
Feed, hay and grain	61	173	158	2,927	1,290	963	1,928	752
Fertilizer	80	.....	76	23	48	859	8	806
Flour .....	.....	.....	.....	2,236	3,651	7,479	15,152	8
Fruits and vegetables, fresh	31	59	112	608	780	501	1,418	10,170
Glass .....	.....	.....	.....	.....	.....	.....	.....	4,998
Groceries and confectionery	20	.....	3	4,351	2,144	4,279	7,555	245
Hardware .....	.....	.....	.....	1,502	1,323	1,267	4,447	4,447
Hemp and cordage	25	.....	87	357	58	401	1,662	1,079
Hides, leather and rubber goods	1	.....	3	324	178	258	419	188
Hops	16	3	10	5	36	.....	717	307
Household goods and furniture	3	4	9	620	637	704	.....	.....
Iron and steel .....	.....	.....	146	239	789	708	1,268	922
Lath .....	.....	.....	.....	.....	.....	.....	530	544
Livestock .....	.....	.....	.....	11	.....	19	296	193
	.....	.....	.....	.....	1	.....	2	1

FREIGHT RECEIVED AT PORTLAND MUNICIPAL TERMINAL NO. 2.—(Continued)

	1916	1917	1918	1919	1920	1921	1922	1923
Lumber	1,853	8,596	1,607	1,106	1,435	709	1,241	182
Machinery	18	227	133	636	946	693	1,411	1,709
Manufactured wares .....	.....	.....	.....	352	10	522	849	93
Metal	60	.....	.....	37	.....	133	212	237
Miscellaneous	2	290	221	1,778	3,166	3,075	5,745	6,437
Oil and grease .....	.....	.....	.....	361	31	255	211	62
Paints and oils	55	10	168	448	366	1,748	2,453	1,387
Paper	9,604	8,384	10,712	39,591	43,769	59,180	31,337	23,113
Peanuts .....	.....	.....	.....	.....	.....	.....	.....	48
Pipe and plumbers' supplies	39	20	.....	416	293	220	908	912
Potatoes	1,641	3,104	1,754	1,750	1,446	133	192	1,439
Prunes .....	.....	.....	.....	.....	.....	.....	163	67
Rags and waste .....	.....	.....	.....	.....	185	17	42	73
Rugs and matting .....	.....	.....	.....	.....	.....	14	2	20
Sacks and burlap	14	12	.....	98	138	365	148	146
Seeds, bulbs and spices .....	.....	.....	.....	305	214	312	368	142
Salt .....	.....	.....	.....	809	5	777	2,983	1,391
Sugar .....	.....	.....	.....	513	177	3,473	4,106	3,149
Shells .....	.....	.....	.....	124	.....	.....	.....	.....
Shingles .....	.....	.....	.....	.....	.....	21	22	.....
Shooks and staves .....	.....	33	1,268	153	136	116	1,285	337
Shipkees and treenails	180	1,066	2,589	38	.....	.....	.....	.....
Sulphite .....	.....	871	130	735	.....	.....	.....	.....
Sulphur	22	.....	.....	41	.....	.....	.....	239
Tea .....	.....	.....	.....	.....	.....	.....	30	.....
Template .....	.....	.....	.....	82	11	.....	17	38
Vinegar and cider .....	.....	.....	.....	209	.....	.....	.....	.....
Wire and fencing	61	118	62	74	146	123	143	76
Wheat	232	343	1	.....	.....	385	38	.....
Wool	23	37	82	118	102	1,382	236	101
Totals	18,876	32,605	31,323	90,621	91,384	117,541	118,882	96,181

**FREIGHT RECEIVED AT PORTLAND MUNICIPAL
TERMINAL NO. 3**
(Tons of 2000 pounds)

	*1918	1919	1920	1921	1922	1923
Asbestos	255	14	.....	.....	.....	.....
Asphalt .....	.....	599	1,088	.....	.....	.....
Building material	59	.....	16	.....	.....	.....
Canned goods	43	.....	9	.....	.....	11
Cement .....	.....	.....	.....	.....	.....	303
Cord and slabwood	12	.....	.....	.....	.....	.....
Coal	588	.....	.....	.....	.....	.....
Cotton	19	102	52	.....	46	49
Drugs and chemicals	15	19	21	88	213	453
Drygoods and merchandise .....	.....	.....	.....	158	161	50
Feed, hay and grain	89	57	785	1	3	.....
Fertilizer .....	.....	25	.....	1,163	563	.....
Flour	6	1,977	2,397	1	.....	.....
Fresh fruit and vegetables	11	8	2	.....	121	.....
Groceries and confectionery	8	2	.....	.....	.....	.....
Hardware	70	2	80	.....	41	.....
Hemp and cordage .....	.....	.....	.....	.....	68	.....
Hides, rubber and leather goods .....	.....	.....	.....	.....	98	.....
Household goods and furniture	119	33	12	5	5	2
Iron and steel, etc.	117	139	11	.....	.....	.....
Lumber	28	4,417	196	.....	9	190
Lead .....	.....	43	.....	.....	.....	.....
Livestock	53	64	31	3	.....	.....
Machinery	103	23	3	.....	7	16
Manufactured wares .....	.....	.....	.....	.....	45	.....
Meats	4	2	.....	.....	.....	.....
Metal .....	.....	.....	.....	10	.....	.....
Milk	165	102	.....	19	.....	.....
Miscellaneous	38	51	190	35	662	1,174
Oakum	166	.....	.....	.....	.....	.....
Oats .....	.....	667	.....	.....	.....	.....
Paints and oils	222	5	.....	.....	.....	.....
Paper .....	.....	.....	.....	.....	72	.....
Potatoes	10	13	2	.....	.....	.....
Pipe and plumbers' supplies	1	106	1	.....	.....	.....
Rags and waste	237	106	135	.....	45	166
Rugs and matting .....	.....	.....	.....	.....	37	.....
Sacks and burlap	8	.....	.....	.....	.....	.....
Salt	22	.....	.....	.....	.....	.....
Shingles	19	.....	.....	156	39	22
Shipknees and treenails... ..	95	133	.....	.....	.....	.....
Shooks and staves.....	.....	2,849	.....	.....	8	7
Sugar .....	.....	.....	.....	.....	7	.....
Tubing	19	.....	.....	.....	.....	.....
Vehicles	1	.....	3	.....	.....	.....
Wheat	1	3,530	.....	.....	.....	.....
Wool	431	450	608	1,100	1,686	794
Totals	*3,034	15,538	5,562	2,739	3,936	3,237

*Seven months only.

**FREIGHT RECEIVED AT PORTLAND MUNICIPAL
TERMINAL NO. 4
(Tons of 2000 pounds)**

	*1919	1920	1921	1922	1923
Ammonia	615	490	.....	.....	.....
Apples .....	.....	.....	7,303	16,844	14,334
Autos and parts	275	203	98	74	119
Bamboo	118	84	.....	.....	.....
Barrels and boxes	56	156	64	319	41
Bones	89	246	.....	.....	.....
Building material	77	419	376	.....	48
Canned goods	4	193	2,269	1,534	3,144
Canned milk	131	3,058	.....	.....	.....
Cement, lime and plaster .....	.....	.....	115	.....	978
Cigars and tobacco....	392	119	60	5	.....
Coal .....	.....	986	6,720	6,587	10,467
Coffee .....	.....	.....	.....	382	470
Copper	57	.....	.....	.....	.....
Copra .....	.....	.....	250	3,094	5
Cotton	771	7,507	954	.....	154
Cotton seed cake	202	506	.....	.....	834
Doors .....	.....	.....	.....	.....	.....
Drugs and chemicals...	40	1,200	254	644	218
Drygoods and merchandise .....	.....	.....	440	.....	.....
Egg case fillers	57	156	.....	.....	.....
Feed, hay and grain...	25	2,796	435	2,248	270
Fertilizer .....	.....	.....	183	362	.....
Flour	13,338	14,828	13,303	13,542	41,161
Fruit and vegetables, fresh	111	114	146	31	359
Fuel oil .....	.....	.....	.....	.....	124,320
Glass .....	.....	.....	.....	.....	3,477
Groceries and confec- tionery .....	.....	1,116	692	1,738	203
Hardware	212	1,038	141	.....	10
Hemp and cordage	9,561	2,861	263	446	489
Hides, rubber and leather goods .....	.....	.....	944	499	1,059
Household goods and furniture	9	683	813	54	27
Iron and steel	16,057	21,364	3,258	6,495	4,145
Lath .....	.....	.....	3,100	338	1,034
Linseed .....	.....	.....	.....	.....	4,696
Lumber	3,247	11,268	31,318	50,014	50,115
Machinery	1,464	857	573	928	680
Maize	116	.....	.....	.....	.....
Malt	30	.....	.....	.....	.....
Manufactured wares ...	15	315	1,266	1,721	.....
Miscellaneous	333	11,486	1,822	8,570	5,735
Metal	37	131	98	2,046	6,509
Molasses .....	.....	8,018	.....	.....	3,394
Oats	355	.....	47	.....	.....
Oils	35	4,021	643	3,996	11,486

*Seven months only.

**FREIGHT RECEIVED AT PORTLAND MUNICIPAL
TERMINAL NO. 4—(Continued)**
(Tons of 2000 pounds)

	*1919	1920	1921	1922	1923
Packing house produce		83	.....	.....	.....
Paints .....		.....	.....	511	.....
Paper	4,739	5,069	2,755	43,126	1,338
Peanuts .....	.....	.....	.....	.....	790
Phosphate rock .....	.....	7,301	.....	.....	.....
Piling .....	.....	1,177	1,609	6,510	1,015
Pipe and plumbers' supplies	1,016	1,446	326	2,313	1,580
Prunes .....	.....	.....	.....	3,197	2,345
Rags and waste .....	.....	.....	41	69	40
Rice .....	.....	.....	263	5	.....
Rugs and matting	86	1,169	141	91	124
Sacks and burlap .....	.....	3,499	1,520	352	274
Salt .....	.....	.....	24	.....	.....
Seed .....	.....	.....	1,901	1,215	1,673
Shingles	771	.....	.....	.....	49
Shoes and leather goods .....	.....	1,131	.....	.....	.....
Shooks and staves	534	141	.....	385	22
Soda	1,226	.....	.....	.....	.....
Soyacake .....	.....	.....	.....	.....	1,139
Sugar	7	132	20	202	1,537
Sulphur .....	.....	12,184	7,045	9,903	12,494
Tea	7	105	500	781	85
Tinplate	1,629	2,083	148	39	.....
Wheat, sacked	868	5,288	87,546	96,674	124,572
Wheat, bulk .....	.....	.....	.....	49,134	56,062
Wire and fencing	643	3,185	.....	2	.....
Wool .....	.....	1,181	88	51	4,425
Totals	*59,355	141,393	181,775	335,366	499,545

*Seven months only.

SUMMARY OF TONNAGE HANDLED AT MUNICIPAL TERMINAL NO. 1
(Tons of 2000 pounds)

	1916	1917	1918	1919	1920	1921	1922	1923
Received								
From foreign ports	8,798	7,483	12,413	5,768	4,074	16,934	12,143	17,520
From Atlantic ports	619	.....	.....	.....	13,113	45,700	112,223	160,832
From Pacific Coast ports	5,519	4,227	933	7,185	9,329	776	3,481	109
From river points	4,342	4,827	13,623	10,444	13,011	3,056	1,549	924
Via cars and teams	30,837	47,482	101,246	95,471	69,762	72,125	86,706	74,718
Totals	50,115	64,019	128,215	118,868	109,289	138,591	216,102	254,103
Delivered								
To foreign ports	1,657	3,745	10,385	38,953	11,974	11,478	18,331	14,880
To Atlantic ports	45	135	.....	.....	494	38,382	69,814	59,416
To Pacific Coast ports	2,767	3,185	4,347	1,832	1,685	1,261	743	.....
To river points	1,982	3,364	1,931	1,069	5,550	1,444	213	693
Via cars and teams	42,680	51,126	105,766	80,458	70,007	91,875	126,613	175,346
Totals	49,131	61,555	122,429	122,312	89,710	144,440	215,714	250,335

SUMMARY OF TONNAGE HANDLED AT MUNICIPAL TERMINAL NO. 2
(Tons of 2000 pounds)

	1916	1917	1918	1919	1920	1921	1922	1923
Received								
From foreign ports	1,875	1,580	2,418	.....	599	1,031	.....	8,618
From Atlantic ports .....	.....	.....	.....	.....	309	3,530	3,432	3,958
From Pacific Coast ports	1,272	1,010	9,972	26,496	27,033	33,745	43,013	31,398
From river points	13,359	14,977	8,911	42,747	43,997	44,348	30,197	22,281
Via cars and teams	2,370	15,038	10,022	21,378	19,344	34,887	42,240	29,926
Totals	18,876	32,605	31,323	90,621	91,282	117,541	118,882	96,181
Delivered								
To foreign ports	4,471	6,545	629	1,327	.....	986	90	322
To Atlantic ports .....	.....	.....	.....	.....	96	1,080	925	300
To Pacific Coast ports	6	52	.....	15,950	9,456	36,498	53,511	36,627
To river points	491	1,239	1,557	2,480	5,555	1,395	2,148	2,209
Via cars and teams	12,208	23,005	27,429	74,985	75,878	75,157	64,244	57,146
Totals	17,176	30,841	29,615	94,742	90,985	115,116	120,918	96,604

**SUMMARY OF TONNAGE HANDLED AT MUNICIPAL
TERMINAL NO. 3**
(Tons of 2000 pounds)

Received	*1918	1919	1920	1921	1922	1923
From foreign ports.....	.....	.....	.....	1,120	1,953	303
From Atlantic ports.....	.....	.....	.....	.....	.....	1,013
From Pacific Coast ports	211	4,855	1,586	.....	.....	.....
From river points.....	1,056	240	167	100	.....	32
Via cars and teams.....	1,767	10,443	3,809	1,519	1,974	1,889
Totals	3,034	15,538	5,562	2,739	3,927	3,237
Delivered						
To foreign ports.....	.....	28	.....	.....	230	317
To Atlantic ports.....	.....	.....	2,396	.....	733	.....
To Pacific Coast ports...	.....	133	19	.....	.....	.....
To river points.....	168	219	519	532	40	47
Via cars and teams.....	2,410	14,019	5,878	3,047	2,452	3,512
Totals	2,578	14,399	8,812	3,579	3,455	3,876

*Seven months only.

**SUMMARY OF TONNAGE HANDLED AT MUNICIPAL
TERMINAL NO. 4**
(Tons of 2000 pounds)

Received	*1919	1920	1921	1922	1923
From foreign ports.....	9,600	38,181	12,439	22,476	47,798
From Atlantic ports.....	.....	12,184	7,045	17,283	22,598
From Pacific Coast ports	1,179	132	473	1,779	125,048
From river points.....	6,172	6,405	7,948	42,867	15,269
Via cars and teams.....	42,404	84,485	153,870	250,961	288,832
Totals	59,355	141,387	181,775	335,366	499,545
Delivered					
To foreign ports	40,710	87,240	125,514	248,058	271,025
To Atlantic ports .....	.....	.....	396	6,060	8,885
To Pacific Coast ports..	250	327	697	52,447	4,525
To river points.....	757	710	5,389	1,632	11,213
Via cars and teams.....	13,089	39,392	35,653	55,397	204,128
Totals	54,806	127,669	167,649	363,594	499,776

*Seven months only.

**SUMMARY OF TONNAGE HANDLED AT MUNICIPAL
TERMINALS NOS. 1, 2, 3 AND 4**
(Tons of 2000 pounds)

Received	*1919	1920	1921	1922	1923
From foreign ports....	15,368	42,854	31,524	36,572	74,239
From Atlantic ports....	.....	25,606	56,275	132,938	219,799
From Pacific Coast ports	39,715	38,080	34,994	48,273	147,438
From river points.....	59,603	63,580	55,452	74,613	46,158
Via cars and teams....	169,696	177,400	262,401	381,881	365,439
Totals	284,382	347,520	440,646	674,277	853,073
Delivered					
To foreign ports.....	81,018	99,214	137,978	266,709	286,544
To Atlantic ports.....	.....	2,986	39,858	77,532	68,601
To Pacific Coast ports..	18,165	11,487	38,456	106,701	41,152
To river points.....	4,525	12,334	8,760	4,033	14,162
Via cars and teams....	182,551	191,155	205,732	248,706	440,132
Totals	286,259	317,176	430,784	703,681	850,591

*Includes seven months only at Terminal No. 4.

TABLE 1
OCEAN COMMERCE AT PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)
Foreign Exports (Tons)

Month	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
January ..	68,682	79,806	71,191	14,769	20,780	4,775	42,931	51,587	53,879	148,588	67,513
February ..	38,889	24,789	55,359	22,843	2,481	17,070	22,219	32,556	76,523	105,162	54,275
March ...	49,120	28,238	73,242	26,475	10,812	19,260	24,037	53,746	51,775	124,549	45,822
April ...	11,066	34,117	31,272	18,210	12,724	25,029	16,050	54,178	168,604	107,970	79,657
May	61,447	62,732	14,295	18,460	16,063	30,477	58,811	63,528	101,943	57,208	68,236
June	41,180	27,752	35,016	.....	21,826	20,015	49,899	107,710	140,450	180,188	72,537
July	52,262	39,199	30,865	.....	11,529	13,106	41,933	95,956	135,249	49,531	72,533
August ...	39,498	44,366	32,942	2,033	23,056	3,561	48,644	81,508	160,670	72,345	99,278
September.	87,404	26,021	43,480	8,896	11,771	12,280	43,255	92,056	199,891	151,595	176,923
October ..	70,030	73,818	53,626	.....	13,312	30,730	55,322	110,030	213,170	99,297	218,583
November .	57,159	75,759	40,798	4,572	10,326	30,176	44,820	22,877	163,994	109,168	125,952
December .	70,949	66,397	35,709	1,672	16,324	21,501	43,998	97,730	160,548	93,915	180,306
Totals..	647,686	582,974	517,795	117,930	171,504	227,980	491,919	863,462	1,656,702	1,299,516	1,261,615

TABLE 2
OCEAN COMMERCE AT PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)
Foreign Imports (Tons)

Month	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
January ..	1,265	4,070	825	3,656	2,026	1,328	359	544	1,314	8,315	6,095
February ..	4,397	7,222	102	430	1,610	3,778	524	3,894	2,069	5,337	9,025
March	8,169	4,543	5,272	4,364	1,128	468	623	2,149	2,054	4,184	9,645
April	398	2,172	4,794	2,519	373	1,672	946	1,303	2,799	4,133	11,053
May	5,881	15,998	12,137	5,177	515	3,120	1,691	2,392	2,498	3,946	8,976
June	7,506	3,865	2,899	1,860	493	1,009	1,139	5,589	2,177	5,914	14,506
July	771	7,405	4,608	2,993	494	1,795	692	3,785	2,466	5,279	12,154
August ..	7,523	4,489	2,577	7,819	537	169	389	5,682	1,901	4,820	4,294
September..	5,400	6,139	1,627	1,207	1,533	2,411	2,758	2,235	868	8,376	5,647
October ..	4,829	1,851	429	533	1,945	185	1,555	21,031	3,194	6,200	7,296
November..	9,318	6,904	577	1,395	5,041	49	3,623	2,288	3,984	4,106	12,371
December..	2,104	659	636	1,451	3,390	885	2,697	7,523	6,638	1,832	4,391
Totals..	57,561	65,317	36,483	33,404	19,085	16,869	16,996	58,415	31,962	62,442	105,453

TABLE 3
OCEAN COMMERCE AT PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)
Domestic Exports (Tons)

Month	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
January ..	50,506	50,724	30,723	32,509	32,874	17,532	5,520	23,055	18,297	32,763	43,567
February .	47,190	57,876	40,384	30,871	29,917	13,012	7,657	14,322	16,434	32,974	42,361
March	57,560	63,999	39,203	36,309	25,805	13,234	10,449	14,372	12,911	34,808	64,317
April	64,602	59,635	39,061	45,213	34,249	14,961	13,060	14,703	15,169	32,898	49,725
May	68,495	59,636	45,411	45,475	36,480	17,118	24,280	11,351	6,786	41,641	63,892
June	60,690	52,506	47,604	24,425	23,738	10,406	16,811	9,890	6,236	31,957	42,577
July	49,609	54,868	51,799	22,433	21,544	13,984	12,147	10,334	33,303	31,295	54,276
August ...	52,015	58,450	41,722	34,348	22,156	21,858	17,155	9,018	25,495	34,892	42,624
September .	64,737	49,182	48,926	33,442	23,003	16,260	17,027	13,727	23,961	35,118	63,442
October ..	79,035	55,140	51,245	39,599	24,620	10,609	8,598	17,815	30,375	38,767	99,236
November .	68,410	41,614	40,795	35,298	22,321	14,050	14,385	17,080	27,404	39,918	78,467
December .	62,168	30,512	42,407	33,773	23,488	14,299	8,369	10,208	32,095	43,101	60,553
Totals..	725,017	634,142	519,280	413,695	320,195	177,323	155,458	165,875	248,666	434,132	705,037

TABLE 4
OCEAN COMMERCE AT PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)
Domestic Imports (Tons)

Month	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
January ..	93,541	81,100	74,240	83,794	76,577	100,140	92,406	122,604	111,860	116,636	142,854
February .	81,938	96,678	61,057	69,539	69,499	85,593	100,428	124,160	84,560	94,114	127,479
March ...	94,180	86,159	80,227	119,572	88,285	104,722	103,556	105,783	92,967	98,862	179,210
April	107,688	75,878	75,177	63,400	84,924	90,159	79,288	99,872	87,562	92,786	143,602
May	73,434	82,202	81,022	92,337	99,629	100,002	107,361	81,873	80,261	99,723	148,187
June	103,246	85,933	99,377	75,065	89,619	96,900	101,343	94,298	66,567	142,135	164,942
July	116,966	92,301	66,956	94,616	94,490	92,952	119,261	125,035	93,584	108,434	152,161
August	106,407	102,479	101,399	80,787	70,048	73,168	93,516	132,688	146,142	123,643	154,185
September..	85,833	70,543	76,405	73,990	81,864	88,168	115,159	79,915	85,532	125,974	132,642
October ..	103,514	63,901	83,862	85,488	91,409	103,581	103,931	113,922	113,572	157,116	200,329
November..	70,695	76,867	80,621	87,999	74,187	81,436	71,463	129,489	105,593	129,918	193,295
December..	95,617	75,381	74,534	106,947	106,670	90,816	99,805	107,120	91,441	166,678	161,302
Totals..	1,133,059	990,422	954,877	1,033,534	1,027,201	1,107,637	1,187,517	1,316,759	1,159,641	1,456,019	1,900,188

TABLE 5
FOREIGN EXPORTS BY OCEAN GOING VESSELS FROM PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Acetate of lime, lbs.						422,234	.....	.....	.....	.....
Ammonia, lbs.						1,169,466	.....	.....	.....	.....
Ammunition, lbs. ..						33,779	.....	.....	.....	.....
Apples, tons									13,269	15,925
Autos, trucks and parts, lbs.						376,614	229,934	190,739	496,734	549,981
Barley, bushels	2,153,599	2,071,461	673,851	.....	.....	.....	.....	223,155	.....	.....
Beef casings, lbs. ..	78,050	.....	.....	.....	.....	.....	.....	21,120	77,983	.....
Bones, tons						44	98	82	124	48
Box shooks, tons ..					814	.....	.....	.....	.....	.....
Bldg. material, tons						21	1,351	.....	.....	.....
Butter, lbs.							2,248	.....	.....	.....
Candy, lbs.				8,045	.....	.....	.....	.....	.....	.....
Canned goods, cases	710	2,395	.....	.....	.....	10,957	84,026	88,636	241,371	148,620
Canned salmon, cases	4,400	27,735	8,938	.....	2	5,203	16,589	28,319	.....	.....
Carbon blocks, lbs..						22,500	.....	.....	.....	.....
Cattle Horns, tons..									24	.....
Caustic soda, tons..						1,311	.....	.....	.....	.....
Chemicals, tons							2,690	312	493	334
Cheese, lbs.							13,373	21,024	10,845	6,719
Clothing, dryg'ds, lbs.						14,848	.....	.....	9,830	15,192
Coal, tons						800	.....	.....	.....	.....
Copper, tons									386	.....
Cotton, bales						4,557	32,231	4,006	.....	.....
Cascara bark, lbs....	146,050	82,550	.....	.....	.....	787,793	94,231	136,982	137,780	464,369
Doors, wooden, lbs..						15,500	.....	151,479	221,817	2,420,845

TABLE 5—(Continued)
FOREIGN EXPORTS BY OCEAN GOING VESSELS FROM PORTLAND, OREGON
 (Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Paints and oils, lbs..								113,483	28,249	102,899
Paper, tons	226	1,808	6,014	.....	.....	3,820	3,373	1,823	3,043	1,594
Paraffin wax, lbs. .								895,786	.....	.....
Pears, dried, tons ..									63	.....
Pears, fresh, tons ..									200	114
Plums, dried, tons ..									172	74
Produce, tons						3	.....	.....	.....	.....
Prunes, dried, tons.									5,284	2,598
Rubber goods, lbs..						3,268	.....	.....	39,369	.....
Rye, bushels								6,881	.....	.....
Salmon, tons									419	976
Salt Fish, lbs.					9,600	.....	.....	.....	.....	.....
Scrap iron and steel, tons										
Seeds, lbs.						33,000	.....	139,118	.....	667
Shingles, bdls.						300	.....	.....	4,026	22,000
Shoes, lbs.						2,500	1,277	1,220	.....	4,240
Soap, lbs.						10,218	60,160	1,763	37,989	3,001
Staves and heads, lbs.						510,980	957,600	18,332	250,416	99,813
Tallow, lbs.	443,354	.....	.....	.....	.....	155,059	2,700	280,211	93,407	.....
Timplate, tons							1,403	107	.....	.....
Tobacco, lbs.						1,525,840	.....	.....	.....	.....
Twine, tons									15	.....
Wheat, bushels	7,825,172	10,688,609	1,698,463	1,760,403	.....	2,011,273	11,587,275	37,240,987	23,601,755	17,732,996
Wood Mfs., tons....										213
Wood pulp, tons ..										3,300
Wool, lbs.							73,516	.....	.....	.....
Zinc								200,018	1,748,107	.....

TABLE 6—(Continued)
FOREIGN IMPORTS BY OCEAN GOING VESSELS AT PORTLAND, OREGON
 (Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Fire clay, tons	350	.....	.....	.....	.....	.....	.....	.....	.....	50
Furniture, pkgs.	.....	.....	.....	.....	.....	.....	.....	1,304	1,465	2,065
Furs, bales	.....	.....	.....	.....	.....	.....	545	570	809	1,739
Glass, cases	24,939	.....	.....	.....	.....	.....	.....	98,770	70,845	84,851
Grain bags, bales	10,428	15,086	8,578	53	156	2,359	7,930	2,909	1,210	2,741
Graphite, bbls.	.....	.....	.....	.....	.....	.....	1,038	.....	.....	.....
Gum Copal, pkgs.	.....	.....	.....	.....	.....	.....	1,095	.....	.....	.....
Hair, bales	.....	.....	.....	.....	.....	.....	595	1,359	605	1,726
Hardwood, M. ft.	8,330	1,873	3,436	359	770	17	.....	201	142	44
Hemp, bales	7,257	3,215	7,658	4,694	2,684	38,136	16,157	2,942	7,980	42,864
Herring, kegs	.....	.....	.....	.....	.....	.....	.....	4,040	4,483	4,625
Hides, bbls.	.....	.....	8,350	6,159	1,336	1,810	2,876	2,260	.....	.....
Iron and steel, tons	5,456	177	68	357	477	272	.....	409	677	758
Linseed, bags	.....	19,121	26,053	12,656	.....	5,148	45,343	21,566	48,907	105,613
Linseed oil, drums	.....	.....	.....	.....	.....	.....	.....	1,032	2,836	60
Liquor, casks	359	84	.....	.....	.....	.....	.....	.....	.....	.....
Liquor, cases	5,744	641	.....	.....	.....	.....	.....	.....	.....	.....
Machinery, pkgs.	.....	.....	.....	.....	479	1,465	105	.....	.....	.....
Maize, bushels	20,857	93,896	.....	.....	.....	2,305	.....	.....	.....	.....
Manganese ore, tons	.....	.....	.....	.....	.....	.....	.....	50	.....	.....
Mating rolls	186	172	347	.....	.....	386	11,286	2,141	323	191
Matches, cases	.....	.....	.....	.....	.....	.....	.....	625	.....	.....
Mill feed, tons	.....	1,233	250	16	.....	25	37,159	191	18,671	3,498
Nitrate soda, bags	.....	.....	.....	.....	.....	.....	.....	4,705	8,843	3,378
Nuts, bags	.....	.....	.....	.....	.....	.....	.....	2,500	.....	.....
Oats, bushels	.....	.....	.....	.....	21,525	22,300	.....	2,642	7,551	.....
Paper, pkgs.	.....	.....	.....	.....	.....	.....	.....	19,921	16,339	10,073
Peanuts, bags	16,433	.....	.....	.....	.....	100	10,105	5	.....	31,455
Peanut Oil, tons	.....	3,400	2,931	2,993	.....	.....	.....	.....	.....	498
Pepper, bags	905	50	.....	.....	.....	.....	.....	.....	925	1,370
Perilla Oil, tons	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pig iron, tons	3,250	100	.....	.....	.....	.....	883	1,775	2,615	7,076

TABLE 6—(Continued)
FOREIGN IMPORTS BY OCEAN GOING VESSELS AT PORTLAND, OREGON
 (Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Pineapples, cases ..	1,501	.....	.....	.....	.....	.....	1,000	14,000	1,000	3,747
Provisions, pkgs. ..	18,408	18,517	27,738	29,980	9,099	18,728	14,872	21,635	16,415	18,545
Rice, sacks	26,996	10,315	14,606	18,722	7,414	1,457	6,338	10,285	6,441	5,361
Rope, hemp and twine, tons .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
Rubber, pkgs. ....	.....	.....	.....	.....	.....	17,656	.....	.....	1,060	299
Rye, bushels .....	.....	.....	.....	.....	1,300	.....	.....	.....	.....	.....
Sand, moulding, tons ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	626
Seeds, bags	2,271	10,786	2,397	4,621	3,884	2,730	23,015	4,229	6,028	8,408
Silk, silkgoods, bales ..	20	26	126	154	115	205	289	207	39	3
Silver sand, tons .....	.....	.....	.....	.....	.....	.....	.....	300	113	.....
Soda ash, bags .....	.....	.....	.....	.....	.....	.....	.....	1,700	1,500	.....
Soya bean oil, tons .....	.....	.....	.....	.....	.....	.....	6,221	785	.....	524
Soya bean cake, tons ..	.....	.....	.....	.....	.....	.....	.....	1,146	1,894	3,041
Spices, bags .....	.....	.....	.....	.....	.....	.....	1,009	.....	.....	.....
Strawbraid, cases .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,917
Straw rugs, bales .....	.....	.....	.....	.....	.....	.....	.....	.....	1,191	228
Sugar, bags	697	2,211	200	32	.....	150	.....	.....	3,433	.....
Sulphur, tons	7,432	7,724	7,026	609	.....	.....	4,551	401	12,350	40,571
Tallow, tons .....	.....	.....	.....	.....	22	13	.....	.....	121	209
Tankage, bags .....	.....	.....	.....	.....	.....	.....	.....	86	.....	.....
Tapioca, bags	1,210	.....	.....	.....	.....	.....	570	869	.....	1,916
Tea, pkgs.	3,922	3,417	6,755	3,522	5,695	3,502	6,041	17,650	22,428	650
Tin, slabs	410	318	932	1,463	100	764	1,100	538	110	259
Tobacco, cigars, pkgs. ..	.....	.....	.....	.....	.....	357	659	156	.....	.....
Toys, pkgs. ....	.....	.....	.....	.....	.....	.....	.....	1,223	2,340	2,856
Walnuts, bags .....	.....	.....	.....	.....	.....	.....	1,297	.....	.....	.....
Walrus tusks, bales. ....	.....	.....	.....	.....	.....	.....	619	.....	.....	.....
Wax, bags .....	.....	.....	.....	.....	.....	.....	.....	.....	2,800	7,148
Wheat, bushels .....	.....	.....	.....	.....	25,631	.....	27,793	.....	.....	.....
Wood, pulp, rolls	5,408	409	.....	.....	.....	.....	.....	.....	.....	.....
Wool, bales .....	.....	.....	.....	.....	5,316	100	910	14,435	13,723	15,753

TABLE 7
DOMESTIC EXPORTS BY OCEAN GOING VESSELS FROM PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Apples, fresh, tons..	.....	.....	.....	.....	.....	.....	.....	.....	2,977	2,643
Apples, dried, tons..	.....	.....	.....	.....	.....	.....	.....	.....	25	.....
Autos, tons .....	.....	.....	.....	.....	.....	.....	.....	134	197	402
Balsam, fir, tons...	.....	.....	.....	.....	.....	.....	.....	8	26	32
Barley, bushels	43,291	136,583	3,503	72,202	667	1,446	2,519	4,418	83	4,571
Beans, tons .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
Beef casings, tons..	.....	.....	.....	.....	.....	.....	.....	.....	21	16
Beverages, tons .....	.....	.....	.....	.....	.....	.....	.....	29	.....	.....
Butter, tons .....	.....	.....	.....	.....	.....	.....	.....	24	271	342
Canned fruit, cases.	80,148	114,307	54,875	.....	76,731	43,389	140,141	319,140	139	.....
Canned goods, cases	.....	.....	.....	.....	.....	.....	.....	.....	679,740	1,562,800
Canned salmon, cases	133,042	138,100	22,109	12,754	17,217	7,590	.....	98,715	.....	.....
Cascara bark, tons.	.....	.....	.....	.....	.....	.....	.....	166	429	287
Cereals, tons .....	.....	.....	.....	.....	.....	.....	.....	350	2,000	2,191
Cheese, cases .....	.....	.....	.....	.....	11,111	3,729	9,346	3,830	5,393	4,675
Chemicals, tons .....	.....	.....	.....	.....	.....	.....	.....	74	320	303
Coal, tons	1,348	940	882	704	779	882	.....	.....	.....	.....
Cocanut oil, tons...	.....	.....	.....	.....	.....	.....	.....	.....	.....	475
Condensed milk, cases	64,639	86,067	99,664	108,937	120,167	44,667	40,056	.....	.....	.....
Confectionery, tons..	.....	.....	.....	.....	.....	5,316	.....	53	285	273
Corn, bushels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Copper, brass, tons ..	.....	.....	.....	.....	.....	.....	.....	8	133	62
Crossarms, tons .....	.....	.....	.....	.....	.....	.....	.....	56	803	1,402
Dried fruit, cases...	176,947	86,658	.....	.....	.....	.....	.....	.....	.....	.....
Drugs, medicines, tons	.....	.....	.....	.....	.....	.....	.....	13	67	101
Doors, tons .....	.....	.....	.....	.....	.....	.....	.....	302	4,961	7,230
Drygoods and clothing, tons .....	.....	.....	.....	.....	.....	.....	.....	125	584	618
Eggs, tons .....	.....	.....	.....	.....	.....	.....	.....	17	.....	130

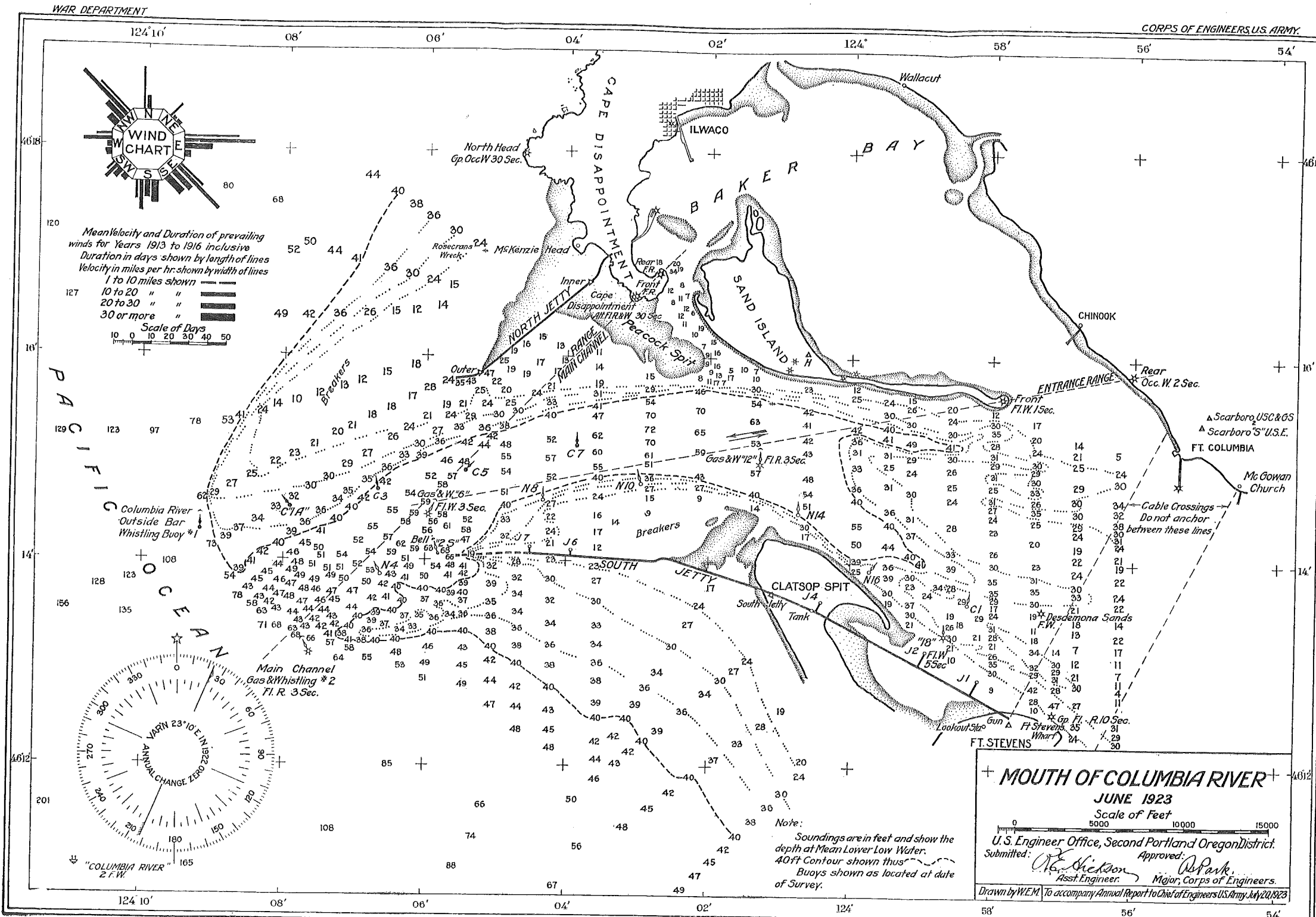


TABLE 8
DOMESTIC IMPORTS BY OCEAN GOING VESSELS AT PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Agricultural im- plements, tons	.....	.....	.....	.....	.....	.....	.....	.....	175	1,057
Ammonia, tons	.....	.....	.....	.....	.....	.....	.....	.....	76	87
Asphaltum, bbls. . .	53,416	90,277	74,261	46,158	24,415	73,804	77,706	29,306	17,042	15,984
Autos, tons	.....	.....	.....	.....	.....	.....	.....	101	580	752
Auto supplies, tons..	.....	.....	.....	.....	.....	.....	.....	285	1,967	2,433
Barley, bushels	.....	.....	.....	.....	.....	.....	10,136	37,592	801,480	219,708
Beverages, tons	.....	.....	.....	.....	.....	.....	.....	90	724	1,177
Butter, cases	14,997	13,940	4,250	1,902	2,407	1,711	1,779	6,406	5,396	1,550
Canned goods, cases	214,495	241,072	176,523	195,474	191,608	115,832	251,158	297,400	433,980	410,690
Carpets, rugs, tons..	.....	.....	.....	.....	.....	.....	.....	95	295	482
Cement, sacks	1,158,241	843,329	840,765	327,032	232,546	729,910	450,163	571,625	642,166	485,936
Cheese, cases	20,469	17,169	20,538	2,025	854	1,295	766	2,844	3,771	3,200
Chemicals, tons	.....	.....	.....	.....	.....	.....	.....	1,878	70,818	9,265
Coal, tons	601	1,188	870	813	336	3	76	3,259	3,997	6,197
Coffee, sacks	31,423	33,302	43,372	35,916	48,093	30,230	50,455	48,850	70,792	56,044
Confectionery, tons	.....	.....	.....	.....	.....	.....	.....	804	1,966	2,082
Cooking oil, tons...	.....	.....	.....	.....	.....	.....	.....	170	.....	.....
Copper and brass, tons	.....	.....	.....	.....	.....	.....	.....	349	454	600
Corn, bushels	.....	.....	.....	.....	.....	.....	35,087	10,714	.....	.....
Cotton, fabrics, tons	.....	.....	.....	.....	.....	.....	.....	81	405	.....
Cotton linters, tons.	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
Dyestuffs, tons	.....	.....	.....	.....	.....	.....	.....	53	51	100
Drygoods and mer- chandise, tons	.....	.....	.....	.....	.....	.....	.....	814	4,530	7,085
Drugs, medicines, tons	.....	.....	.....	.....	.....	.....	.....	970	3,066	3,172
Electrical g'ds, pkgs.	17,756	6,708	5,469	4,294	7,781	5,554	14,191	35,181	107,088	164,100
Fibers, tons	.....	.....	.....	.....	.....	.....	.....	215	574	422

TABLE 8—(Continued)
DOMESTIC IMPORTS BY OCEAN GOING VESSELS AT PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)

Commodity and unit	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Meal, tons	.....	.....	.....	.....	.....	.....	3,015	708	1,701	1,445
Merchandise, tons	93,197	92,629	39,791	43,258	57,064	25,383	32,782	16,326	10,362	19,254
Milk, canned, tons	.....	.....	.....	.....	.....	.....	.....	389	667	344
Miscellaneous, pkgs.	.....	.....	4,279	.....	.....	.....	.....	.....	.....	.....
Molasses, gals.	.....	.....	.....	.....	.....	416,667	695,423	.....	.....	.....
Nuts, tons	.....	.....	.....	.....	.....	.....	.....	.....	1,762	.....
Oil, Fuel, bbls.	4,252,497	4,069,585	5,190,410	5,266,640	5,694,754	4,995,487	5,478,158	4,452,403	5,238,345	6,910,464
Oakum and packing, tons	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oyster shells, tons	.....	.....	.....	.....	.....	.....	.....	20	43	53
Paints and oils, pkgs.	65,200	75,140	45,620	30,325	31,062	19,131	47,975	61,761	3,803	2,765
Paper pulp, bdls.	548	.....	.....	.....	.....	.....	.....	.....	116,510	101,300
Paper, tons	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peanuts, tons	.....	.....	.....	.....	.....	.....	.....	2,377	6,202	9,290
Pepper, tons	.....	.....	.....	.....	.....	.....	.....	.....	.....	223
Pianos and musical instruments, tons	.....	.....	.....	.....	.....	.....	.....	.....	89	17
Pig Iron, tons	.....	.....	.....	.....	.....	.....	.....	204	528	828
Pineapple, canned, cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	750
Plaster, sacks	113,345	83,880	48,996	66,201	36,644	10,904	59,972	32,270	.....	82,560
Plumbing supplies, tons	.....	.....	.....	.....	.....	.....	.....	.....	5,279	50,140
Powder, cases	24,946	16,349	1,165	5,132	9,952	11,414	.....	.....	13,198	32,962
Rice, sacks	10,031	11,347	9,652	15,902	43,813	33,007	33,631	4,012	7,709	19,120
Roofing, tons	.....	.....	.....	.....	.....	.....	.....	28,528	31,834	39,420
Rosin, tons	.....	.....	.....	.....	.....	.....	.....	.....	1,526	2,609
Rye, bushels	.....	.....	.....	.....	.....	.....	.....	275	664	828
Rubber, tons	.....	.....	.....	.....	.....	.....	1,143	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	333	1,074	2,204

TABLE 9
SHIPMENTS OF GRAIN BY OCEAN GOING VESSELS FROM PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)

Year	Wheat		Barley		Oats	
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic
1908.....	13,039,956	3,441,601	977,057	353,531	188	203,784
1909.....	5,568,181	4,434,423	490,134	10,515	.....	245,487
1910.....	5,187,865	3,563,481	.....	2,104	.....	112,492
1911.....	7,718,861	3,143,763	.....	.....	97	173,792
1912.....	7,340,194	4,822,382	1,250,578	600,522	135,316	342,333
1913.....	8,469,769	7,141,169	2,014,110	848,409	8,006	733,102
1914.....	7,825,172	5,037,318	2,153,599	43,291	609,047	555,882
1915.....	10,668,609	3,184,834	2,071,461	136,583	968,460	358,657
1916.....	1,698,463	1,553,376	673,851	3,503	.....	859,586
1917.....	1,760,403	819,305	.....	72,202	161,699	788,014
1918.....	.....	1,009	.....	667	.....	35,848
1919.....	2,011,273	98,500	.....	1,446	26,055	14,065
1920.....	11,578,275	13,711	.....	2,519	20,518	61,813
1921.....	37,240,987	206,669	223,155	4,418	16,445	235,545
1922.....	23,601,755	45,125	.....	71	8,050	119,139
1923.....	17,732,996	1,051,525	.....	4,571	7,252	276,496

TABLE 10
SHIPMENTS OF FLOUR AND LUMBER BY OCEAN GOING VESSELS FROM PORTLAND, OREGON
(Merchants' Exchange Records, Portland, Oregon)

	Flour (bbls.)—		Lumber (M. F. B. M.)	
	Foreign	Domestic	Foreign	Domestic
1908.....	684,648	254,104	100,686	61,089
1909.....	363,088	268,957	89,261	97,749
1910.....	286,566	280,439	124,975	80,561
1911.....	743,079	339,673	76,780	126,168
1912.....	650,426	364,549	113,047	169,464
1913.....	786,202	431,788	176,091	228,997
1914.....	416,417	500,225	157,233	193,352
1915.....	355,965	641,231	60,675	146,888
1916.....	85,903	600,746	22,317	107,630
1917.....	97,980	488,388	68,333	71,438
1918.....	1,568,175	139,541	45,551	55,662
1919.....	2,756,440	170,171	78,242	56,619
1920.....	1,941,370	200,019	175,689	46,900
1921.....	1,296,041	507,307	174,170	39,727
1922.....	1,102,614	638,064	239,904	96,241
1923.....	1,521,575	638,064	323,615	210,843

TABLE 11
IMPORTS BY COMMODITIES AT PORT OF PORTLAND, OREGON, FOR FISCAL YEARS ENDING JUNE 30
(U. S. Custom House Records, Portland, Oregon)

Commodity	1915	1916	1917	1918	1919	1920	1921	1922	1923
Bags and bur-lap	\$1,236,294	\$1,224,587	\$412,807	\$	\$201,745	\$596,663	\$1,156,111	\$100,321	\$312,589
Butter	.....	.....	.....	.....	11,836	.....	.....	.....	.....
Cement	.....	.....	8,077	.....	.....	.....	.....	.....	31,753
Chemicals	20,171	6,324	.....	11,522	20,968	.....	.....	.....	.....
Coal	19,380	9,912	11,744	.....	38,044	.....	.....	.....	.....
Coffee	89,853	81,626	11,610	.....	.....	.....	127,140	735,011	517,222
Coke	9,640	.....	.....	.....	.....	.....	4,000	.....	.....
Copra	.....	58,962	168,802	2,029,876	732,940	384,972	.....	742,100	2,257,015
Corn	66,374	6,930	.....	.....	.....	.....	.....	.....	.....
Cotton Mfs.	38,150	42,997	24,879	27,071	20,214	87,440	99,205	51,271	77,367
Creosote	76,825	.....	.....	.....	.....	127,625	198,875	.....	.....
Earthenware	38,544	31,075	25,660	37,071	20,109	38,075	83,325	93,302	155,399
Equipment for vessels	.....	.....	.....	269,146	141,063	.....	.....	.....	.....
Fibres	106,380	171,996	322,748	120,391	109,511	114,551	162,137	97,817	125,681
Fire brick	3,494	.....	.....	.....	.....	.....	.....	.....	.....
Glass	.....	.....	.....	.....	.....	1,267,093	120,706	302,902	326,637
Hemp	.....	.....	.....	.....	.....	40,529	250,843	127,698	217,231
Hides, pelts, tallow	17,133	21,293	112,135	29,867	42,198	78,847	3,146	.....	18,199
Household goods	.....	32,033	55,676	38,826	35,865	78,847	61,009	71,722	117,611
Iron and steel	106,219	.....	.....	.....	111,087	26,004	74,439	97,313	221,323
Linseed	.....	.....	.....	.....	.....	.....	.....	166,924	499,022
Lumber	96,920	93,173	32,200	73,419	.....	.....	.....	.....	.....
Maple sugar	.....	.....	.....	.....	10,979	.....	.....	.....	.....
Machinery	.....	.....	.....	.....	.....	8,568	9,634	.....	.....
Miscellaneous	595,575	228,886	376,572	224,103	266,840	844,327	1,068,822	1,448,265	2,631,416
Nitrates	.....	.....	.....	.....	.....	84,531	152,738	47,629	49,049

TABLE 11—(Continued)
IMPORTS BY COMMODITIES AT PORT OF PORTLAND, OREGON, FOR FISCAL YEARS ENDING JUNE 30
 (U. S. Custom House Records, Portland, Oregon)

Commodity	1915	1916	1917	1918	1919	1920	1921	1922	1923
Oats				27,175	20,438				
Oil cake		10,284				19,822	127,842	201,301	216,441
Oils	154,928	11,249	16,008	8,541	9,034			40,340	173,306
Peanut oil						35,678	1,645	1,431	1,970
Peanuts				4,666					
Provisions						61,027			
Rice	65,153	61,821	72,502	72,429	6,321	15,805	27,907	17,102	33,231
Rubber						1,415,750	4,077	17,412	22,343
Seeds, plants, bulbs	98,016	124,237	160,234	63,104	31,512	875,472	302,189	19,010	40,574
Silk and mfs.	33,400	41,500		67,216	36,278	146,043	197,829	265,267	149,687
Soya bean oil						561,457	348,396		68,169
Spices	17,871	5,844							
Spirits	17,960								
Sugar						42,752	31,718	20,734	168,146
Sulphur	183,926	62,856	84,809						
Table food prep'tns							75,572	32,672	34,425
Tapioca	4,772								
Tea	74,813	71,459	64,426	104,194	81,438	38,219	65,910	303,273	282,095
Tin in bars	3,477	10,704	4,221	6,419	36,490	53,299	45,855	18,390	40,482
Tobacco	15,125	9,799	19,501	13,447	17,178				
Toys	24,221	3,260	15,526			19,650	53,621	88,832	100,786
Vegetables				54,949	25,002				
Wheat				78,900		40,200	15,193		
Wood	15,392	9,727	14,344	11,285	30,387				
Wool and wool manufacturers	20,498	6,605	10,633	7,111	1,167,911	18,323	144,315	1,422,356	710,041
Totals	\$3,250,514	\$2,439,139	\$2,025,114	\$3,380,728	\$3,225,388	\$7,042,702	\$5,014,199	\$6,530,395	\$9,599,210

TABLE 12
IMPORTS BY COUNTRIES AT PORT OF PORTLAND, OREGON, FOR FISCAL YEARS ENDING JUNE 30
(U. S. Custom House Records, Portland, Oregon)

	1915	1916	1917	1918	1919	1920	1921	1922	1923
Africa									
British East	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....
British South	39						1,142	24,447	1,188
Egypt						349			9,051
Asia									
China	101,502	71,842	117,986	70,957	42,805	296,161	530,728	1,569,814	762,882
East Indies, Br. . .	74,148	384	1,548	1,535	126,742	289	3,384		14,561
East Indies, Dutch .	27,176	9,959	13,336		76,256	3,318	52,641	101,474	91,637
Hong Kong	93,885	68,799	69,429	68,257	42,278	114,165	169,934	101,732	123,712
India, British	1,250,578	1,279,910	419,695		126,113	598,368	1,169,232	114,485	323,480
Japan	571,632	392,117	454,269	440,036	169,433	834,973	807,264	896,152	815,861
Korea									300
Kwantung						191,308	380,010	77,322	141,830
Russia, Asiatic			125			776,115	140,694		
Straits Settlements .	17,505	13,725	4,249		36,490	1,463,147	31,104	21,779	94,722
All other ports	451								3,468
Siam				91		1			111
Oceania									
Australia	14,508	73,816		1,658,877	1,582,129	6,391	4,521	33,217	153,796
British Oceania			111,035	313,196	80,033	346,934		76,950	574,860
Hawaii				300					
New Zealand	20	4,251	14,895	3,941	143,862	88,384	2,674	1,276	19,938
Philippines	158,704	122,617	330,823	185,938	123,645	1,356,055	379,827	1,289,045	3,083,686

TABLE 12—(Continued)
IMPORTS BY COUNTRIES AT PORT OF PORTLAND, OREGON, FOR FISCAL YEARS ENDING JUNE 30
 (U. S. Custom House Records, Portland, Oregon)

	1915	1916	1917	1918	1919	1920	1921	1922	1923
Europe									
Austria Hungary.	10,116	100	50	.....	.....	.....	2,941	909	733
Belgium	121,250	.....	.....	.....	.....	8,263	131,309	336,923	340,135
Czecho-Slovakia ..	.....	.....	.....	.....	.....	.....	205	3,365	18,769
Denmark	5,249	1,142	610	125	.....	983	16,878	2,372	9,867
Finland .....	.....	.....	.....	.....	.....	.....	.....	828	.....
France	29,181	13,955	3,941	10,632	1,224	38,485	46,369	63,003	65,435
Germany	195,249	1,101	11,686	.....	177	1,162	62,553	156,999	249,343
Gibraltar .....	.....	.....	.....	.....	.....	799	.....	.....	.....
Greece	11,260	4,995	6,813	.....	.....	4,560	15,758	18,397	23,515
Ireland .....	.....	.....	.....	.....	.....	.....	.....	4,281	14,141
Italy	25,494	7,114	8,700	4,104	3,188	13,410	7,693	36,544	43,570
Netherlands	18,436	14,447	20,023	2,509	.....	140,424	25,013	81,105	193,726
Norway	32,377	10,396	1,992	1,035	799	7,303	34,848	78,405	226,092
Russia	15	.....	.....	.....	.....	.....	.....	.....	344
Spain	1,986	1,232	1,883	.....	.....	.....	.....	.....	2,214
Sweden	14,910	46,769	181	.....	.....	164	9,532	74,794	54,653
Switzerland	60	62	14	16	.....	44	379	1,104	5,982
Turkey .....	.....	.....	.....	.....	.....	.....	4,060	.....	.....
United Kingdom..	248,046	103,191	114,324	274,072	192,228	184,044	472,307	369,013	445,456

TABLE 12—(Continued)
IMPORTS BY COUNTRIES AT PORT OF PORTLAND, OREGON, FOR FISCAL YEARS ENDING JUNE 30
(U. S. Custom House Records, Portland, Oregon)

	1915	1916	1917	1918	1919	1920	1921	1922	1923
North America									
Canada	\$ 128,298	\$ 111,089	\$ 301,775	\$ 341,338	\$ 474,095	\$ 518,706	\$ 179,221	\$ 154,203	\$ 509,333
Cuba	13,461	6,053	4,311	3,493	2,641	12,557	12,154	.....	400
Guatemala	4,980	13,291	10,575	.....	.....	.....	5,826	.....	54,810
Jamaica	180	.....	.....	276	.....	.....	.....	.....	.....
Mexico	28	.....	.....	.....	.....	.....	.....	67,098	.....
Nicaragua .....	.....	.....	.....	.....	1,250	.....	.....	.....	19,219
Panama	193	215	800	.....	.....	.....	.....	800	12,034
Salvador .....	.....	.....	.....	.....	.....	.....	.....	18,270	91,856
South America									
Argentina	10	.....	.....	.....	.....	.....	.....	61,981	427,257
Brazil	79,581	69,950	46	.....	.....	.....	153,880	398,489	414,680
Chile .....	.....	.....	.....	.....	.....	35,678	122,394	47,629	51,673
Colombia .....	.....	.....	.....	.....	.....	.....	19,469	245,875	108,890
Peru	6	617	.....	.....	.....	163	18,255	.....	.....
All other ports ..	.....	.....	.....	.....	.....	.....	.....	315	.....
Totals	\$3,250,514	\$2,439,139	\$2,025,114	\$3,380,728	\$3,225,388	\$7,042,702	\$5,014,199	\$6,530,395	\$9,599,210

TABLE 13
EXPORTS BY COMMODITIES AT PORT OF PORTLAND, OREGON, FOR FISCAL YEARS ENDING JUNE 30
 (U. S. Custom House Records, Portland, Oregon)

Commodity	1915	1916	1917	1918	1919	1920	1921	1922	1923
Autos and cycles \$	.....	\$	.....	\$	.....	\$92,228	\$101,758	\$105,522	\$156,941
Barley	974,994	1,398,242	.....	.....	.....	227,964	49,000	109,848	.....
Caustic soda .....	.....	.....	.....	.....	.....	85,388	3,675	.....	.....
Coal .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Copper .....	.....	55,470	.....	.....	642,053	.....	.....	.....	.....
Cordage .....	.....	.....	.....	.....	8,058	.....	.....	.....	.....
Cotton .....	.....	.....	.....	.....	.....	6,855,507	233,646	82,962	.....
Fuel, gas and oil .....	.....	.....	.....	.....	.....	12,219	.....	.....	.....
Fish	64,647	60,257	36,105	.....	.....	.....	.....	.....	.....
Flour	1,898,832	1,199,136	3,600	6,751,045	23,088,049	16,931,906	10,328,925	7,667,267	7,590,098
Fruits	18,905	.....	.....	.....	.....	.....	155,384	1,861,285	2,921,623
Hides	8,679	.....	.....	.....	.....	.....	84,993	433,386	290,146
Hops	42,207	.....	.....	.....	.....	.....	217,768	21,090	5,745
Iron & steel mfgs. ....	.....	63,617	163,025	102,150	1,156,280	2,999,506	120,315	824,892	110,373
Lumber	1,482,742	634,473	830,808	1,835,117	1,550,953	5,304,302	5,375,302	9,108,117	8,946,323
Machinery .....	.....	.....	.....	.....	.....	.....	1,129,749	833,983	217,004
Miscellaneous	47,500	28,592	5,519	80,129	92,898	891,539	674,522	1,385,793	1,493,137
Milk, condensed	7,225	.....	.....	39,270	.....	1,036,909	482,326	219,191	1,029
Oats	751,446	39,000	.....	.....	.....	287,598	.....	.....	.....
Oatmeal .....	.....	.....	.....	253,193	.....	.....	.....	.....	.....
Paper	14,483	148,000	131,928	.....	121,928	488,066	343,366	270,702	.....
Paraffin .....	.....	.....	.....	.....	.....	.....	106,414	.....	.....
Railroad ties .....	.....	.....	.....	64,869	.....	614,146	1,089,797	91,174	.....
Salmon, canned .....	.....	.....	.....	.....	.....	97,392	453,633	739,718	669,669
Tablefood prepts .....	.....	.....	.....	121,679	85,417	.....	.....	.....	.....
Tallow	4,296	.....	.....	.....	171,312	.....	.....	.....	.....
Tinplate .....	.....	.....	.....	.....	.....	391,874	44,860	.....	.....
Tobacco .....	.....	.....	.....	.....	261,710	.....	.....	.....	.....
Wheat	15,030,500	7,027,704	3,019,710	957,993	3,237,930	6,298,579	47,057,289	42,346,440	18,039,685
Wood mfgs.	21,649	.....	.....	.....	.....	.....	.....	.....	.....
Wood pulp	38,161	.....	.....	.....	.....	.....	.....	.....	.....
Totals	\$20,406,266	\$10,654,491	\$4,190,695	\$10,205,445	\$30,518,519	\$42,812,891	\$69,129,971	\$66,101,370	\$40,441,773

TABLE 14
EXPORTS BY COUNTRIES AT PORT OF PORTLAND, OREGON FOR FISCAL YEARS ENDING JUNE 30
 (U. S. Custom House Records, Portland, Oregon)

	1915	1916	1917	1918	1919	1920	1921	1922	1923.
Africa									
British East	\$	\$	\$	\$	\$27,630	\$	\$	\$	\$
French	1,656,644	276,160	6,579	45,911	59,787	175,967	754,936	362	615,626
British South						833,460	850,573	78,714	61,968
Egypt							785,945	5,875	2,273
Asia									
China	445,097	336,594	140,768	301,144	978,783	3,306,796	4,172,102	5,115,929	4,984,687
China, Jap.						304,049	553,806	46,242	82,707
E. Indies, Dutch.						785		343	
British E. Indies					357,717	780,229	496,440	901,154	810,897
Hong Kong	537,679		87			140,684	206,607	1,539,682	84,940
India, British	255,387	8,200	218,572			11,933,714	3,042,547	15,511,897	8,512,091
Japan	108,043	1,500		176,150	25,000	910	40	206,223	88,100
Korea							242,816	1,410,150	940,762
Kwantung							894	180,495	60
Russia, Asia						1,041	2,125	317	4,304
Straits Sett'l'm'ts	2,206					509	450	2,275	
Siam									
Europe									
Belgium	191,070						1,103,899	563,876	243,301
Dansig & Poland							551,576		53,714
Denmark							204	110,094	10,391
Finland									558,592
France	297,584	216,460		6,068,371	26,035,785	13,232,658	2,461,650	2,113,685	403,897
Germany	1,266						5,903,846	299,000	239,678
Gibraltar							440,000		
Greece							1,093		
Ireland								6,240,897	2,460,627
Italy		205,195			450,000		4,098,721	1,413,666	1,541,583
Netherlands	190,361					58,675	2,787,113	1,117,095	305,781
Norway						46		4,008	500,150

EXPORTS BY COUNTRIES AT PORT OF PORTLAND, OREGON FOR FISCAL YEARS ENDING JUNE 30
(U. S. Custom House Records, Portland, Oregon)

	1915	1916	1917	1918	1919	1920	1921	1922	1923
United Kingdom	\$14,113,878	\$6,425,528	\$3,034,791	\$1,891,690	\$782,568	\$8,176,302	\$32,850,510	\$24,263,454	\$13,937,640
Spain	.....	.....	.....	.....	.....	851,373	823,000	289,835	5,766
Sweden	.....	.....	.....	.....	.....	272,158	.....	7,835	32,836
Turkey in Europe	.....	.....	.....	.....	.....	.....	.....	.....	693
North America									
Canada	40,384	312	151,296	.....	334,759	367,420	9,245	1,479	242,950
Costa Rica	.....	.....	.....	1,339	.....	564	429	2,240	1,670
Guatemala	.....	.....	.....	11,428	.....	.....	.....	64,173	96,472
Mexico	17,941	33,984	3,600	.....	19,243	11,900	71,299	242,654	20,010
Panama	119,911	626,440	30,169	691,500	183,924	315,782	2,363,600	11,015	577,220
Honduras	.....	.....	.....	.....	.....	.....	2,055	3,548	12,985
Nicaragua	.....	.....	.....	.....	.....	12,067	1,910	20,973	36,232
Salvador	.....	.....	.....	.....	.....	8,668	14,228	338,815	197,275
Santo Domingo	.....	.....	.....	8,424	.....	.....	57,504	.....	.....
South America									
Argentina	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bolivia	.....	.....	.....	.....	14,751	25,000	.....	17,092	201,774
Brazil	.....	.....	.....	36,968	.....	34,922	33,940	10,457	23,240
Chile	.....	.....	.....	.....	.....	.....	279,964	15,387	652
Colombia	244,113	890,007	114,190	391,426	62,219	305,195	191,231	141,601	248,305
Cuba	.....	.....	.....	.....	.....	.....	2,281	23,629	7,237
Ecuador	.....	.....	.....	.....	.....	92,555	13,607	.....	.....
Peru	539,390	195,749	19,396	228,541	199,927	165,634	83,088	182,275	241,504
Oceania							1,593,042	1,447,756	419,898
Australia	1,475,647	1,438,362	464,524	352,553	237,025	666,441	681,704	730,045	1,301,827
French Oceania	.....	.....	.....	.....	17,298	.....	82,468	.....	.....
New Zealand	37,337	.....	6,723	.....	.....	9,798	73,648	74,575	18,332
Philippine Islands	129,528	.....	.....	.....	732,103	727,174	1,443,835	770,201	793,596
Miscellaneous	.....	.....	.....	.....	.....	.....	.....	22,386	76,122
Totals	\$20,406,266	\$10,654,491	\$4,190,695	\$10,205,445	\$30,518,519	\$42,812,891	\$69,129,971	\$66,101,370	\$40,441,773

TABLE 15
NUMBER AND NET TONNAGE OF VESSELS ENTERING AND CLEARING AT PORTLAND, OREGON
(U. S. Custom House Records, Portland, Oregon)

—In Foreign Trade—				—*In Intercoastal Trade—				—In Pacific Coast Trade—			
Entered		Cleared		Entered		Cleared		Entered		Cleared	
No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons	No.	Tons
1908.....	166	405,218	179	420,028	...	...	...	557	536,614	537	535,320
1909.....	89	236,339	97	243,915	...	...	...	704	661,705	686	654,908
1910.....	100	275,390	103	279,553	...	...	...	823	878,304	774	839,399
1911.....	112	301,226	114	301,675	...	...	...	834	916,908	803	890,615
1912.....	139	370,466	132	347,800	...	...	...	836	973,108	839	977,321
1913.....	163	445,703	170	452,296	...	...	...	989	1,177,495	947	1,044,422
1914.....	143	385,135	163	406,001	...	...	...	944	1,123,281	912	1,092,978
1915.....	101	228,610	138	293,462	...	...	...	826	1,032,536	776	973,125
1916.....	41	85,356	48	91,654	...	...	...	630	691,832	639	693,802
1917.....	21	32,782	61	107,114	...	...	...	539	720,214	515	661,216
1918.....	14	11,309	93	173,330	...	...	...	420	550,136	445	628,447
1919.....	14	15,916	140	346,641	...	...	...	433	592,684	434	553,510
1920.....	82	282,010	193	589,188	19	65,970	24	95,142	1,107,430	481	772,077
1921.....	331	1,207,456	343	1,246,647	138	572,298	126	535,080	685,509	414	749,430
1922.....	317	1,148,743	355	1,284,965	272	1,070,783	237	842,854	923,608	572	1,353,955
1923.....	373	1,377,048	373	1,377,010	292	1,175,592	291	1,161,462	1,099,979	658	1,129,265

*Entries prior to 1918 included in Pacific Coast Trade.

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