

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

PERSPECTIVE OF PORTLAND MUNICIPAL TERMINAL NO. 4

ANNUAL REPORT  
OF  
THE COMMISSION  
OF PUBLIC DOCKS  

---

---

of PORTLAND, OREGON

Year Ending November 30  

---

1920

---

# THE COMMISSION OF PUBLIC DOCKS OF PORTLAND, OREGON

---

## COMMISSIONERS

C. B. MOORES, Chairman  
JOHN H. BURGARD, Vice-Chairman  
F. C. KNAPP  
A. H. AVERILL  
C. C. HINDMAN

### *Engineer and Secretary*

G. B. HEGARDT, M. AM. SOC. C. E.

---

## PROPERTIES

---

PORTLAND MUNICIPAL TERMINAL NO. 1  
FOOT OF FIFTEENTH STREET

PORTLAND MUNICIPAL TERMINAL NO. 2  
FOOT OF EAST WASHINGTON STREET

PORTLAND MUNICIPAL TERMINAL NO. 3  
FOOT OF PITTSBURG STREET

PORTLAND MUNICIPAL TERMINAL NO. 4  
FOOT OF KELLOGG STREET

PORTLAND MUNICIPAL DRY DOCK  
(UNDER CONSTRUCTION)

MUNICIPAL BOAT LANDING  
FOOT OF WOODWARD AVENUE

MUNICIPAL BOAT LANDING AND EXECUTIVE OFFICES  
FOOT OF STARK STREET

# Annual Report of The Commission of Public Docks

---

December 10, 1920.

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

Sir: The Commission of Public Docks herewith submits its tenth annual report for the fiscal year ending November 30, 1920.

The organization of the Commission of Public Docks at present consists of the following members: C. B. Moores, chairman; John H. Burgard, vice-chairman; F. C. Knapp, A. H. Averill and C. C. Hindman. Mr. Moores, whose term of office expired December 7, 1919, was, by you, appointed to succeed himself for the term of five years. Mr. Ben Selling having tendered his resignation as member of the Commission, Mr. C. C. Hindman was, on August 11 by you appointed to serve for the unexpired term of Mr. Selling, to December 7, 1923.

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; \$2,500,000.00 of the \$3,000,000.00 Elevator Bonds authorized at the election held June 4, 1917, 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 Dock Bonds, and \$500,000.00 of Elevator Bonds.

With funds made available from these bond issues there have been constructed and are now in operation the following terminal facilities:

**Municipal Terminal No. 1:** Quay dock, 955 feet long; pier and slip, 484 feet long, and two warehouses.

**Municipal Terminal No. 2:** Quay dock, 526 feet long.

**Municipal Terminal No. 3:** Quay dock, 540 feet long. The original structure was acquired by the Commission when the former city of St. Johns was annexed to the city of Portland in 1915. Extensive improvements have since, by the Commission, been made to this terminal.

The above terminal facilities were placed in operation previous to 1916.

**Municipal Terminal No. 4:** This terminal development is of pier and slip construction and the project provides for a total of five piers and three slips, on a site containing approximately 160 acres, with a harbor frontage of 2,730 lineal feet. The facilities completed at this terminal at this time are:

1. **Grain Elevator:** For the handling of grain produced in the port's tributary territory and shipped to this port in bulk, there was

constructed a fireproof elevator, with a capacity slightly in excess of 1,000,000 bushels. It was completed in May and shipments of the new grain crop began to be received toward the close of the fiscal year.

2. **Pier No. 1:** This pier, which, when first constructed, was only 1,200 feet long, was extended 300 feet shoreward, making the completed pier 1,500 feet long and 225 feet wide, covered with a transit shed 180 feet wide, the full length of the pier, or 1,500 feet.

3. **Pier No. 2:** The substructure of this pier, which is also 1,500 feet long and 225 feet wide, was completed in July. Contract for the construction of a transit shed on the outer one-half of this pier has by the Commission been authorized.

4. **Slip No. 1:** This slip, which serves Piers 1 and 2, is 1,500 feet long and 280 feet wide and has been dredged to a low water depth of 32 feet.

5. **Pier No. 5:** This pier consists of a quay dock 665 feet in length and a pier proper 900 feet in length. The quay portion of this pier was completed, with the required fill in rear of it, for the reception of bulk storage structures, which are now under construction there, and contract had been let for the construction of the 900-foot long pier at the close of this fiscal year.

6. **Vegetable oil and molasses storage plant:** This consists of eleven steel tanks of a combined capacity of 1,092,000 gallons, a complete system of mains for pumping bulk oil and molasses from Piers 1 and 2, direct to the storage tanks, with two 60-ton scale tanks for weighing oils and molasses delivered by vessel, or for outward shipments in tank cars.

7. **An administration building, a restaurant, seating at one time 200 people and a welfare building with shower baths, smoking and lounging rooms.**

8. **A track scale, 150-ton capacity.**

9. **Terminal trackage:** Of the total trackage of about seventeen miles to be provided at this terminal, approximately ten miles have been laid at this time, serving the grain elevator, Piers 1, 2 and 5, and the oil and bulk storage plants.

The facilities under construction and nearing completion at Terminal No. 4 are:

1. **Bulk storage plant** of 16,000 tons capacity on Pier No. 5 for the handling and shipping phosphate rock, coal, sulphur and other like bulk commodities.

2. **Pier No. 2 transit shed:** This transit shed will cover the outer one-half of the pier and will be 750 feet long and 180 feet wide.

3. **Bulkheads:** Preparatory to actual construction of Piers 3 and 4, bulkheads were constructed to provide for the filling of these piers by material dredged from slips 2 and 3 and the ship channel.

4. **Dredging:** One of the Port of Portland's dredges has been leased for nearly the entire year to excavate slips 2 and 3 to the

# PORTLAND MUNICIPAL TERMINAL No 4

SCALE OF FEET  
0 100 200 300 400 500

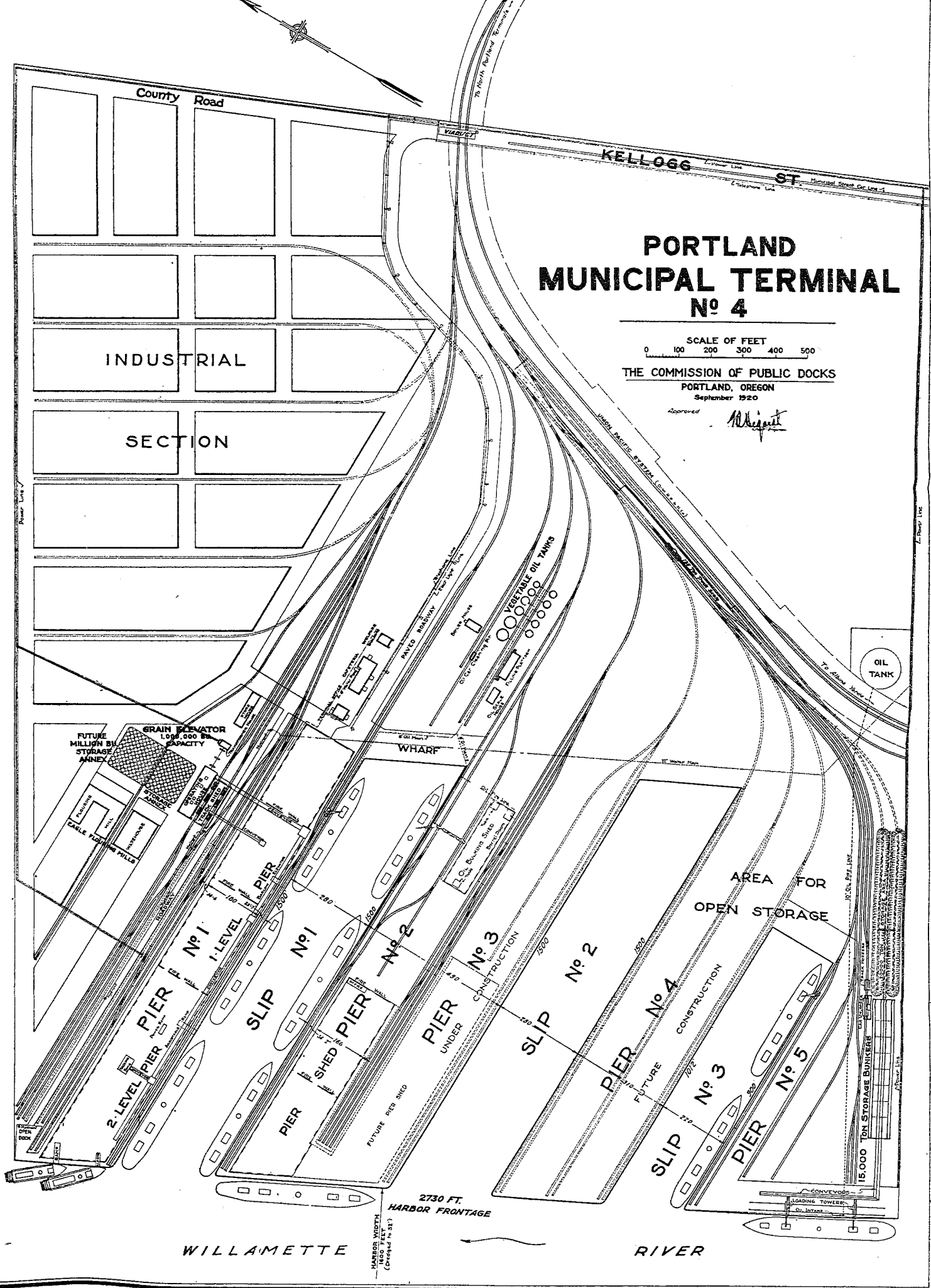
THE COMMISSION OF PUBLIC DOCKS

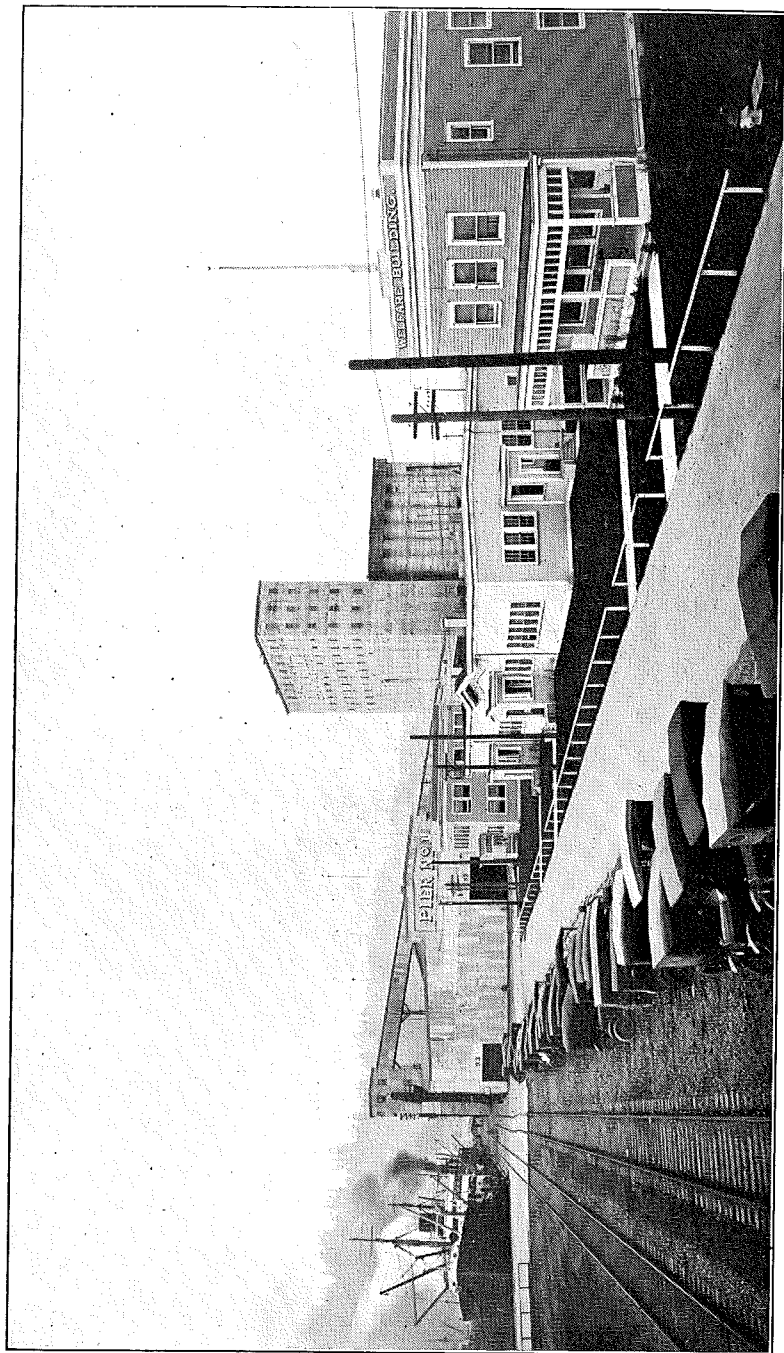
PORTLAND, OREGON

September 1920

Approved

*M. H. H. H.*





ENTRANCE TO PORTLAND MUNICIPAL TERMINAL NO. 4

A2004-001.367

required depth of 32 feet below low water, and this work should be fully completed in a few months.

In the widening and deepening of the channel approach to Terminal No. 4, the Port of Portland, as part of its functions in the development of the port, has excavated a channel the full width of the river, or 1,600 feet, to a depth of not less than 30 feet at low water. The material obtained from the channel dredging has been deposited on the terminal site, which has now been raised to the required elevation for about 80 per cent of the entire area of the site.

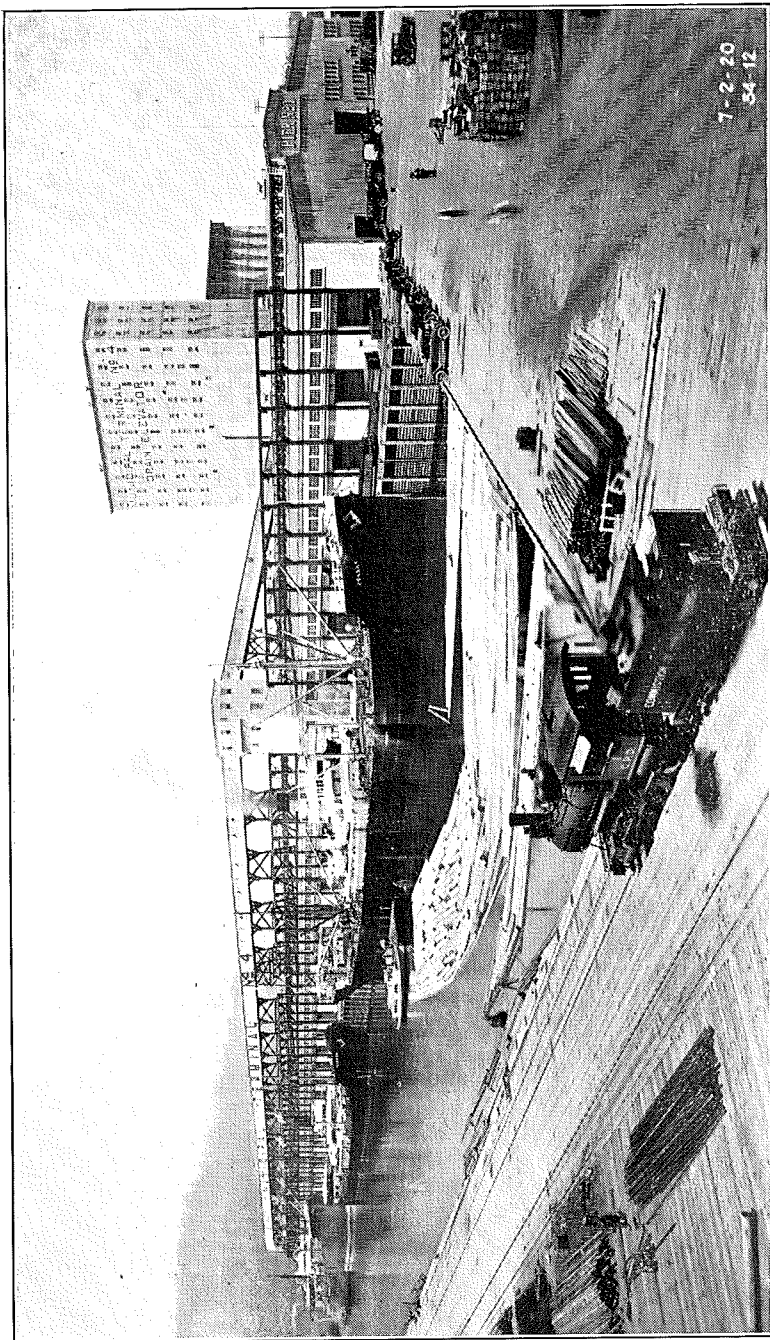
When the Commission decided to construct a bulk storage plant on Pier No. 5, Municipal Terminal No. 4, it was deemed advisable, in order to permit of possible future extension of this plant, and also to provide additional trackage to it, to acquire additional property and for this purpose purchased from the Oregon-Washington Railroad & Navigation Company a strip of land, adjoining Pier No. 5 on the south, containing 4.94 acres. This property had by the railroad company been used in connection with a 55,000-barrel fuel oil tank and pipe line, but, owing to the discontinuance of this class of fuel for their locomotives, it was no longer needed by the railroad and the Commission acquired it on very favorable terms.

The Commission at the same time obtained a lease on this oil tank, with privilege of purchase after a certain period, if, within this time, the railroad company decided that it would not go back to the use of fuel oil.

In view of the constantly increasing shipping of the port and the necessity of providing increased dry dock facilities, in addition to the 10,000-ton floating dock owned and operated by the Port of Portland, the Commission, after a thorough survey of the situation and in keeping with its policy of always having the facilities of the port of adequate capacity and available in advance of actual demands, decided to build a dry dock of 15,000 tons deadweight lifting capacity, capable of docking vessels of the largest size. Contract for the construction of the five pontoons of this dry dock was let early in April, the work to be completed in January, 1921. Contract for the installation of all machinery, pumps, etc., was let in September, and it is expected that the dry dock will be fully completed, installed at its permanent location and ready for operation in June, 1921. By agreement entered into with the Port of Portland Commission, the new 15,000-ton dry dock will be installed at the site of and alongside the present Port of Portland dry dock. This agreement further provides that the two dry docks, with their shops and other repair equipment, shall be managed and operated by the Port of Portland, and that, in the operation of this combined dry dock plant, the net dry dock revenues and deficits, if there be any, shall be divided equally between the parties to the agreement at the end of each calendar year.

The agreement is for a period of ten years and at the termination thereof all equities of the Commission of Public Docks in and to any





PIER NO. 1, PORTLAND MUNICIPAL TERMINAL NO. 4, WITH GRAIN ELEVATOR IN BACKGROUND

of the structures and the improvements made by this Commission upon the dry dock site, and used for dry dock purposes, shall be ascertained and determined by a Board of Arbitration.

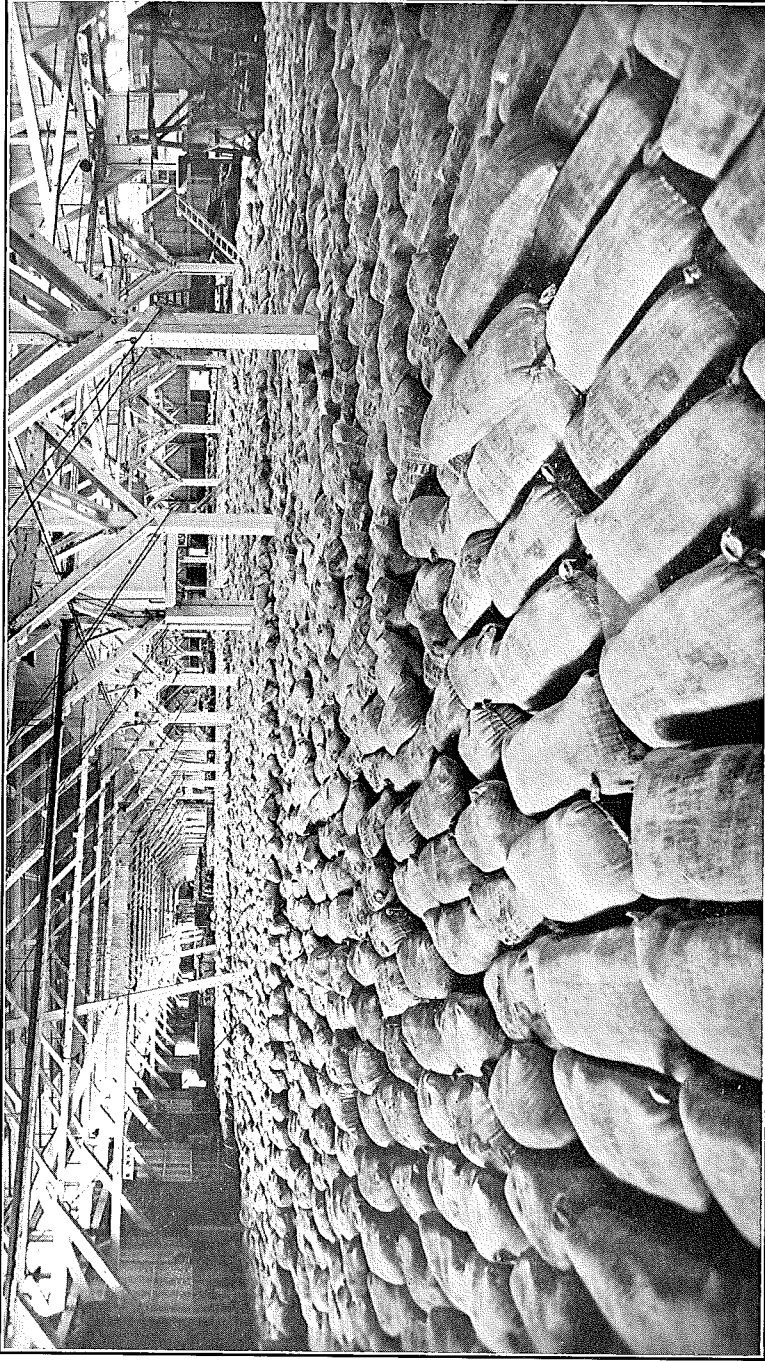
In order to carry out the provisions of this agreement and prepare the present dry dock site for the reception and operation of the 15,000-ton dry dock, it was further agreed that the Port of Portland Commission should expend for betterments of its plant the approximate sum of \$117,500.00, and the Commission of Public Docks the approximate sum of \$145,000.00 for its dry dock berth, additional shop facilities, dredging, etc. This work is now under way and it is planned to have the combined dry dock plant in operation by June, 1921.

The construction activities of the Commission during the fiscal year have been the greatest since its organization in 1910, and, aside from the 15,000-ton dry dock, have been confined nearly entirely to the further development of Terminal No. 4, where the total expenditures at the close of the fiscal year had been \$4,352,849.52, and during the fiscal year, \$1,517,802.38.

As the distance of Terminal No. 4 from the nearest street car service of nearly one and one-half miles constituted a great inconvenience in the operation of the constantly increasing shipping at this terminal, the Commission, early in the year, took up the question of having street car service extended to the terminal. For this purpose, request was first made on the Portland Railway, Light & Power Company for such extension, as part of their street car system, but, because of the unsatisfactory financial condition existing at that time, they were unable to do so. The Commission then appealed to the Public Service Commission of Oregon for an order compelling the street car company to provide the required car service to the terminal. The Public Service Commission, however, sustained the stand taken by the street car company, but issued an order that, if the Commission of Public Docks would itself construct this line, the street car company would be required to operate it at actual cost.

As this street car service was considered as absolutely necessary for the successful operation of this extensive terminal, the Commission procured franchises from the city and county, and proceeded to construct this extension for a distance of one and one-eighth miles and had it in operation early in November. A rate of fare of five cents for single trip was established on this line. The greater portion of the street car line extension was constructed on Kellogg street, the main thoroughfare leading to Terminal No. 4, and in order to provide for future and greatly increased traffic on this street the Commission has started proceedings to have this street widened, so as to allow for a paved roadway 50 feet wide. The street will be paved early in 1921 by the County, Kellogg street being a county road.

As the port had outgrown the customs limits which were estab-



INTERIOR VIEW OF GRAIN SECTION, PIER NO. 1, PORTLAND MUNICIPAL TERMINAL NO. 4  
The pier shed on Pier No. 1 is 1540 feet long and 130 feet wide, divided into four sections by concrete fire walls. Pier shed is provided with sprinkler system and equipped with modern cargo handling facilities.

lished many years ago, the Treasury Department was petitioned to extend these limits so as to make the district include the entire harbor from head of deep water navigation in the Willamette river to its confluence with the Columbia river, and, as it has the approval of the local Collector of Customs, it is believed that favorable action will soon be taken on this request.

The Commission has given its full support to the work being done by the Waterfront Committee, appointed by the City Council, to clear the waterfront of structures which have become greatly deteriorated by age and are in a dangerous condition. Eight such waterfront structures have been condemned and removed by action of the Commission.

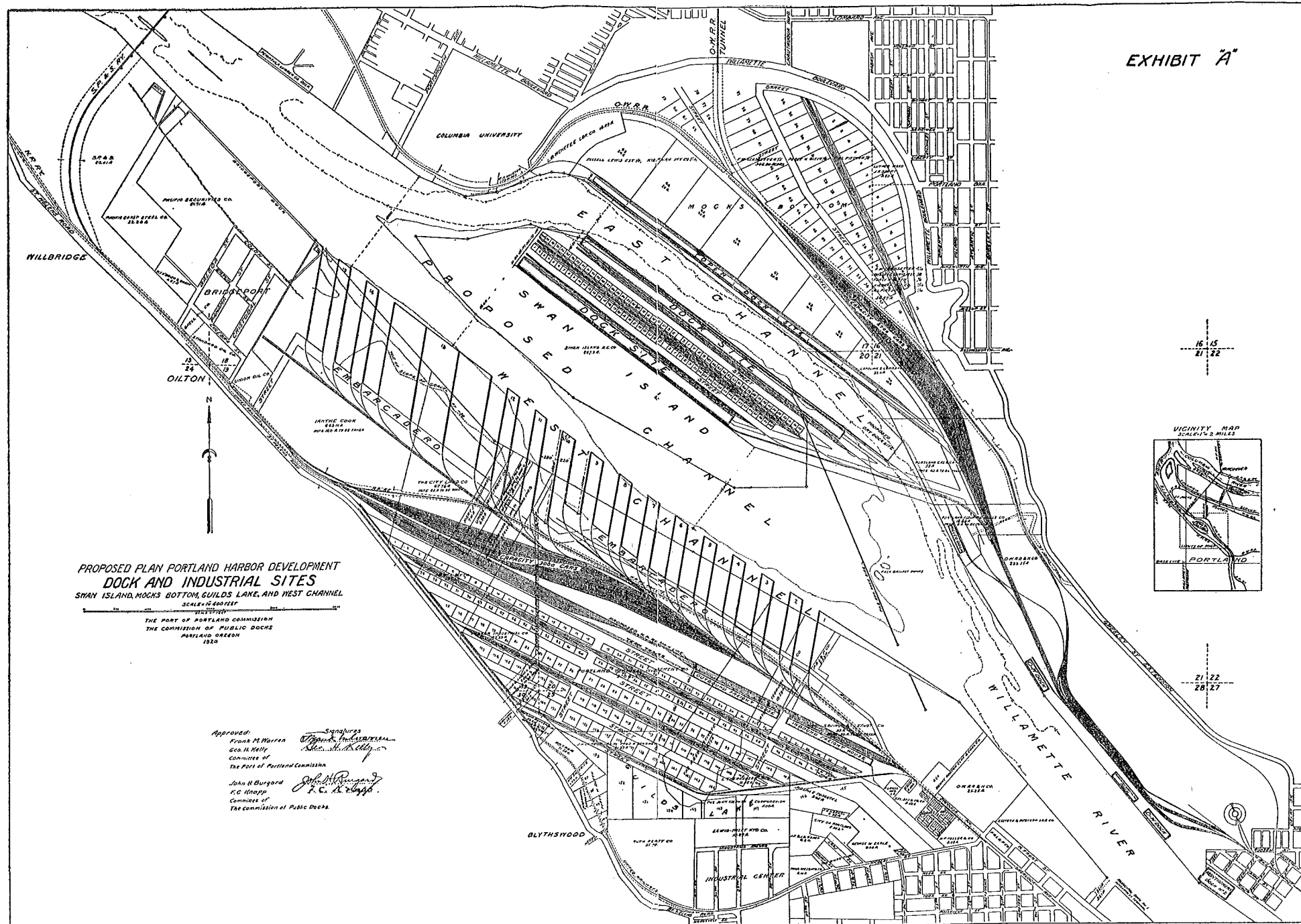
In addition to its construction and operation activities, the Commission has given much of its attention to matters pertaining to the development and upbuilding of the port, its waterborne commerce, and supporting industries.

Probably one of the most important matters undertaken in this connection was the joint action of the Commission of Public Docks and the Port of Portland Commission in having a project worked out looking to the comprehensive development of the Swan Island district, located about midway between the upper and lower harbor areas. Such a plan had been under consideration for many years, but, with the continued growth and expansion of the port, it was felt that the time had arrived to bring it to a definite issue, and Mr. George W. Boschke, consulting engineer, was, by the two port bodies, engaged to investigate and report on the most feasible plan for such comprehensive development. Mr. Boschke made a complete survey and investigation of the Swan Island situation and, in March, submitted his report upon the improvement of the harbor between Municipal Terminal No. 1 and the Spokane, Portland & Seattle Railway bridge, with reference to harbor development for dock and industrial sites, including Guild's Lake, Mock's Bottom, Swan Island and dredging the west channel of the river.

The suggested improvements form a concrete and comprehensive project and admit of serially conducted developments, as funds become available and necessity arises for construction of piers, railroad terminals and yards, contiguous to industrial sites. These suggested improvements as shown on accompanying plan are, briefly, as follows:

1. Revising present harbor lines within the scope of the project.
2. Dredging the west channel of the Willamette river to a width of 1,600 feet and a depth of 30 feet at low water.
3. Construction of piers, slips and industrial sites in Guild's Lake, on the west side of the river, served by railroad trackage facilities, including depots and inbound and outbound freight, with terminal yards of 3,000 car capacity.
4. The development of a "Mole" 1,087 feet wide and 5,000 feet

# EXHIBIT A



long, on the easterly portion of Swan Island, remaining after the west channel had been dredged, connecting the mole to the east shore by a causeway, which would close the south end of the present east channel, together with industrial sites served by railway and dock facilities.

5. Dredging the present east channel to its full width of 700 feet to serve the east side of the "Mole" and the west side of Mock's Bottom, with shipping facilities.

6. Development of Mock's Bottom into building sites for industries of magnitude requiring space, served by adequate docks and railroad trackage, including terminal yards, with a capacity of 2,700 freight cars.

The amount of dredging to be done to provide 30 feet at low water in these waterways was:

From west channel, 1,600 feet wide.	27,598,517 cu. yds.
From all slips on west side.....	6,720,000 cu. yds.
From east channel, 700 feet wide...	2,018,555 cu. yds.

---

Total ..... 36,337,072 cu. yds.

To fill the low areas to desired height above low water would, according to the project estimate, require 39,312,380 cu. yds.

The report further showed that, upon completion of development, the areas reclaimed would be:

Guild's Lake district.....	888.29 acres
Swan Island.....	159.20 acres
Mock's Bottom.....	483.30 acres

---

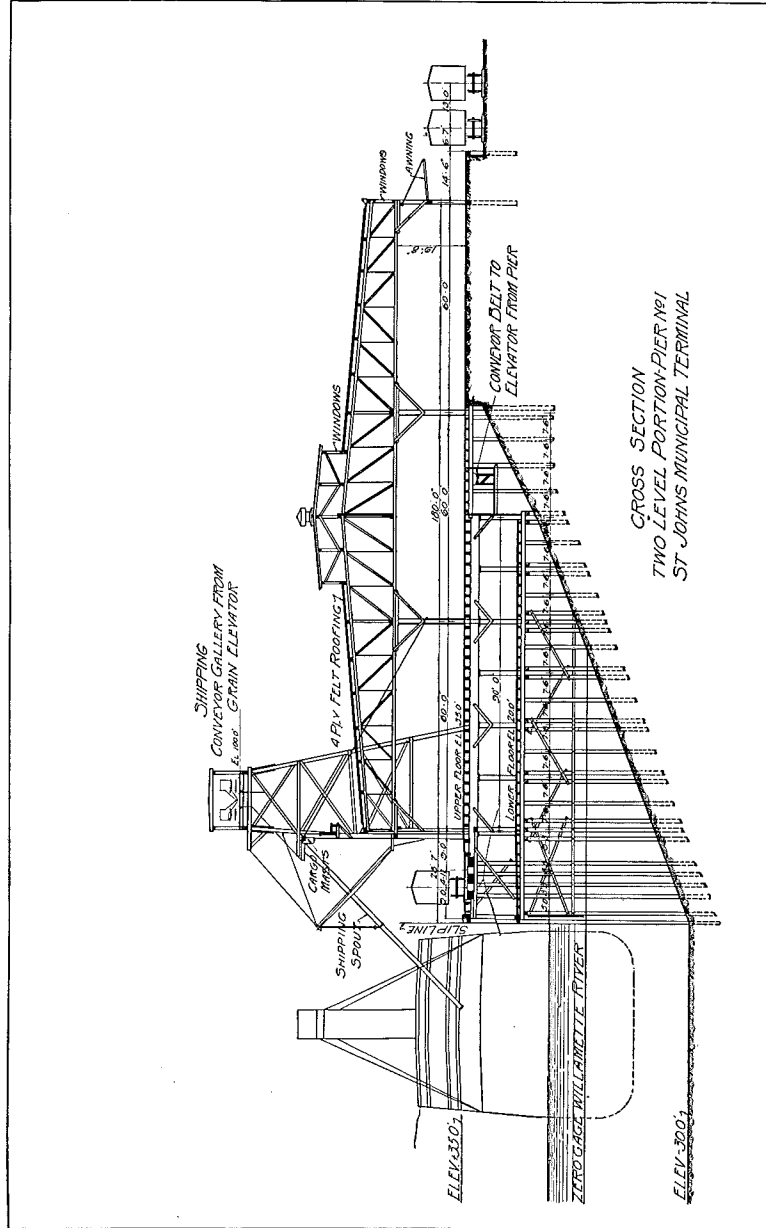
Total ..... 1,530.79 acres

and that the estimated cost of the project, which includes the acquisition of the real estate, on the basis of the assessed valuation, and performing the required dredging, with contingencies, was \$4,805,000.00.

This report was adopted by the two port bodies and later used in connection with a certain charter amendment and an initiative measure, which were to be voted on at the November election, the purpose of which will be referred to hereinafter.

The Commission joined with the Port of Portland Commission in financing the work of a Committee of Fifteen representative citizens, appointed by the Mayor of the city, for the purpose of making a comprehensive survey of the water front and industrial areas adjacent thereto. This Committee organized and assumed the name of the "Committee of Fifteen."

In carrying out the duties assigned to it, this Committee proceeded with its work on the assumption that the future commercial and



CROSS SECTION PIER NO. 1, PORTLAND MUNICIPAL TERMINAL NO. 4

Pier is equipped with complete dry valve sprinkler systems, electric service for light and power, electric dock trucks, electric pilers, power ramps and Barlow elevators, as well as cargo mast system, are provided for rapid handling of cargo to and from vessel. Grain conveyors and sacking bins are provided for grain handling to ships. Two locomotive cranes of 15 and 40 tons capacity are provided for use on the tracks at ship's side.

industrial development of the community required the adoption of a definite plan, which would insure:

1. A satisfactory ship channel and ample harbor and dock facilities.

2. Relief from railroad terminal congestion and ample rail facilities.

3. Provision for ample and convenient site for industrial development.

In working out the plan for the comprehensive development of the channel and harbor and reclaiming of a large area of land for commercial, industrial and railroad uses, the Committee recommended, as a part of this plan, the consolidation of the Commission of Public Docks and the Port of Portland Commission, which would avoid duplication of authority and responsibility in the carrying out of these contemplated public improvements and centralizing the activities of these two commissions into one consolidated body, to be known as the Port of Portland Commission. This recommendation was approved by both commissions and was incorporated in the charter amendment and initiative measure referred to.

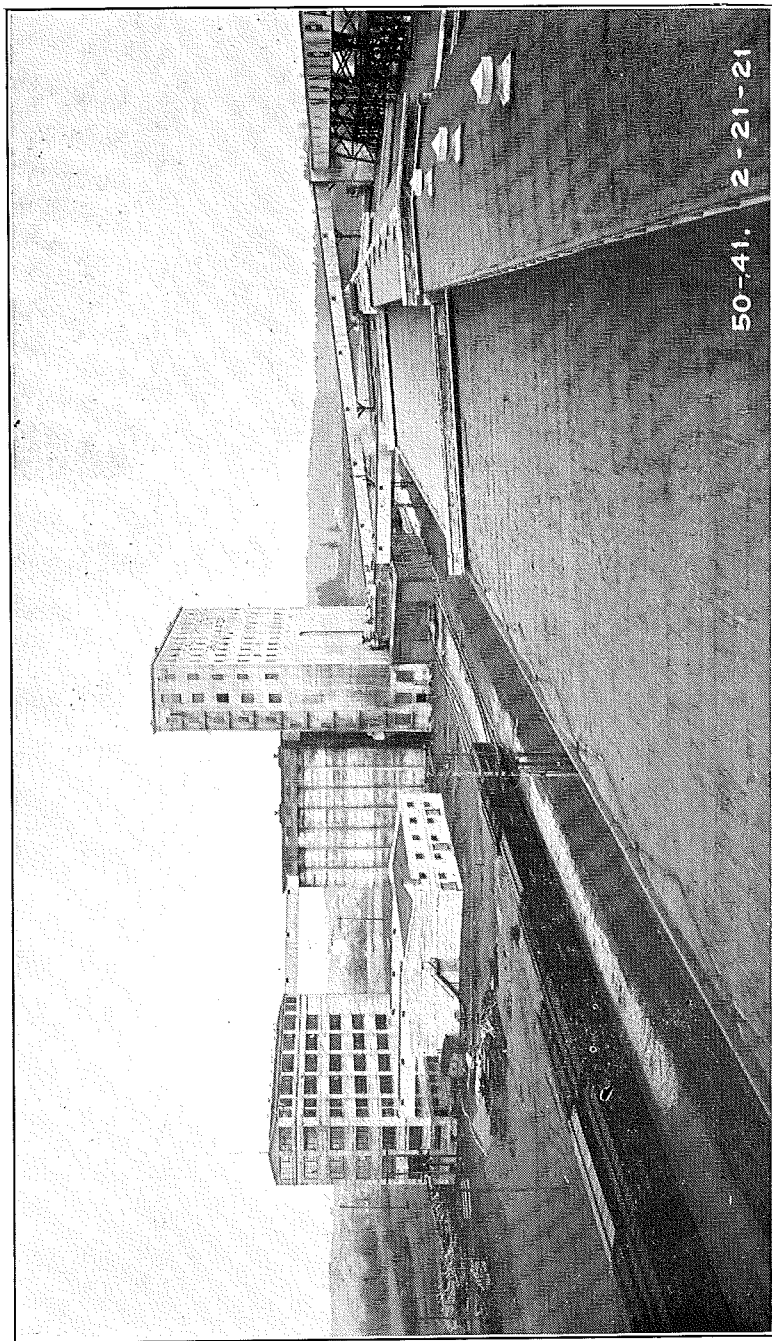
These measures, which provided not only for the consolidation of the two port bodies, but also the taxing power necessary for carrying out the Swan Island project and other contemplated port and harbor improvements, were voted on at the November election, with the result that the Charter amendment was adopted in the port district, but the initiative measure failed to carry in the state at large.

In view of the failure of the initiative measure to receive the necessary votes, it is the announced intention of the Committee of Fifteen to secure through legislative action practically the same authority as was contained in the initiative measure, with the object of carrying out of the provisions of the original program or plan of this Committee.

Another important matter in which the Commission of Public Docks participated in 1920 was the Portland Rate Case, involving freight rates on all commodities between Portland and points in the Columbia Basin territory. The Commission joined with the Portland Traffic and Transportation Association, the Chamber of Commerce, and the Port of Portland in a complaint to the Interstate Commerce Commission, that existing rate schedules unduly favored Puget Sound cities and deprived Portland of the benefits of her location, in that the same rates were made for hauls over the Cascade Mountains as applied for like distances via the Columbia river route, upon a water grade.

The trial of this case extended over two weeks, before three of the Interstate Commerce Commissioners who came to the coast for the hearing. On November 5, 1920, the case was decided by the Commission, holding that rates on classes and commodities, between





MILLION BUSHEL GRAIN ELEVATOR AND EAGLE FLOURING MILLS IN REAR OF PIER NO. 1,  
PORTLAND MUNICIPAL TERMINAL NO. 4

Portland on the one hand, and points in the Columbia river basin south of Snake river, on the other hand, were unduly prejudicial to Portland. In the judgment of the Commission, there should be a difference of ten per cent in the rates between Portland and Puget Sound cities and points in the territory south of Snake river. The difference of ten per cent will be made effective in rate schedules by increasing present rates to Puget Sound five per cent, and by reducing Portland rates five per cent.

It is difficult to estimate the full advantage to Portland of this decision, which adds to the already large territory in which Portland has an advantage in rates, an area of approximately 4,500 square miles, producing in round numbers, 10,000,000 bushels of grain, and in which are located many important cities and towns, including Walla Walla, Pendleton, Athena, Freewater, Milton, Dayton and Pomeroy.

In addition to the direct advantage in freight rates resulting from this decision, the effect will have a marked influence upon prospective business, that is, the locating of future industries.

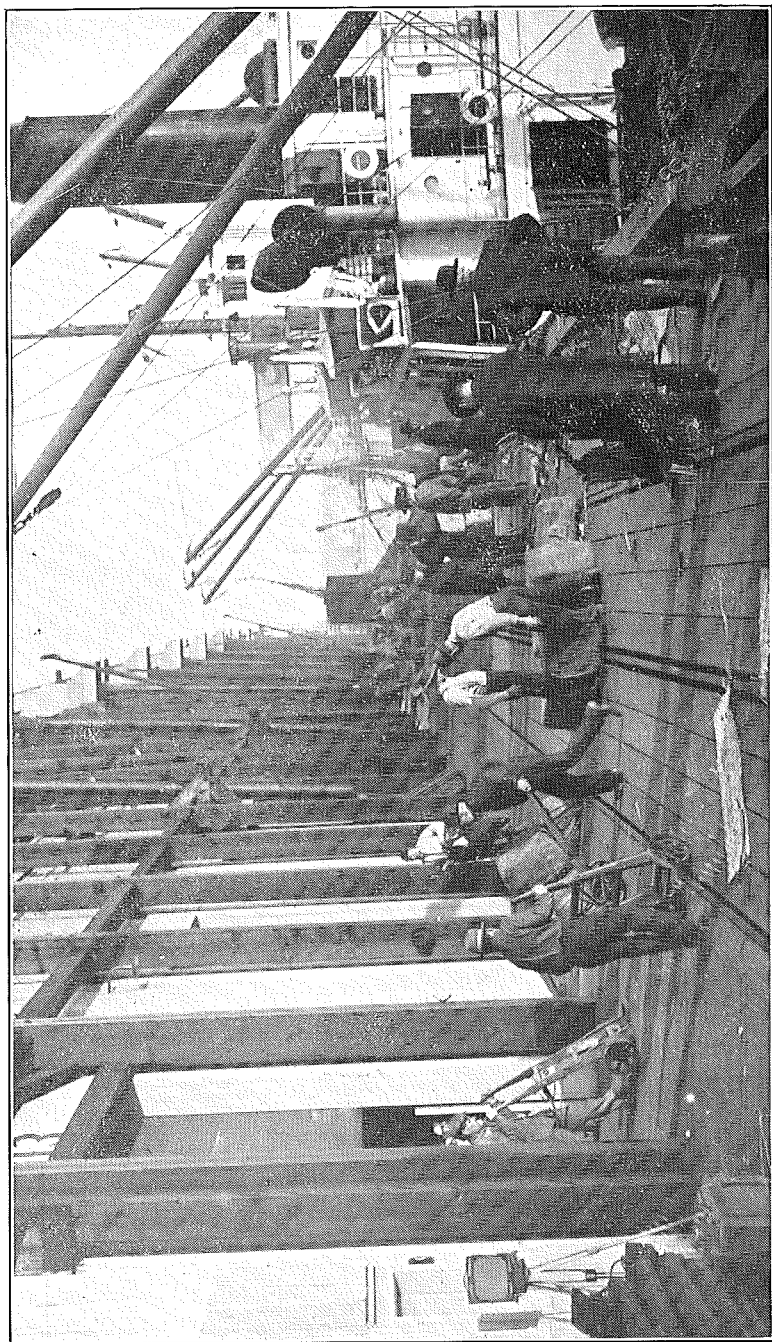
The parity of rates in effect for many years, which has given to competing cities a preference to which they were not justly entitled, and which has deprived Portland of her natural advantages, has been upset. It is understood this decision of the Interstate Commerce Commission becomes effective April, 1921.

Portland also possesses a particular advantage over other Pacific Coast ports in attracting shipping. The Columbia river district, of which Portland is the center, has a large volume of outbound movement of cargo which is of local or northwestern origin. This advantage has been fully demonstrated in the volume of the export business of the port during the past year, when ships have been seeking cargo to a degree which was not anticipated or expected in 1919.

In April The Commission of Public Docks entered into an agreement with the Port of Portland Commission to establish a joint traffic department, which was soon thereafter organized, to develop through and local water-borne traffic for the port; to solicit the establishment of foreign and local steamship service; the routing of import and export to and through the port; to encourage the establishment of those agencies which enter into the handling of such traffic—custom's brokers, freight forwarders, steamship agencies, foreign and American importing and exporting firms, etc., to develop trade relations between local and foreign firms and to promote and advertise the shipping and industrial facilities of the port generally.

Mr. H. L. Hudson was appointed general traffic manager in charge of the traffic department, with headquarters in this city, and in August an eastern traffic office was opened in New York City, with Mr. C. A. Lockhart in charge.

The work of the Traffic Department, under Mr. Hudson's direction, has been well organized and is being conducted with great energy



DISCHARGING RUBBER CARGO AT PIER NO. 1, PORTLAND MUNICIPAL TERMINAL NO 4

and it is confidently expected that the effect of this work will be favorably reflected in an increase in the port's business, as soon as more stabilized conditions in world commerce have become established.

In addition to the traffic department's activities in this country, the two port bodies are, also, jointly, maintaining two traffic agents in the Orient, one of which took up his duties in January, and the other in June. Their work is being carried on in Japan, China, Manchuria, Singapore, Straits Settlements, Dutch East Indies, India, etc.

The Commission, because of these activities and conditions, feels that it has taken a very advanced position in laying the foundation upon which will be built the future and more permanent growth of the port and the benefits which will be derived from the renewed energy, which the Commission fully realized had to be made to recover and expand this shipping arrested or diverted on account of the World War. It is gratifying to be able to record the great increase in the commerce passing through the port during the past year and that shipping interests are learning to appreciate more and more the excellent advantages which the port possesses and that the shipping facilities, provided by the municipality, are being used to a greater extent than ever before. The number of steamship lines doing business with the port is the greatest in the history of the port and the sizes and carrying capacity of these vessels are greatly in excess of those of previous years. The Commission further feels that the prospects for a much greater expansion of the port's water-borne commerce are most promising and that the city's foresight in providing modern and extensive terminal facilities to accommodate this commerce in advance of their actual need, has been more than justified.

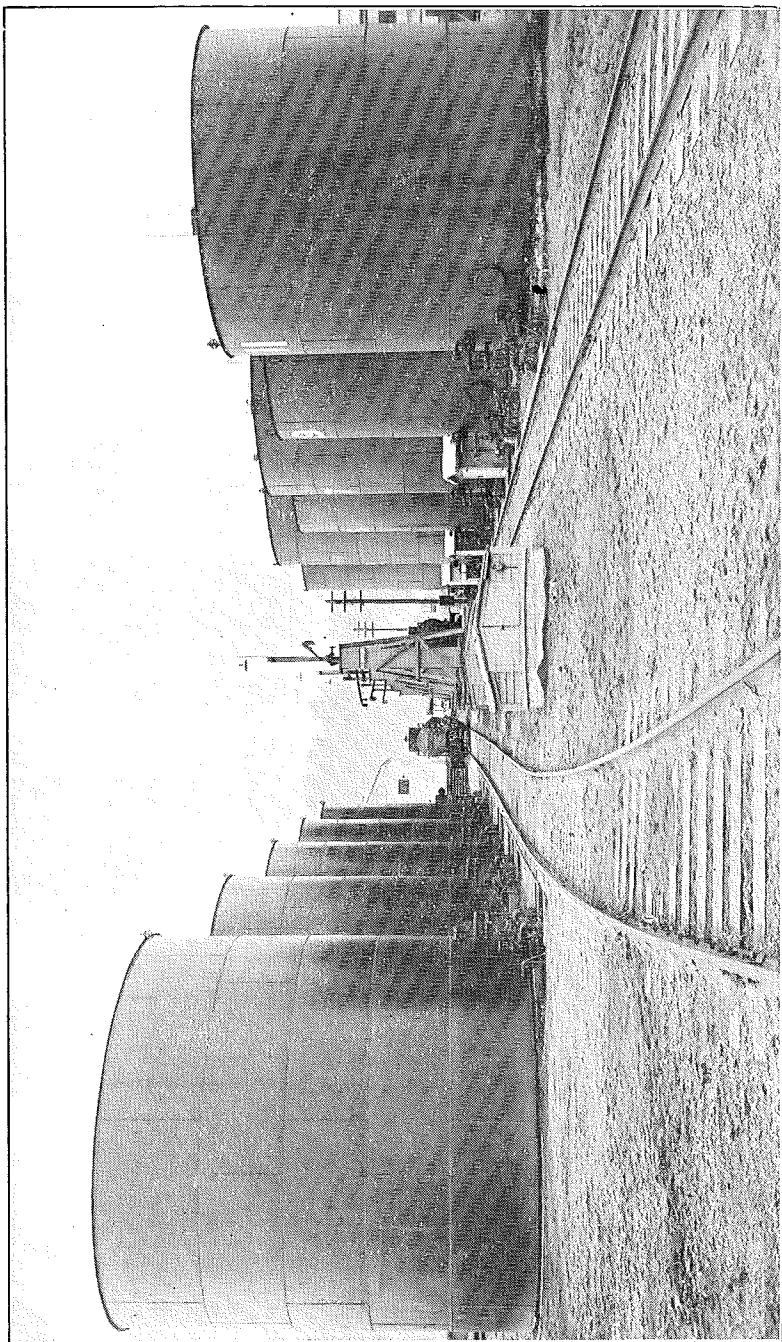
The revenues accruing from the operation of the municipal terminals have been very gratifying as are shown in attached financial statement.

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, handling and other charges being established by tariff.

For a more detailed statement of the work of the Commission during the year, the shipping facilities of the port, the port's channel conditions and other information relative to the port, attention is invited to the report of the Engineer of the Commission, herewith.

The Council, by action taken October 6, 1920, refused to include in its tax levy the amount of the estimate required by the Commission.

Subdivision "K," Section 163 of the Charter provides that if the Council fail to make a levy for the Commission, the amount of the Commission's estimate may be certified by it to the County Clerk in like manner and with the same effect as in the case of other corporations having the power to act.



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

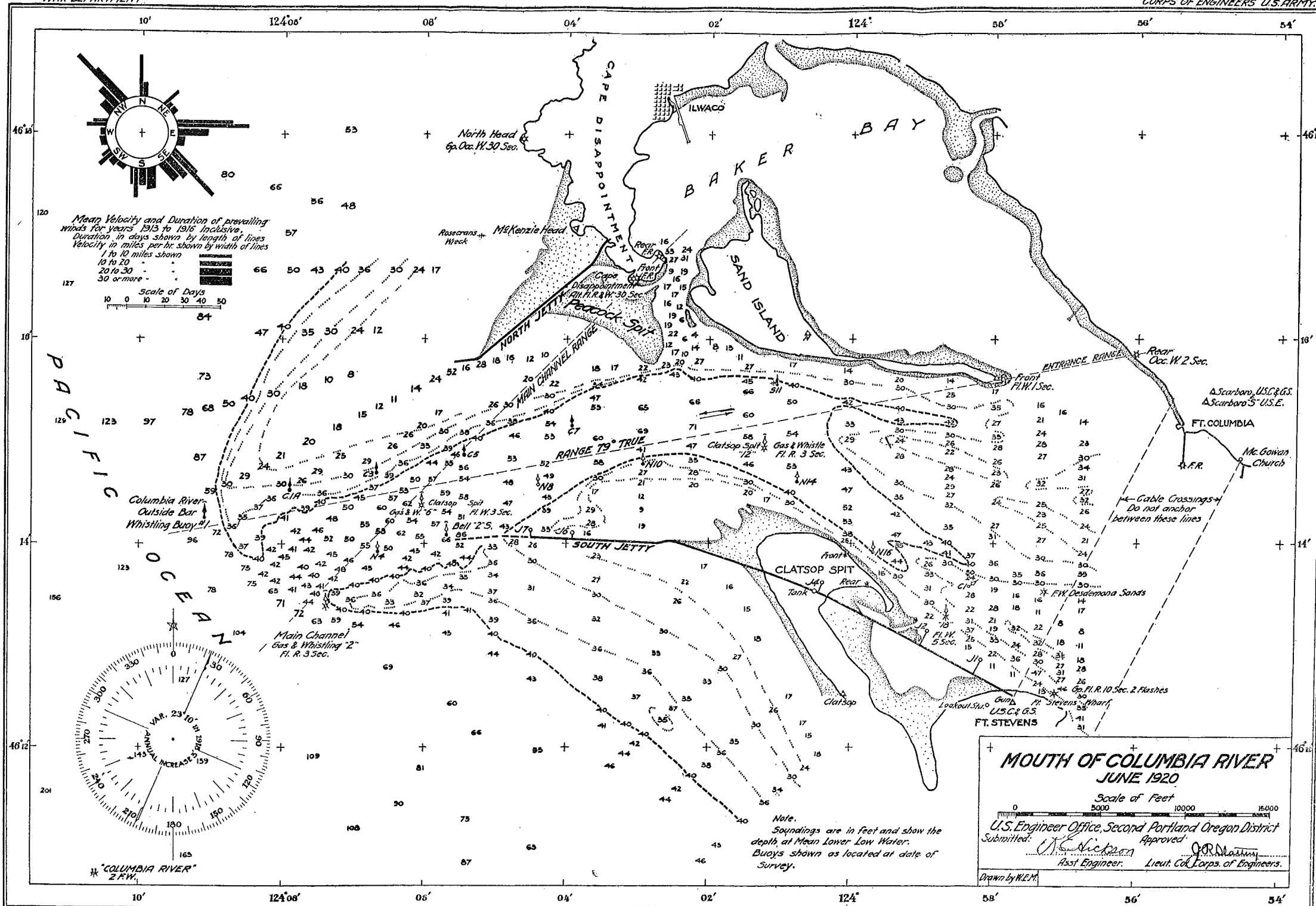
Pursuant to the above provisions and to the statutes of the State of Oregon and more particularly, Section 3664 of Lord's Oregon Laws as amended by chapter 184 of the General Laws of Oregon for 1913 and as further amended by chapter 225 of the General Laws of Oregon for 1917, the Commission of Public Docks notified the County Clerk and the County Assessor that the tax levy of the department for the fiscal year ending November 30, 1920, had been fixed at \$634,020.37.

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 expenditures 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,

CHAS. B. MOORES,  
Chairman of the Commission of Public Docks.



# Annual Report of Engineer

---

December 10, 1920.

The Commission of Public Docks, Portland, Oregon.

Gentlemen: For the fiscal year ending November 30, 1920, I beg to submit the following report covering the engineering and construction activities of the Commission, with a general statement of the facilities of the port provided by private interests and available to shipping.

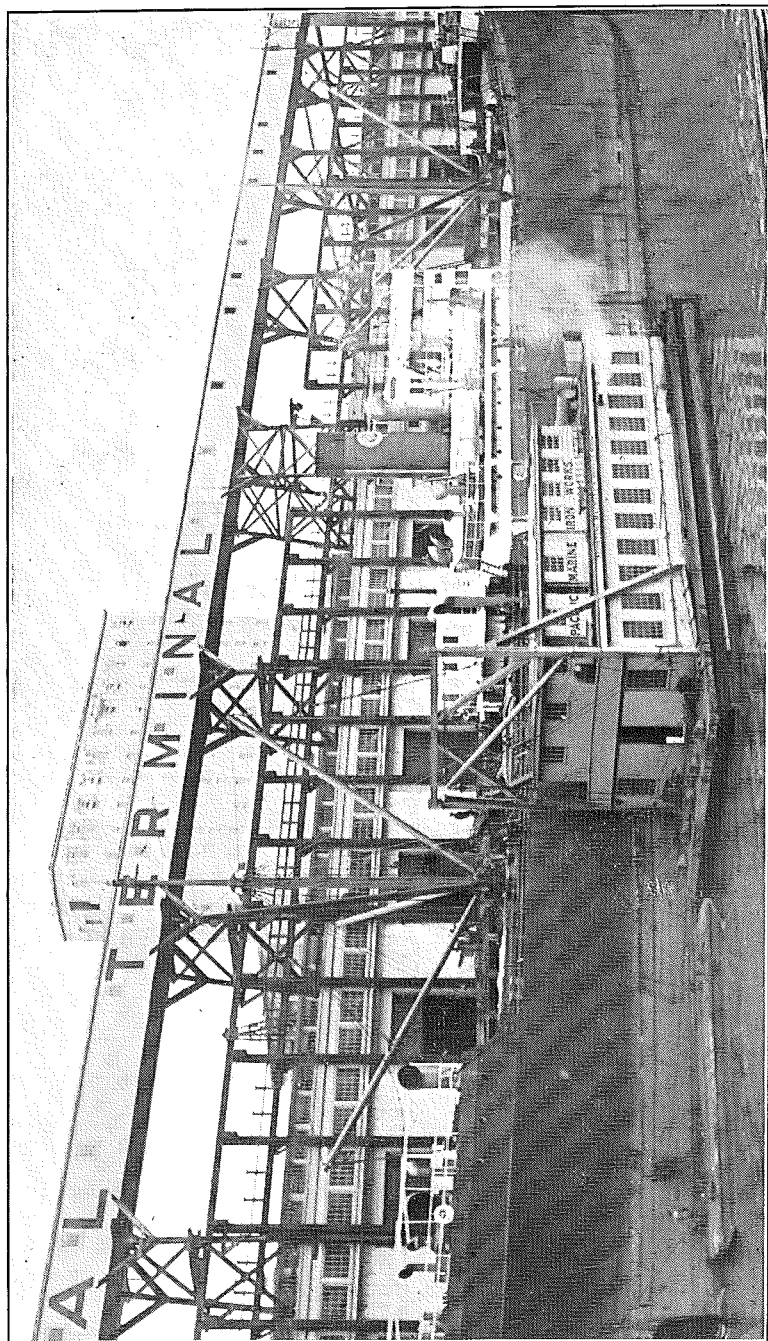
In my last annual report a detailed statement was made also of all the shipping facilities of the port, and as such information is believed to be of special interest and particular value to steamship lines which, in constantly increasing number, are entering the field of securing cargo in the rapidly growing Pacific coast trade, similar information will be included in this report, to which will be added a brief description of the port and its channel conditions—the mouth of the Columbia river and the ship channel from Portland to the sea.

Portland, at the head of deep water navigation on the Willamette river, is 10 miles above its confluence with the Columbia river and distant 110 miles from the Pacific ocean. Within the limits of the city of Portland the port's harbor frontage is nearly 29 miles, on a channel which is from 900 to 1600 feet wide between the established harbor lines. On this frontage 6.13 miles of berthing space has been developed for the accommodation of shipping and industries, segregated as follows: municipal terminals, 1.47 miles; private general cargo, grain, lumber, fuel docks, etc., used for ocean commerce, 2.72 miles; and for coastwise and river steamers, shipbuilding and other plants and industries, 1.94 miles.

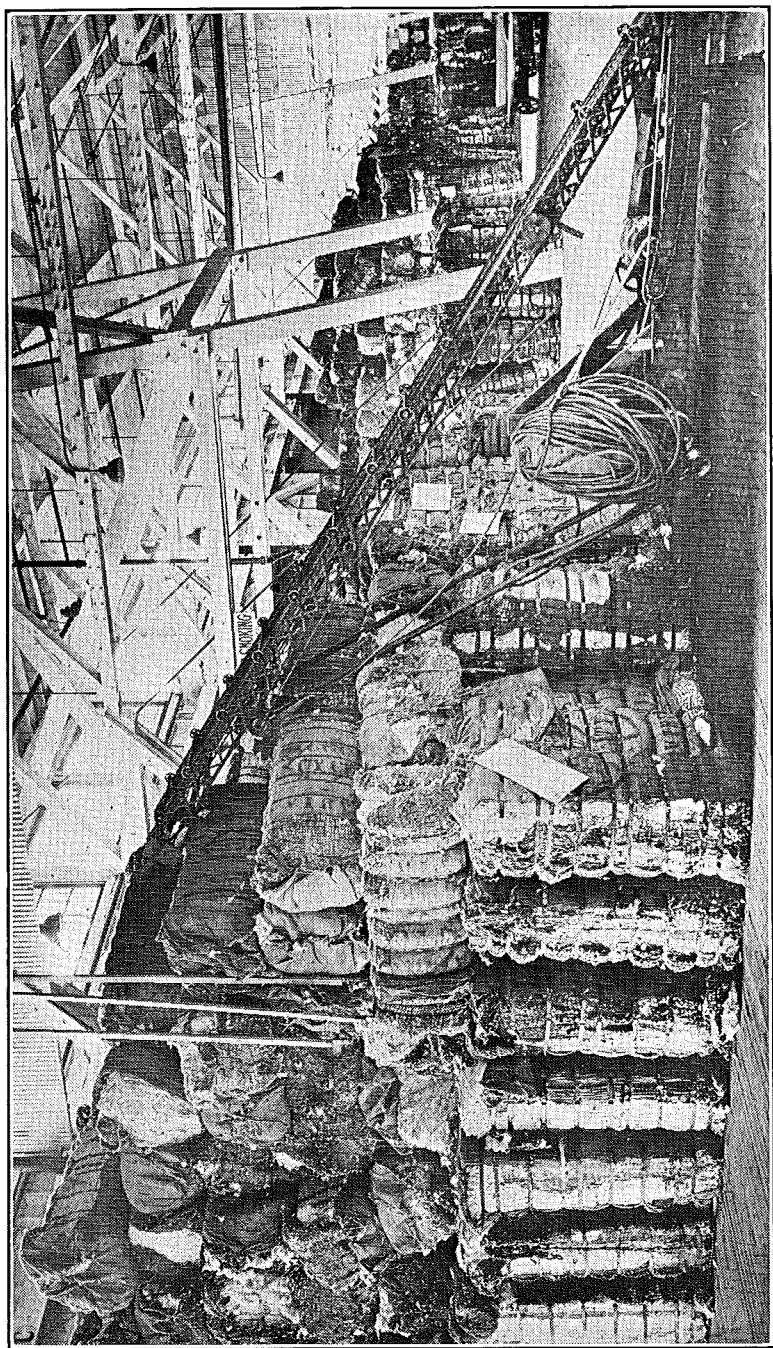
A least depth of 30 feet at low water exists throughout the harbor at all of the municipal terminals and, with only a very few exceptions, at all private docks used in connection with deep sea shipping. The required harbor depth is maintained by the Port of Portland Commission, which also assists the Federal Government in the ship channel work from Portland to the sea, which insures at all times, satisfactory navigating conditions.

**Entrance to the Columbia River:** The United States Engineer Department survey of the mouth of the Columbia river of June, 1919, showed an entrance channel having a least depth of 40 feet at the mean of the lower low waters, for a width of 3,300 feet, and a least depth of 36 feet for a width of 7,000 feet. The Engineers' survey of June, 1920, clearly indicates the important improvements which are constantly taking place from the natural scouring action produced





A MODERN FLOATING MARINE REPAIR PLANT IS AVAILABLE FOR SHIP REPAIRS WHILE VESSEL IS WORKING CARGO



OUT-BOUND COTTON CARGO BEING ASSEMBLED AT PORTLAND MUNICIPAL TERMINAL NO. 4  
Electric portable stacking machines are provided at all municipal terminals.

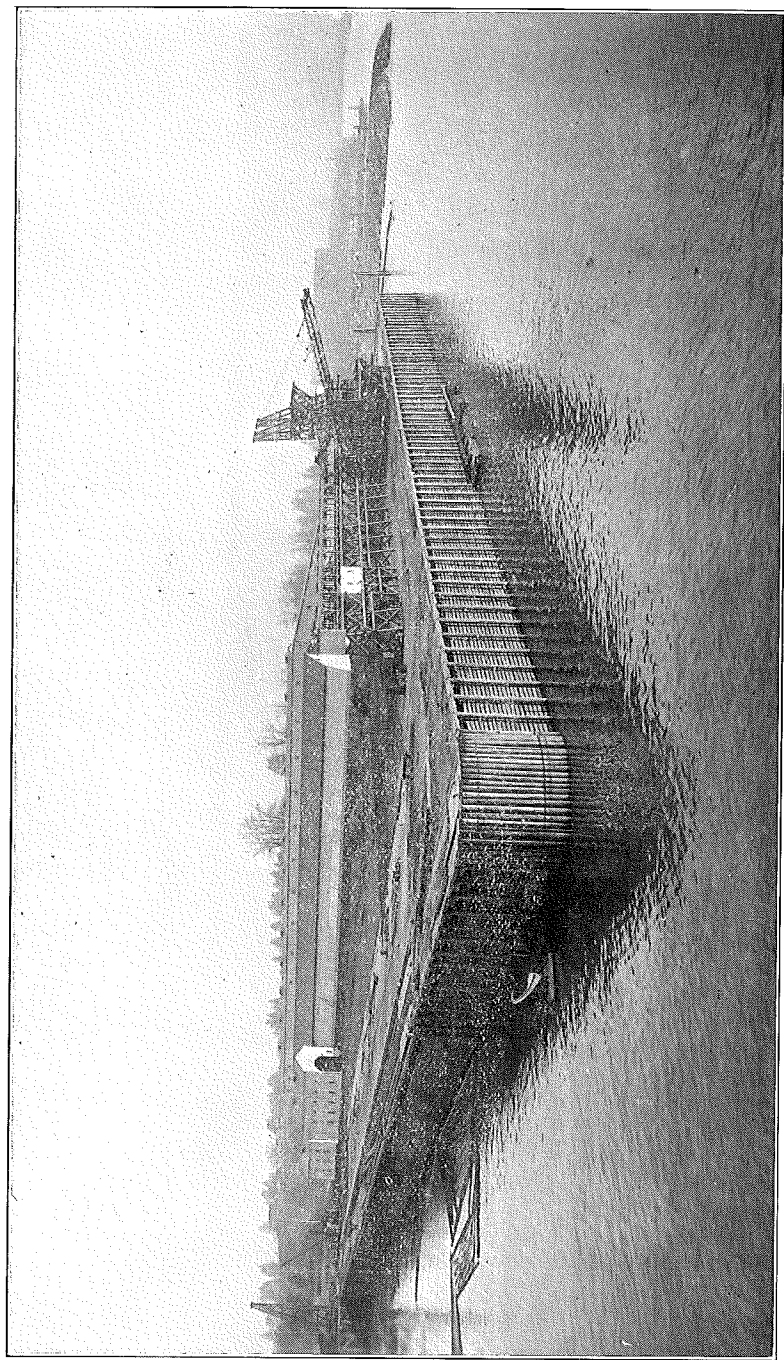
by the completed jetty works. This latter survey shows the entrance channel to have a least depth of 40 feet for a width of nearly 5,000 feet and a 36-foot depth for a width of 8,000 feet, with a bar crossing of only 4,000 feet—the distance between the 50-foot low water depths on either side of the crossing. The mean rise of tide is 7.5 feet at the entrance, which is well supplied with aids to navigation, consisting of light ship, gas and other buoys, and range lights, permitting uninterrupted navigation by vessels at all times, day and night.

**Ship Channel from Portland to the Sea:** The present Federal Government project depth of 30 feet at mean lower low water was completed several years ago, and the improvement work now being done on this channel is the maintenance of the project depth and the construction of additional permanent construction works. The improvement of the ship channel requires dredging to be done only in about one-fourth of its entire distance. The dredged portions of the channel have a minimum width of 300 feet, and where cuts are in a bend in the river, or other conditions require a wider channel, a cut of 500 to 600 feet is made. Between the dredged portions of the ship channel long stretches of much deeper water exist—35 to 100 feet—having widths of 1,000 to 2,000 feet, which afford frequent and convenient anchorages, where vessels may swing with the tide, without interference with navigation.

A further ship 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 the 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, 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 port is, therefore, generally considered as 33 feet.

There is now before the Federal authorities a project for the further deepening of the ship channel and increasing the dredged cuts to a minimum width of 500 feet on straight courses and 800 feet in bends of the river. It is expected that this project will be approved early in 1921 and that execution of this work will be undertaken directly thereafter.

As a result of the very extensive construction program carried out by the Commission during the fiscal year, the facilities of the port have been greatly improved and increased, both with respect to pier and shed space and to facilities for handling and storage of bulk commodities and heavy freight. Practically no waterfront construction work was done by private parties.



HARBOR VIEW, PIER NO. 5, MUNICIPAL TERMINAL NO. 4, SHOWING BULK STORAGE PLANT  
The pier has a frontage on the harbor line of 666 feet and a length of 900 feet along slip No. 3.

With funds made available from a total authorized bond issue of \$10,500,000.00 for the provision of municipal commercial water terminals and other port requirements, the following facilities have been completed and placed in operation, or are now nearing completion:

**Completed and in Operation:**

**Municipal Terminal No. 1:** This site contains an area of 11.85 acres, with a harbor frontage of 1,075 lineal feet, on which there has been constructed:

A quay dock of 955 feet in length, 300 feet of which has two levels. This dock is covered with a transit shed 935 feet in length and 100 feet in width.

A slip at the lower end of the quay dock, 120 feet in width and 484 feet in length, with an open pier, the full length of the slip, 60 feet in width.

A warehouse in rear of the open pier, 176 feet in width, and 330 feet in length.

A warehouse in rear of the quay dock, 190 feet by 200 feet.

Total general cargo capacity of this terminal, 20,500 tons.

This installation furnishes a very compact terminal, with rail trackage accommodating at one time seventy cars and a frontage affording berthing space for one 500-foot and two 450-foot vessels. It is located in the main railroad terminal district of the city and is below all bridges but one. The mechanical equipment consists of one 20-ton locomotive crane, four electric dock winches, cargo hoists, freight elevator, electric trucks, conveyors and freight piling machines. All the structures are provided with automatic sprinkler system.

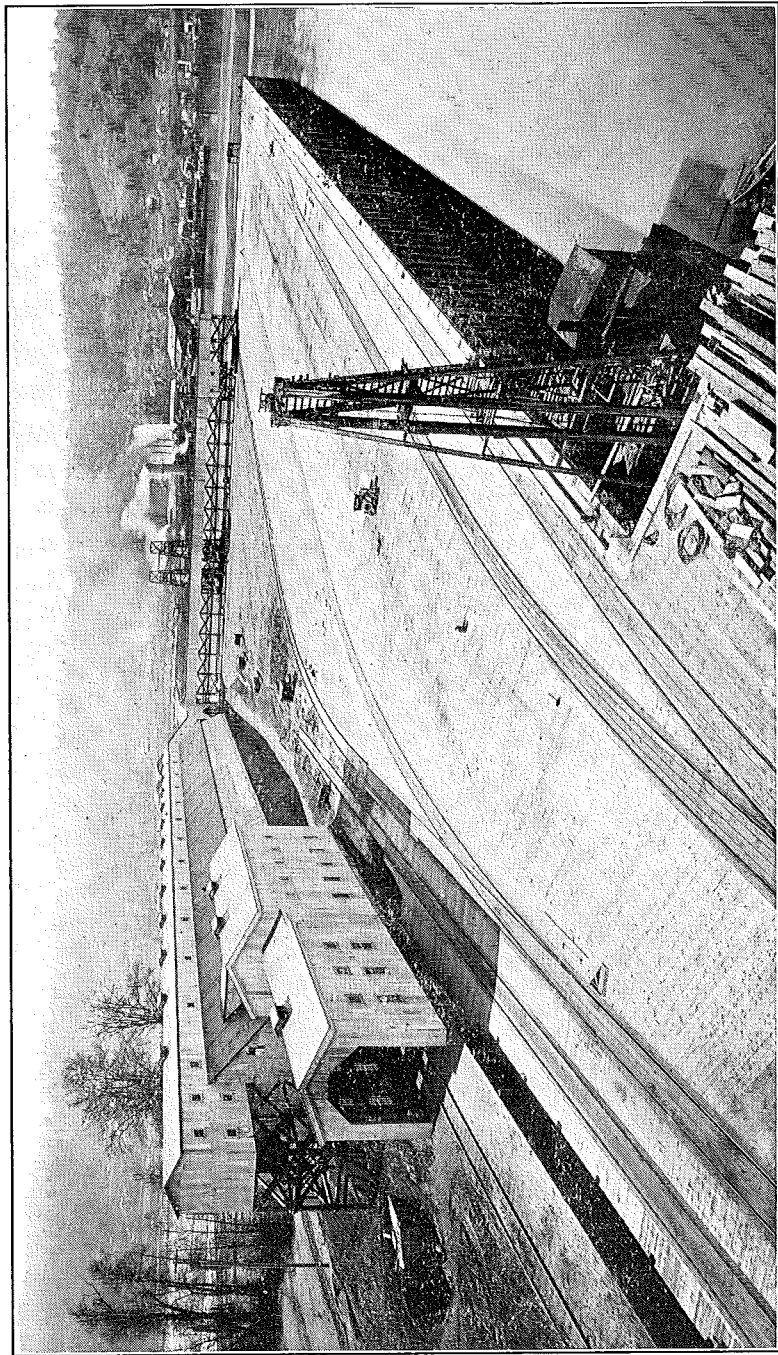
**Municipal Terminal No. 2:** Area of site, 3.64 acres and harbor frontage, 526 lineal feet, with:

A two-level quay dock, 526 feet in length, covered with transit shed 100 feet in width the full length of the dock and trackage for the placement of twenty cars, with capacity for 9,000 tons of general cargo. The mechanical equipment consists of cargo hoists, 5-ton derrick, electric elevators and freight piling machines. This dock is protected by automatic sprinkler system.

**Municipal Terminal No. 3:** Area of site, 2.64 acres, and harbor frontage of 540 lineal feet, with:

A quay dock, 540 feet in length, with transit shed 100 feet by 440 feet, trackage facilities for 27 cars, and general cargo capacity of 5,500 tons. This dock is supplied with electric freight piling machines.

**Municipal Terminal No. 4:** This construction is the most extensive development yet undertaken in this port and, when completed, will be one of the most modern in the entire country. The terminal site is located below all bridges, where the channel has a width of 1,600 feet, with a low water depth of 32 feet, the full width of the channel. The area of the site is approximately 160 acres and has a



PIER NO. 5 AND BULK STORAGE PLANT, MUNICIPAL TERMINAL NO. 4.  
View is toward the harbor, with slip No. 3 to the right.

harbor frontage of 2,730 lineal feet. The great depth of the property lent itself most advantageously to pier and slip construction, with very extensive trackage, which would permit of handling a large number of freight cars, without congestion.

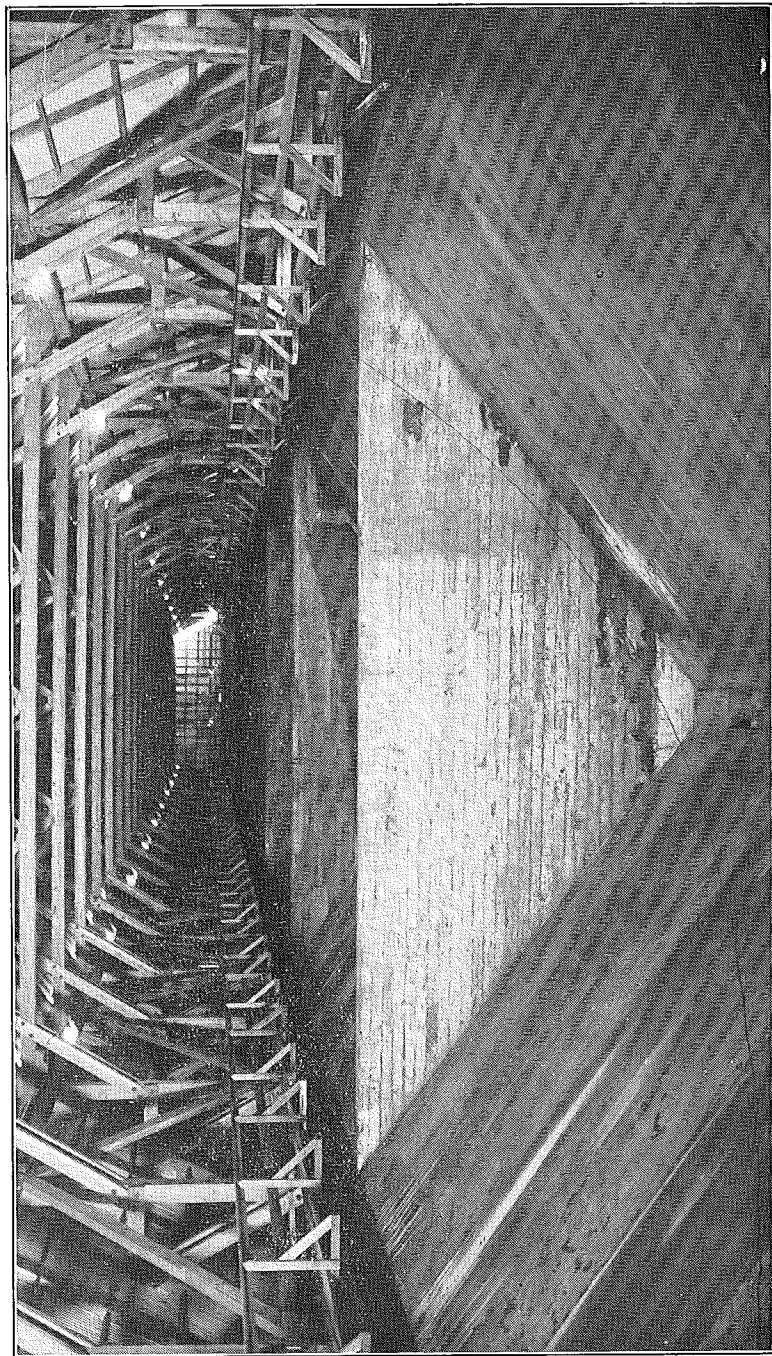
This terminal layout consists of three piers each 1,500 feet long and 225 feet wide; one pier 1,500 feet long and 310 feet wide; one pier 900 feet long and average width of 225 feet and a quay dock 665 feet long. Two slips are 1,500 feet long and 280 feet wide and the third slip 1,000 feet long and 220 feet wide. The terminal also contains an industrial section of approximately 50 acres. The location in rear of and adjacent to the terminal site of Union Pacific (Oregon-Washington Railroad & Navigation Company) trackage, made possible most convenient connection with the proposed extensive terminal trackage and this condition was made more favorable through an agreement, whereby switching and delivery charges were eliminated on practically all present freight movement, except as to certain commodities originating in or destined to non-competitive territory on intra-state electric and Southern Pacific lines. At this terminal, therefore, one of the most difficult and vexatious problems in the planning and operation of a combined rail-and-water terminal, on a large scale, were solved in a most satisfactory way.

In designing Municipal Terminal No. 4, special consideration and study were given to the question of the length of piers and width of pier sheds that should be adopted as standard for this large terminal. In other terminals constructed by the Commission, the sheds were made only 100 feet wide, following a more or less universal practice at many ports at that time. But as an operating condition it was soon demonstrated that a narrow shed was a positive agency in producing congestion and that, in any new construction undertaken, a radical change should be made to insure greater efficiency and reduced cost in handling of cargo of the character most common to the port.

The construction finally decided upon was for sheds 180 feet in width and from results obtained during an operating period of nearly two years, this width of shed has met every practical and economical requirement in import and export cargo handling, in furnishing adequate floor space capacity for vessels of large size discharging and taking out large cargoes, usually of many and varied commodities and sizes.

For the four main piers of the terminal a length of 1,500 feet was adopted, as furnishing the greatest flexibility and economy in operation, and as being at all times ample for accommodation of inbound and outbound cargo of two large vessels, and, in most cases, for three vessels of such size. Besides, the tendency for vessels of larger dimensions in the Pacific trade is steadily growing and this condition had to be taken into consideration in the new construction. These





INTERIOR OF STORAGE BUNKERS OF BULK STORAGE PLANT AT PORTLAND MUNICIPAL TERMINAL NO. 4. THE BUNKERS ARE OF REINFORCED CONCRETE CONSTRUCTION.



piers are filled piers, so that the 280-foot wide slips are free of current and furnish ample room for easy operation and berthing of vessels and barges or lighters.

Actual construction work on this terminal was first begun early in 1918, and at the close of the fiscal year the following facilities had been completed and placed in operation:

**Grain Elevator:** This elevator, which is of fireproof construction throughout, was completed in April, 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, 168 feet in length, 46 feet in width and 178 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, and provisions have been made in construction for increasing the storage to 2,000,000 bushels whenever such extra space is required to handle the business.

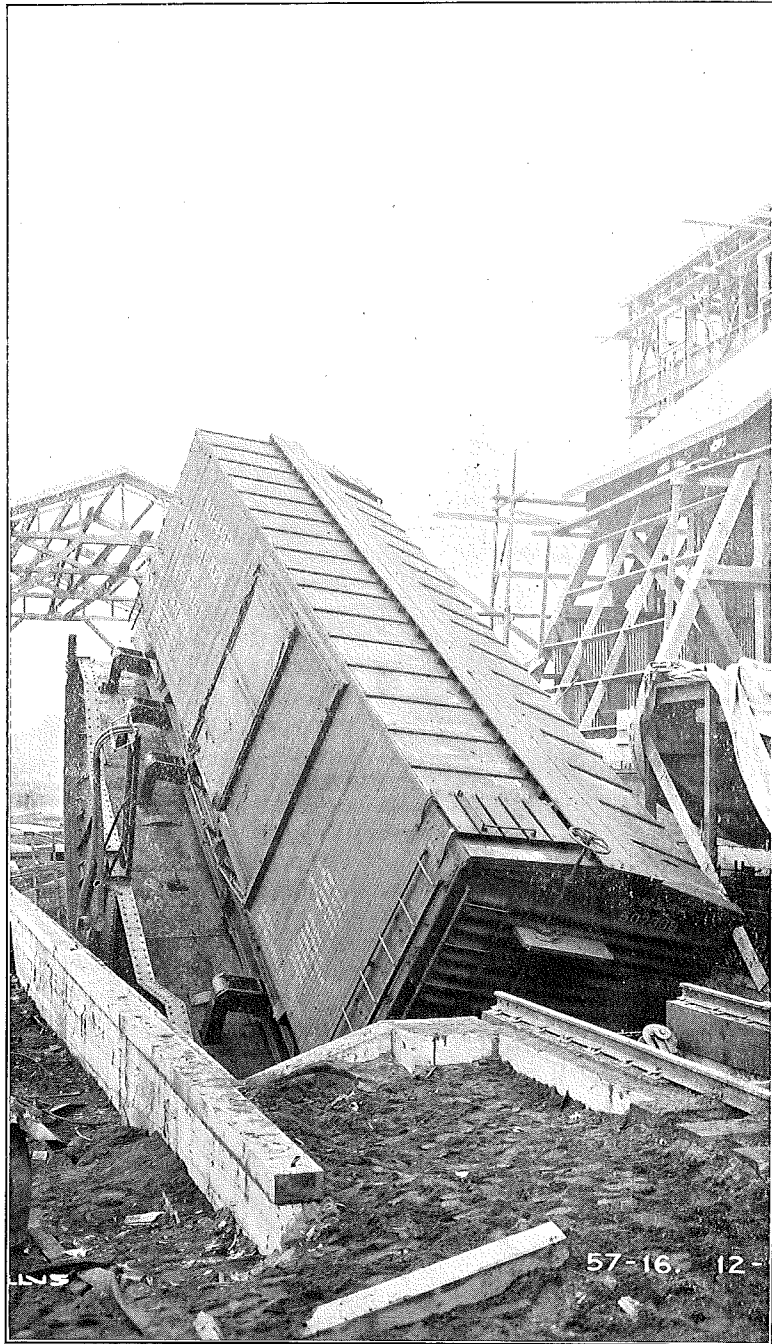
The track shed has six power shovels for unloading bulk grain into six track hoppers, with an unloading capacity of about 120,000 bushels per day. For the convenient unloading of sacked grain, of which a very considerable quantity is brought in from the producing sections, from cars in the track shed, 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. One car puller operates to handle cars on either side 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.

The elevator equipment as now installed consists of the following, to which it is proposed later to add more separators and smutters:

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



BOX CAR UNLOADER AND LOADER AT BULK STORAGE PLANT ON  
PIER NO. 5, PORTLAND MUNICIPAL TERMINAL NO. 4  
Shed covering over car unloader not yet installed

---

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 conveyor 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
1 distributing conveyor belt, operating house cupola .....	10,000 bu. per hr. each
2 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.	
14 dock spouts.	
Dust collecting system.	
Sweeper system.	

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

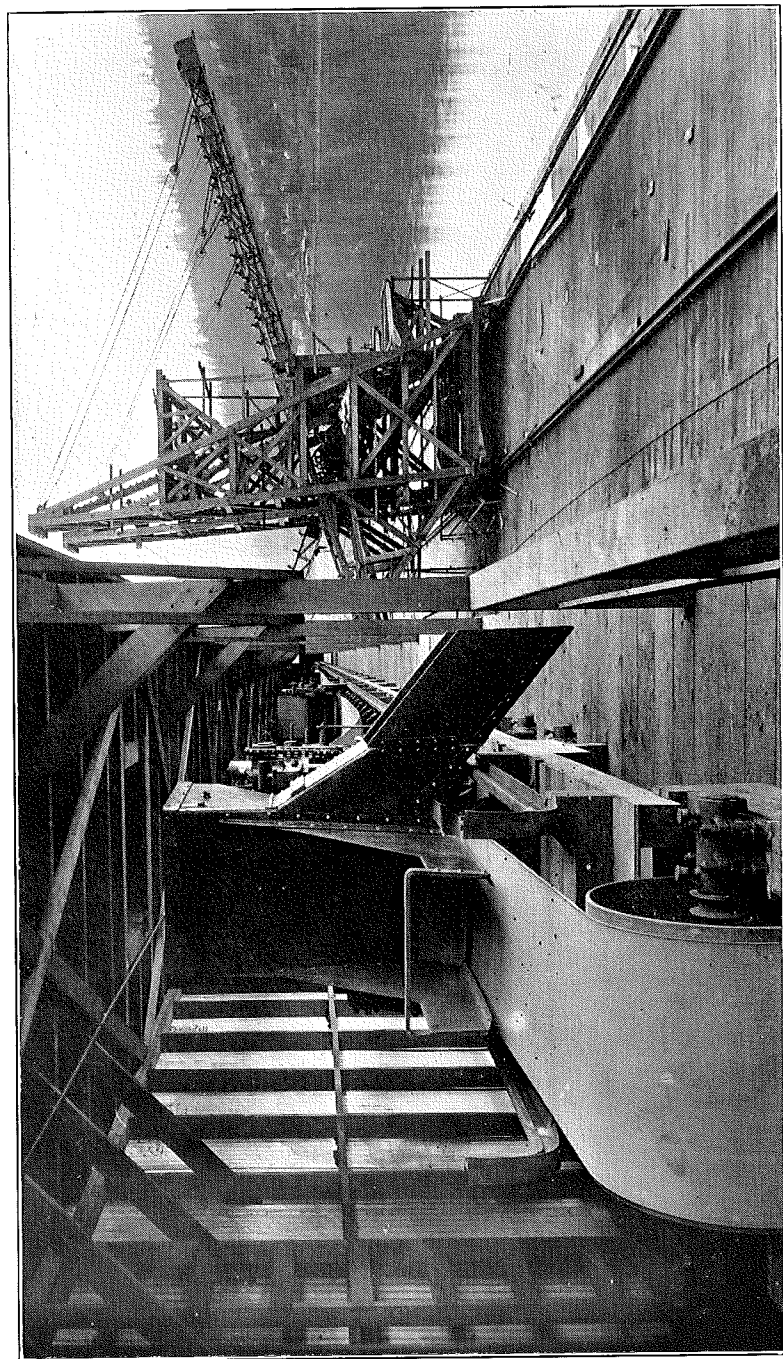
Loading bulk grain to ships is at the rate of 20,000 bushels per hour.

**Pier No. 1:** This pier is 1,500 feet long and 225 feet wide, and is a two-level structure for a distance of 600 feet at the outer end. The transit shed is 180 feet wide and covers the entire length of the pier, or 1,500 feet. The outer 600 feet of this pier is used principally for the handling and storage of grain received in sacks, or to be sacked for re-shipment by water. This section of the pier has two sacking bins on the upper level, filled from the elevator by the shipping belts, and under the pier shed floor there is a conveyor belt running nearly the full length of the pier, on which grain from sacks can be cut in and carried to the elevator for cleaning and smutting and storage, if so required. From the two-belt shipping gallery at front of the pier, fourteen spouts permit the loading of two vessels at one time with bulk grain.

Track facilities are provided at both front and rear of the pier, at the latter place two depressed tracks, with provision for a third track, as business develops.

With proper allowance for trucking space and gangways, this pier has capacity for 35,000 tons of general cargo, or 56,000 tons on the basis of grain and flour.

**Pier No. 2:** The sub-structure of this pier, which is also 1,500 feet long and 225 feet wide, was finished in June, complete with track-age facilities. It has been used for handling and storage of lumber,



CONVEYOR E AND TWO LOADING TOWERS ON PIER 5, PORTLAND MUNICIPAL TERMINAL NO. 4, FOR HANDLING  
BULK CARGO TO AND FROM VESSEL

steel rails, sulphur and other bulk and heavy freight. The outer half of this pier will be covered with a transit shed, 180 feet wide, contract for which is to be let at once.

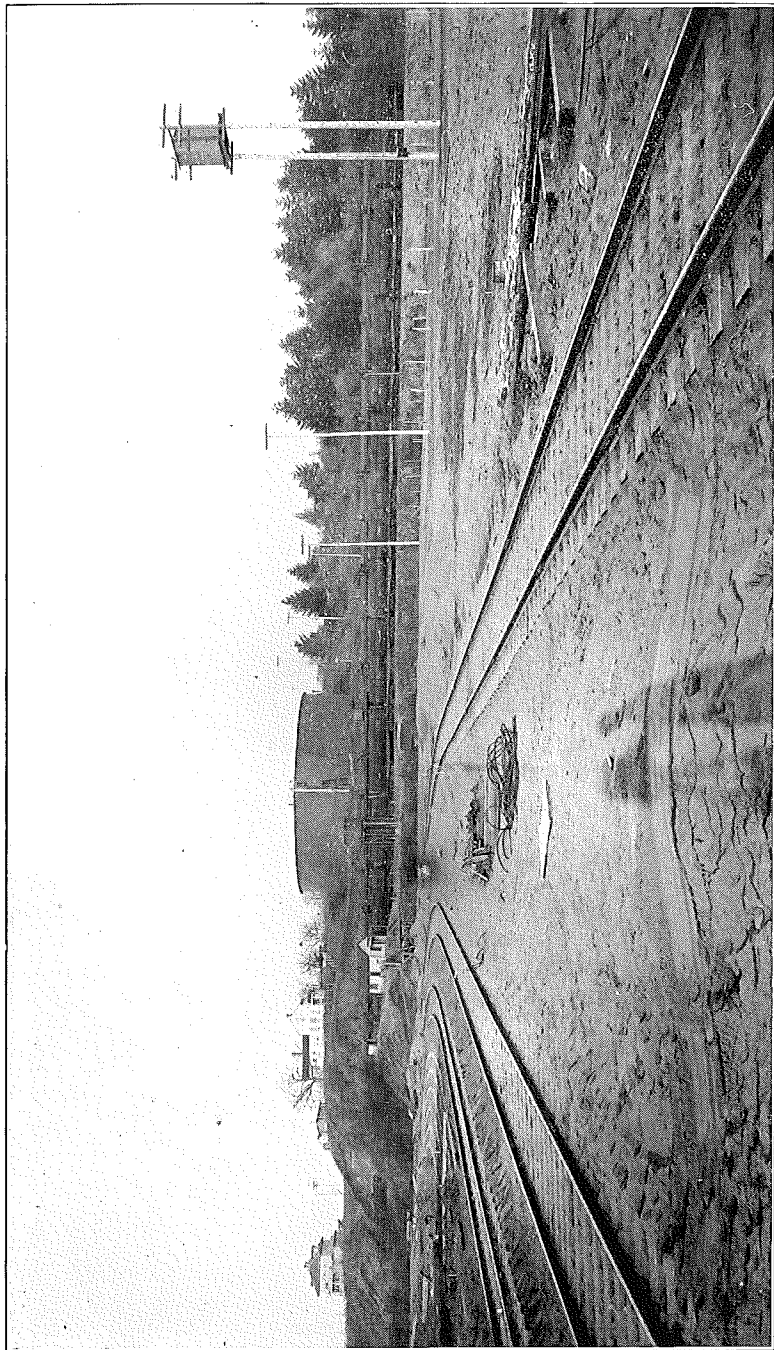
**Pier No. 5:** This pier consists of a quay dock 665 feet long and a pier proper 900 feet long. The quay portion of the pier was completed, together with necessary fill. It was constructed primarily for the purpose of furnishing berthing space for the large bulk storage plant which was to be erected on the filled ground in rear of the dock and for the traveling towers used in connection with this plant in loading vessels, with such bulk commodities as phosphate rock, coal, etc. This plant will be herein later more fully described.

**Oil Bulk-storage Plant:** For the handling and storage of vegetable oils and molasses, eleven steel tanks, on concrete foundations, were 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 were installed two bulk scale tanks, 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.

**Terminal and Switching Trackage:** In considering the various facilities which were to be constructed at this terminal, it was evident that for the successful operation of the grain elevator, five piers, oil and bulk storage plants, and other facilities to be constructed, a large trackage installation would be required. The great area of the terminal site made it possible to provide an elevator trackage with capacity for 70 loaded cars—a full day's run for the elevator—and a trackage on the other side of the elevator accommodating 90 empty cars. With the special car puller machinery installed in the elevator, the necessity for locomotive switching service in bringing the loaded cars into the track shed for unloading and shunting the unloaded cars to the empty car storage tracks is thereby eliminated.

With equal facility rail facilities were as easily supplied at both front and rear of piers, as the leads were amply long to bring them to the piers, oil and bulk storage plants, on easy curves.

It was, of course, realized that one of the prime requisites of a combined rail-and-water terminal of such magnitude as Terminal No. 4, and more particularly so when in such terminal is included an industrial section, was the quick movement of cars. It was necessary to provide every rail facility possible to insure the most rapid removal and replacement of both loaded and unloaded cars and that, as facilities at this terminal were being completed and shipping developed to a considerable extent, the necessary switching to render this service would have to be performed by the Commission by its own equipment,



VIEW OF 55,000 BARREL FUEL OIL HANDLING PLANT IN REAR OF PIER NO. 5, PORTLAND MUNICIPAL TERMINAL NO. 4  
The tank is provided with a 10-inch pipe line leading to ship's berth at Pier No. 5 and facilities are  
provided for loading 12 tank cars.

the railroads bringing in and placing, on tracks provided for that purpose, full trains for distribution to the various terminal facilities. Negotiations are now under way with the railroads for the carrying out of this program.

The industrial section has been so laid out that each industry may be served by rail connecting with the main terminal trackage.

The terminal trackage to be provided at this terminal may be best understood from an examination of the terminal layout accompanying this report. This total trackage will be approximately 17 miles, exclusive of industry tracks, and at the close of the fiscal year ten miles of track had been laid.

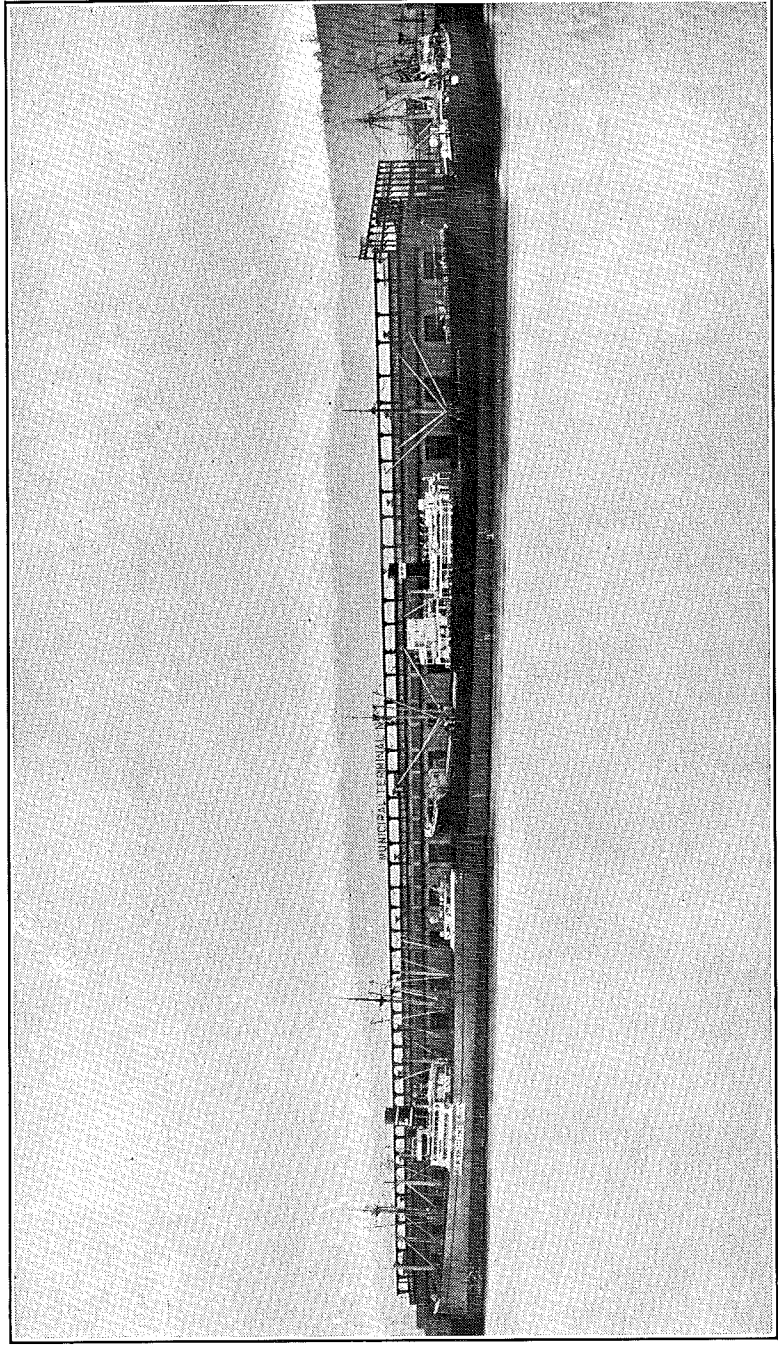
**Administration and Other Buildings:** For the accommodation of the Commission's terminal force, Government grain research work, branch office of the State Grain Inspection Bureau and railroad agencies, a large two-story structure office was constructed. For the purpose of enabling employes and others to obtain meals while working at this terminal, the Commission constructed a restaurant building seating 200 people, where wholesome food is served at reasonable cost.

Many steamers, while berthed at this terminal, close down their mess, and officers and men take their meals at this restaurant. Another convenience provided by the Commission is a welfare building, where hot and cold water, shower baths and lounging rooms are available to those employed at the terminal.

**Roadways and Streets:** On the terminal site a main roadway, 80 feet wide, was constructed and paved temporarily for a width of 24 feet, from which branch roads or streets are extended to the piers, industries, etc., as required. For the purpose of taking care of present as well as future growth of this terminal and adjacent territory, the Commission has taken steps to have the principal city street leading to this terminal widened, so as to permit of a paved roadway 50 feet wide, for a distance of about one mile.

**Street Car Service:** As quite a handicap existed against Terminal No. 4, because of its location of about one and one-half miles from nearest street car service, the Commission constructed, and is now operating, its own street car line connecting the terminal with the street car lines of the city. The street car service is maintained continuously for sixteen hours daily and special cars are run after this when ships are working at the terminal between the hours of 11 p. m. and 7 a. m.

**Mechanical Cargo Handling Equipment:** During the year the mechanical cargo equipment of this terminal was greatly increased and now consists of the following, which does not include the bulk storage plant, elsewhere described: one 15-ton and one 40-ton locomotive crane; one switch engine; a few flat and dump cars, the latter



HARBOR VIEW PORTLAND MUNICIPAL TERMINAL NO. 1

1383



being used for taking away ship's ballast; cargo masts or cargo hoists; electric trucks, tractors with trailers; one-ton electric crane, electric elevators, freight piling and stacking machines.

**Heating Plant:** A central boiler plant was installed for the heating of administration, restaurant and welfare buildings, pier and other structures of the terminal. This boiler plant also furnishes steam for the heating of the vegetable oil tanks and for cleaning pipe lines and tank cars.

#### **Facilities Under Construction at Terminal No. 4:**

**Pier No. 2 Transit Shed:** Contract for construction of this shed, 750 feet long and 180 feet wide, on the outer one-half of the pier, was let the end of the year, to be completed in May, 1921. It is of the same type as the shed on Pier No. 1, with its fire walls, sprinkler system, equipment, etc.

**Pier No. 5:** This pier unit consists of a 665-foot long quay dock, which as already stated, was completed during the year. The pier itself, along the south line of slip No. 3, is 900 feet long and its construction was authorized in October and contract let the same month, the work to be completed in April, 1921. The slip portion, as well as the quay portion of Pier No. 5, were constructed more particularly for the handling of bulk commodities, such as phosphate rock, coal and sulphur through the bulk storage plant and for open storage of lumber and steel and also of coal and sulphur on the filled portion of this pier.

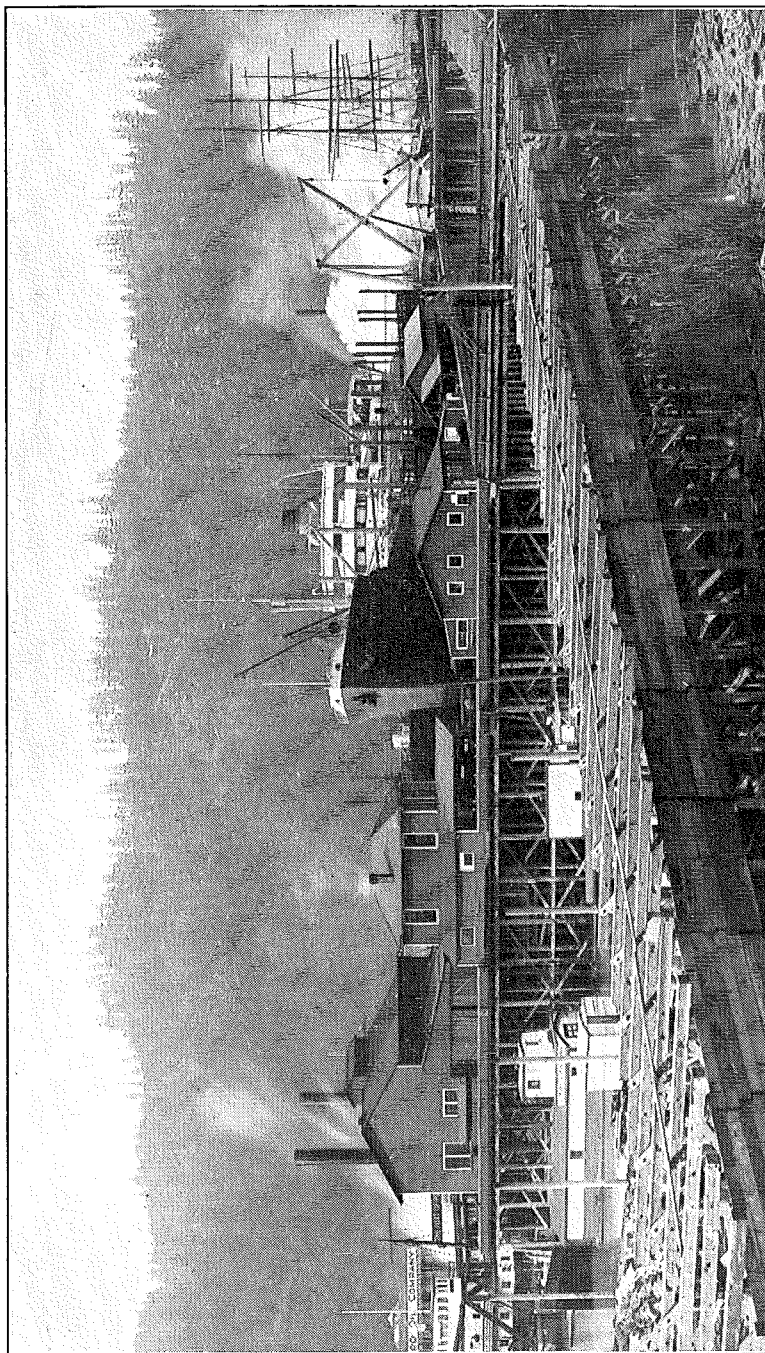
**Bulk Storage Plant:** This plant, constructed on Pier No. 5, will be fully completed in February, 1921. This installation consists of covered bunkers, together with the necessary car unloading devices and conveyors for handling materials.

Conveyor machinery includes drives, traveling hoppers, trippers, chutes, automatic scales and traveling ship-loading towers, for handling bulk commodities such as phosphate rock, sulphur, coal, ores, etc., in the following manner:

1. Delivery of bulk commodities from hopper bottom cars to bunkers, or directly to vessel;
2. Delivery of bulk commodities from box cars to bunkers, or directly to vessel;
3. Delivery of bulk commodities in bunkers to vessel;
4. Delivery of bulk commodities from vessel to bunkers;
5. Delivery of bulk commodities from bunkers to cars.

#### **Unloading Facilities:**

**Track Hopper:** A double-hoppered pit for unloading bottom dumpcars, with "Duplex" shaker feeders discharging material to 30-inch belt conveyor; capacity, approximately 250 tons per hour for phosphate rock or 100 tons for coal.



PORT OF PORTLAND'S PRESENT DRY DOCK PLANT  
The 15,000-ton floating dry dock now nearing completion will be berthed to the left of the present 10,000-ton dry dock and modern shops will be provided.

**Box Car Unloader:** This unloader, manufactured by the Ottumwa Box Loader Company, discharges the contents of box cars into a hopper, from which it is conveyed by means of a single shaker feeder on a 30-inch belt, with a maximum capacity of about 300 tons of phosphate rock or 125 tons of coal per hour. The car, after having been securely clamped on the cradle, is given a side tip of 20 degrees and maximum end inclinations of 45 degrees, causing all of the material in the car to be discharged through the car door into a concrete hopper. The car unloader can also be employed in loading and trimming cars.

**Storage Facilities:** The enclosed storage facilities consist of eight separate concrete bins, under which a concrete tunnel, 580 feet long, 8 feet wide and 9 feet high, is provided for housing a 30-inch belt conveyor for transporting the material from bins to vessel or cars and also for receiving material from the car unloading hoppers.

The capacity of the covered storage bunkers is as follows: Normal capacity of the eight separate bins is 18,000 tons of phosphate rock or 8,000 tons of coal.

**Belt Conveyors:** All material handled in the bulk storage plant is conveyed by 30-inch belts, driven by direct connected electric motor drives, through gear and pinion reductions.

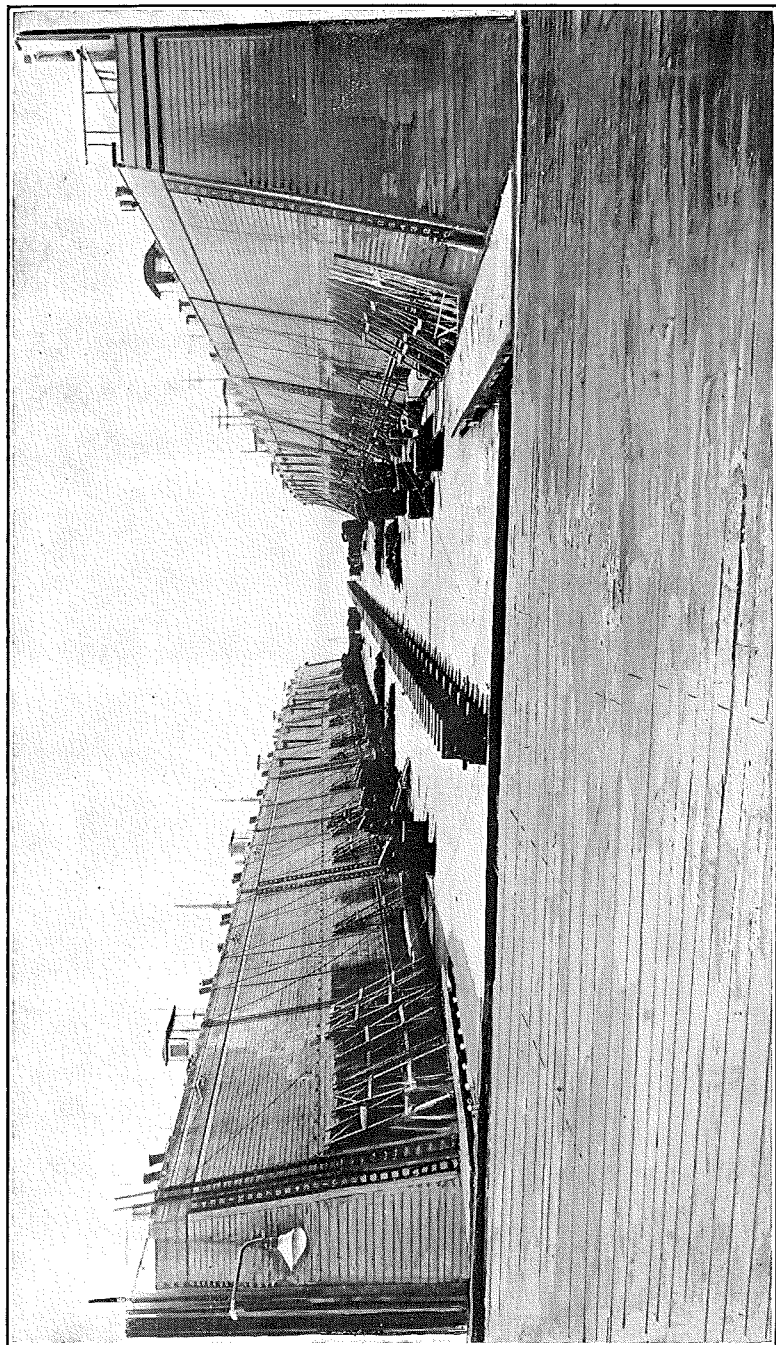
**Ship's Towers:** Two traveling towers, operated along the harbor face of Pier No. 5, for transferring material from the 30-inch belt conveyors to vessels. The towers can be spotted to any location along the pier and the spouting arrangement from the adjustable conveyor on the tower permits the material being delivered to vessel at any stage of the river.

**Unloading Vessels:** The movable towers are also provided with return belts for receiving material from vessels for delivery to bunkers or cars.

**Weighing Devices:** Two Merrick Scale Manufacturing Company's weightometers are provided, one being placed on the loading and one on the unloading conveyor belts. The weightometers automatically weigh the material while in transit on the belt and an accuracy of 99 per cent is guaranteed.

**Power and Light:** The entire bulk storage plant is electrically operated by 440 volt, alternating current and both direct and flood lighting is used. The connected load is 600 horse power. A system of electric bell signals and remote control is provided for safety in operation.

**Track Scale:** A standard railroad track scale of 150 tons capacity is now being installed, and when completed will be operated under



TYPE OF 15,000-TON MUNICIPAL DRY DOCK NOW NEARING COMPLETION

the supervision of the Weighing and Inspection Department of the Transcontinental Freight Bureau.

**Bulkheads:** To permit of making the necessary fills in advance of construction of Piers 3 and 4, pile and timber and sheet pile bulkheads were constructed, and filling operations are now under way on these piers.

**Dredging:** Slips Nos. 2 and 3 were excavated to a depth of approximately 20 feet below low water for nearly their entire length and width and upon completion of the bulkheads being constructed for Piers 3 and 4, the dredging of these slips will be carried to the required depth at 32 feet at low water.

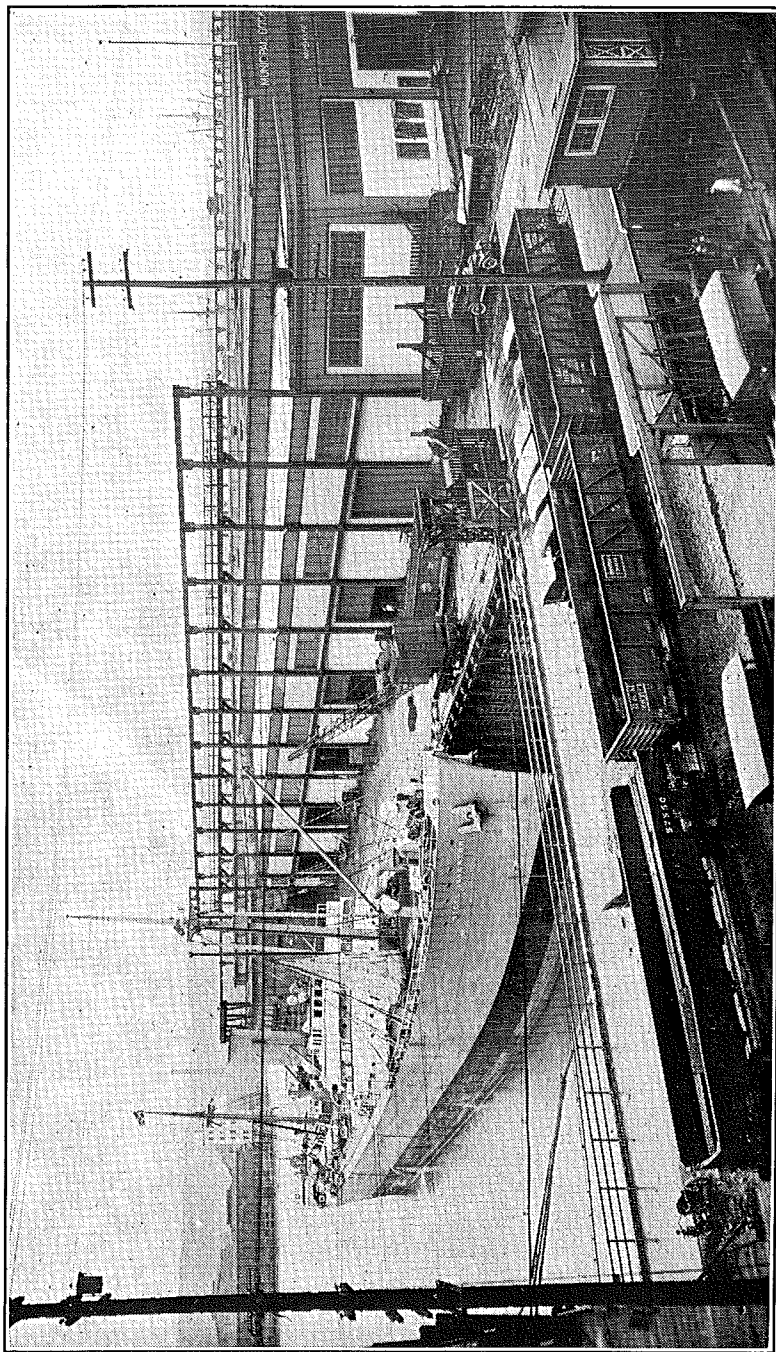
**General:** Special attention has been given to adequate measures of fire protection at all of the municipal terminals, and this has been accomplished by dividing the transit sheds on the quay docks and piers, except at Terminal No. 3, into sections by concrete fire walls, extending from low water to four feet above the shed roofs, and the installation of automatic sprinkler system, which has resulted in low insurance rates, both on structures and contents. In addition, at all terminals, a large equipment of fire extinguishers, both hand and on wheels, fire hose trucks, etc., has been provided. A fire marshal has been permanently employed to supervise all fire prevention, fire control and fire fighting measures at these terminals, where fire drills are regularly held by permanent employes and others who are more or less regularly employed there.

At all municipal terminals vessels are supplied with city supply water at ship side. The charge for supplying water to vessels is at the rate of \$1.00 for five thousand gallons, or less, and for amounts over five thousand gallons, twenty cents for one thousand gallons.

For the accommodation of vessels berthed at Municipal Terminals 1, 2, and 4, provision has been made permitting such vessels to make connection with the terminal lighting circuit, in case a vessel desires to discontinue the operation of its own dynamos, or to make repairs to same, for which service a charge is made, based on meter consumption.

An important industry which has been located on that section of Terminal No. 4, set aside for industrial purposes, is a flour mill of 1,200 barrels capacity daily, with adjoining warehouses. These structures are of reinforced concrete construction. This plant is now nearing completion, and in operation will utilize the Commission's grain elevator facilities for the storage of grain used in milling. Under the terms of the leasing agreement, which is for a period of twenty-five years, with privilege of renewal for a like period, the rental charge is at the rate of \$300.00 per acre per annum, subject to re-appraisal every five years, during the life of the agreement.

**Dry docks:** There is at this time one floating dry dock in the



WAREHOUSE B, PORTLAND MUNICIPAL TERMINAL NO. 1; 20-TON LOCOMOTIVE CRANE AND MODERN CARGO HANDLING FACILITIES ARE PROVIDED

port, owned and operated by the Port of Portland Commission, and is of the following dimensions:

Length .....468 feet  
 Width between wings..... 82 feet  
 Depth of water over keel blocks..... 25 feet  
 Designed lifting capacity, tons deadweight, 10,000.  
 Handles vessels up to 500 feet in length.

This dry dock is open to all repairers and mechanics on equal terms and has available for such work compressed air piped to all sections, electric current, direct and alternating, city water, machine tools, forge fires, etc. There is also available, in connection with dry dock work, a 15-ton fixed derrick and a 15-ton locomotive crane.

With the constantly increasing shipping of the port and the apparent necessity of providing increased dry dock facilities, to meet demands for such additional service, the Commission early in the year took steps to supply this needed facility and in April awarded contract for the construction of a five-pontoon, 15,000-ton deadweight, floating dry dock and later awarded another contract covering the furnishing and installation of pumps, motors and other machinery. This dry dock will be of the following dimensions:

Length .....492 feet  
 Width between wings.....94 ft. 6 in.  
 Depth of water over keel blocks.....27 ft. 6 in.  
 Designed lifting capacity, tons deadweight, 15,000.  
 Will handle vessels up to 525 feet in length.

When this dry dock is completed it will be installed at the site of and adjoining the Port of Portland dry dock, occupying the outside berth.

Both dry docks will be operated under the management of the Port of Portland and by its present organization. In connection with the operation of these dry docks, the present repair facilities will be greatly increased by enlargement of existing shop buildings, the provision of additional tools and machinery, equipment, etc. It is expected that the new 15,000-ton dry dock will be fully completed, in place and ready for operation in June, 1921.

**Private waterfront facilities:** As will be noted from description given below, private interests have provided quite extensive shipping facilities, which, however, are used mostly in connection with the handling of grain, flour and lumber, and these docks are well supplied with equipment for the convenient handling of the commodities referred to.

The list of docks which follows has been corrected as to changes which have taken place since the last annual report was issued, and

UPSHUR ST.

N. 17TH ST.

FRONT STREET

NORTHERN PACIFIC TERMINAL CO. TRACKS

PLANT OF AMERICAN CAN CO.

PAVED RAMP TO LOWER DOCK

WALK

RAMP

OFFICE'S

SCALE

ROADWAY

ROADWAY

OFFICE

RAMP

ONE STORY WAREHOUSE

230'

206'

31'-40'

20'

30'

PLATFORM

RAMP

ROADWAY

OVERHEAD CONVEYOR

878'

TWO LEVEL SECTION OF DOCK

100'

12'

RAMP

RAMP

RAMP

303'

RAMP

RAMP

RAMP

CENTRAL DRIVEWAY

COVERED DOCK

PLATFORM 955'

ONE LEVEL SECTION OF DOCK

PLATFORM WITH AWNING

MARGINAL WAY

TRACKS

CONCRETE FIRE WALL

DOCK

SPACE FOR OPEN STORAGE AND FUTURE WAREHOUSE

COVERED DOCK

330' DRIVEWAY

176'

AND WAREHOUSE

Office

UNCOVERED DOCK

368'

LOGOMOTIVE CRANE 20 TON CAPY

484'

420'

55'

BARGE SLIP

BARGE

BARGE

120'

FERRY WEBSTER

LOWER ALBINA FERRY LANDING

65'

PLANT OF

WILLAMETTE IRON & STEEL CO.

WILLAMETTE RIVER



UPSHUR ST.

N. 17TH ST.

FRONT STREET

NORTHERN PACIFIC TERMINAL CO. TRACKS

PLANT OF AMERICAN CAN CO.

PAVED RAMP TO LOWER DOCK

ROADWAY

SCALE

ROADWAY

OFFICE RAMP

ONE STORY WAREHOUSE

230'

31'-40'

PLATFORM

ROADWAY

SPACE FOR OPEN STORAGE AND FUTURE WAREHOUSE

MARGINAL WAY

SPACE FOR

OPEN STORAGE

AND

FUTURE WAREHOUSE

TWO LEVEL SECTION OF DOCK

OVERHEAD CONVEYOR

CENTRAL DRIVEWAY

COVERED DOCK

PLATFORM WITH AWNING

ONE LEVEL SECTION OF DOCK

DOCK

PLATFORM

COVERED DOCK

330' DRIVEWAY

AND WAREHOUSE

UNCOVERED DOCK

368'

LOCOMOTIVE CRANE

20 TON CAPY

420' 55'

BARGE

SLIP

BARGE

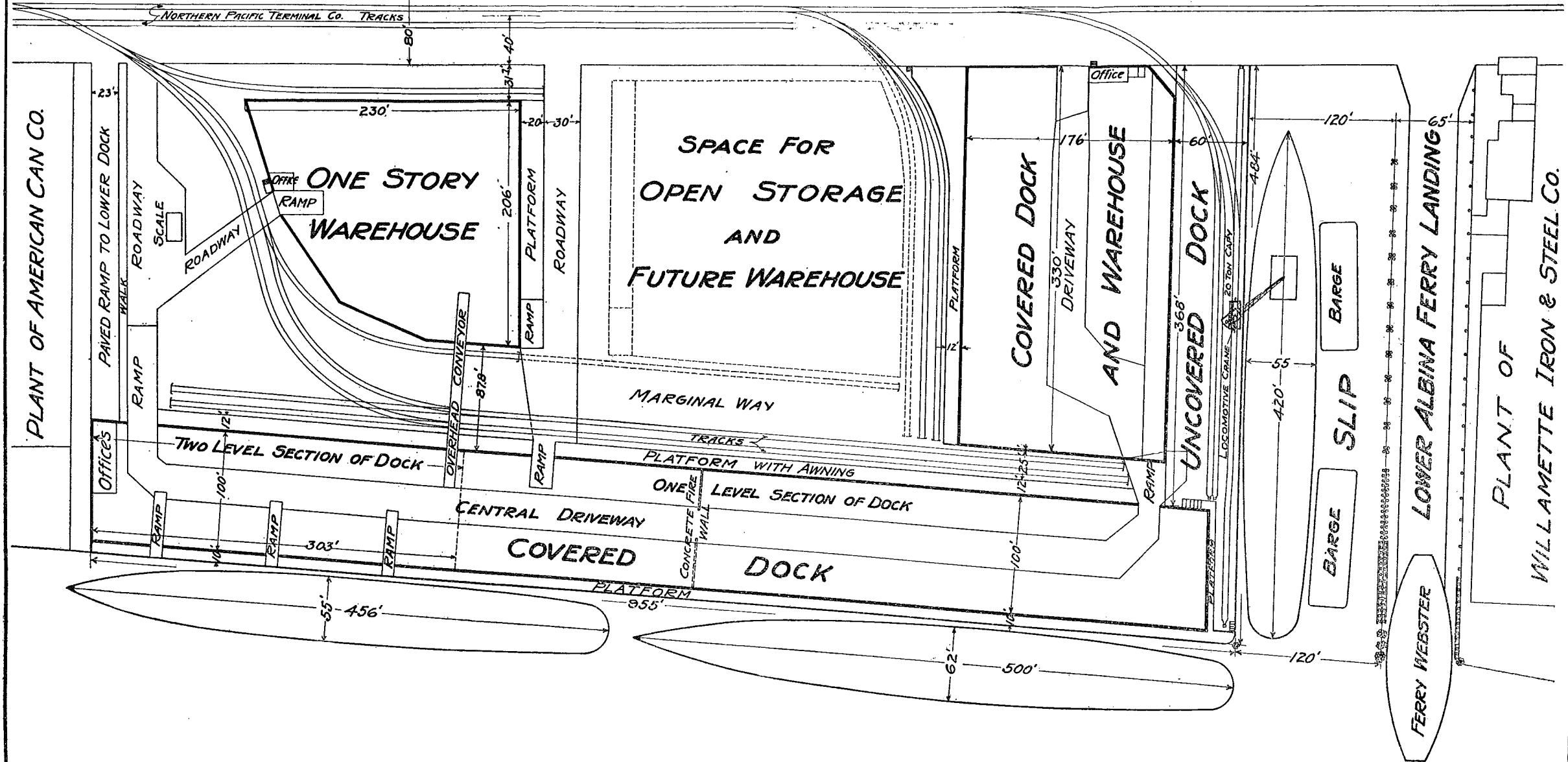
LOWER ALBINA FERRY LANDING

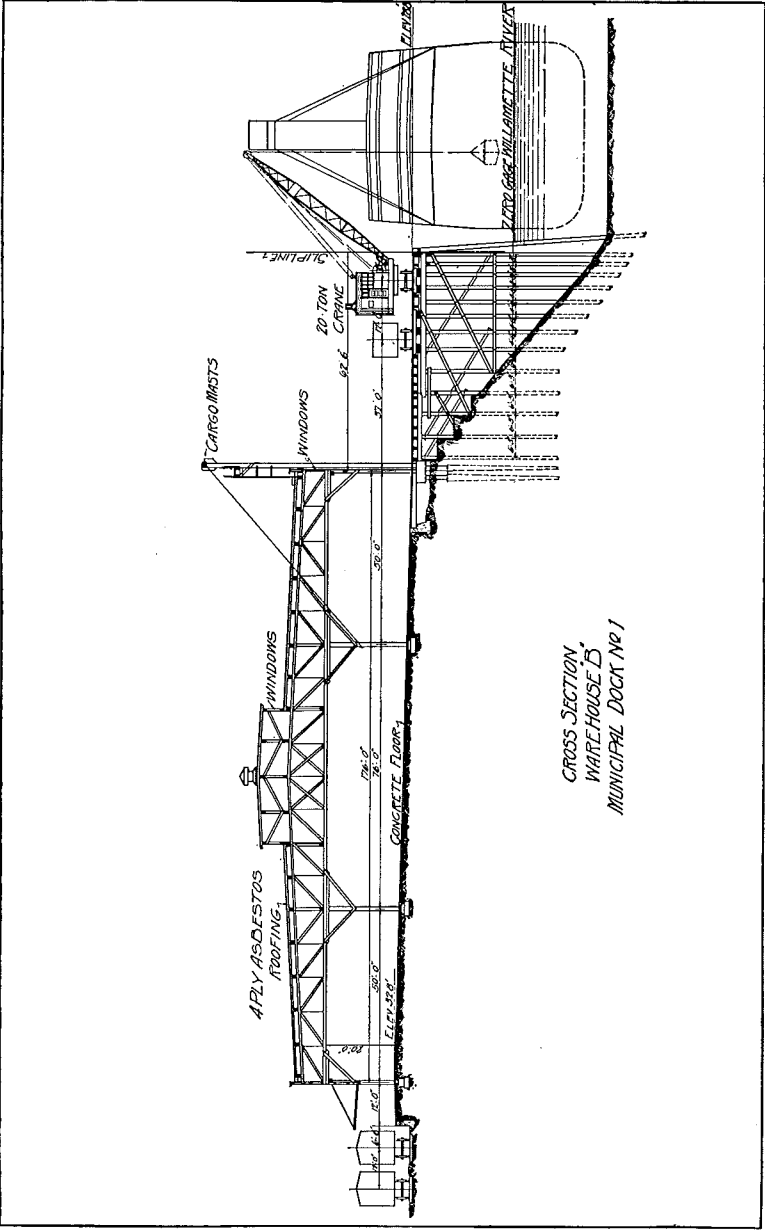
FERRY WEBSTER

PLANT OF

WILLAMETTE IRON & STEEL CO.

WILLAMETTE RIVER





CROSS SECTION OF WAREHOUSE B, AND 60-FOOT OPEN DOCK, PORTLAND MUNICIPAL TERMINAL NO. 1  
 Warehouse B is equipped with complete dry valve sprinkler system, lighting system, power equipment for electric winches, pilers, etc. Cargo mast system also provided for handling cargo to and from vessel and warehouse. Open dock equipped with double tracks and 20-ton locomotive crane.

includes only such docks as are used entirely in connection with deep sea shipping.

#### **General Cargo Docks.**

**Oregon-Washington Dock (Union Pacific):** Quay dock, 580 feet in length, with total cargo space under shed of 67,200 square feet and trackage for 28 cars. Mechanical equipment consists of an electrically operated escalator.

**Ainsworth Dock (Union Pacific):** Quay dock, 1,000 feet in length, partly two-level, with total 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. 3:** Quay dock, 305 feet in length, partly two-level, with total cargo space under shed of 79,200 square feet and trackage for 6 cars. Ample berthing space for this dock for large vessels, by overlapping on Albers Dock No. 2.

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

**Spokane, Portland & Seattle Railway Dock:** Quay dock, 1,000 feet in length, two-level, with total cargo space under shed of 304,200 square feet and trackage for 150 cars. One-fourth of this dock is usually classed as general cargo, although a larger section may be used for this purpose. Dock is provided with power ramps and conveyors.

#### **Grain Docks (Also Flour).**

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

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

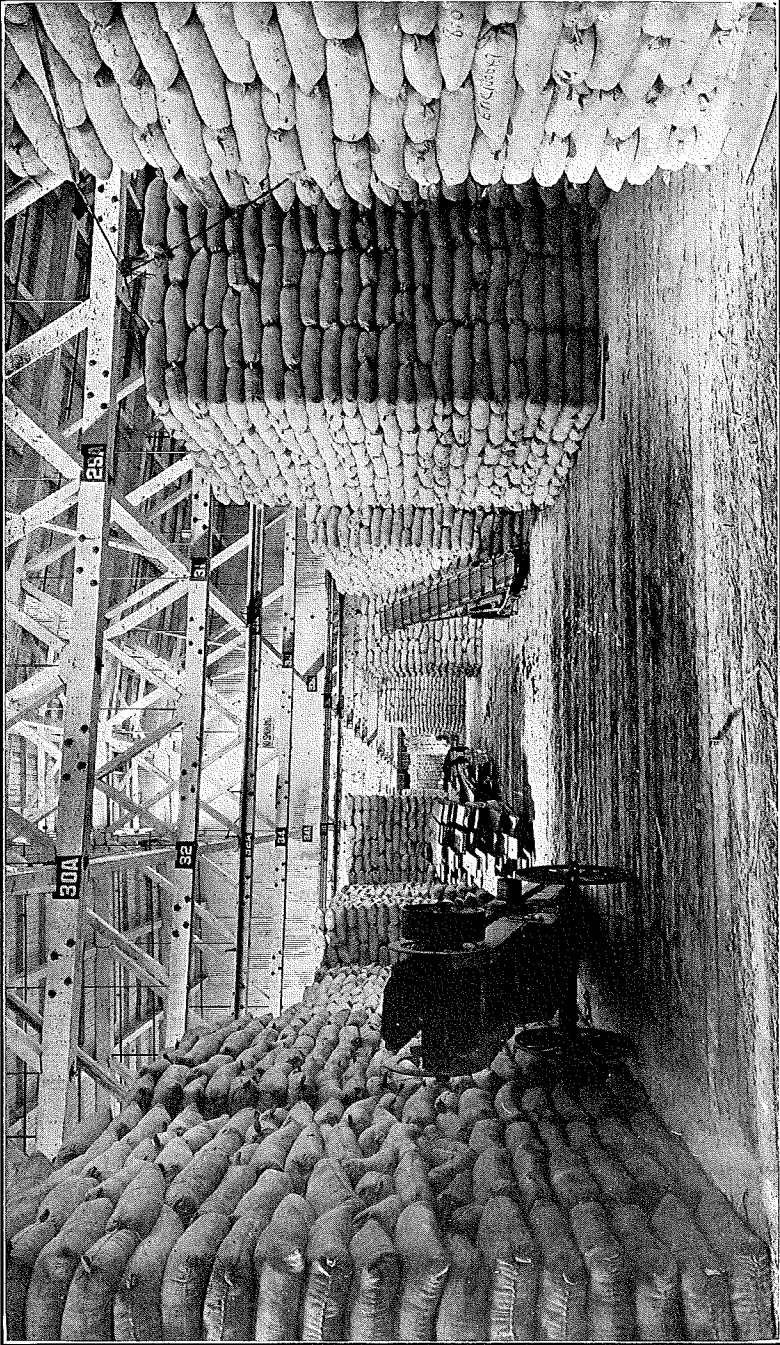
**Albina Dock:** Quay dock, 775 feet in length, with a total cargo space under shed of 66,700 square feet and trackage for 30 cars.

**Montgomery Dock No. 2:** Quay dock, 550 feet in length, with total cargo space under shed of 145,600 square feet and trackage for 33 cars.

**Crown Mills Dock:** Two-level quay dock, 300 feet in length, with total cargo space under shed of 56,000 square feet and trackage for 8 cars.

**Mersey Dock:** Two-level quay dock, 325 feet in length, with total cargo space under shed of 83,300 square feet and trackage for 8 cars.

**Albers Docks Nos. 1 and 2:**—Two-level quay dock, 460 feet in



INTERIOR VIEW, DOCK NO. 1, PORTLAND MUNICIPAL TERMINAL NO. 1

length, with a total cargo space under shed of 100,500 square feet and trackage for 19 cars.

**Columbia Dock No. 1:** Two-level quay dock, 355 feet in length, with a total area under shed of 95,000 square feet and trackage for 8 cars.

**Irving Dock:** Quay dock, 400 feet in length 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 in length, with total cargo space under shed of 66,500 square feet and trackage for 32 cars.

#### Capacities of Private Docks.

These private general cargo and grain docks of the port have a combined capacity for 262,050 tons of cargo at one time.

**Grain Elevator:** Globe Milling & Grain Company—Elevator of fireproof construction, has a capacity for 280,000 bushels of bulk grain, with ship loading facilities.

The grain docks are provided with cleaning facilities and electrical conveyors for delivering sacked grain and flour to vessels. They handle only sack grain, but have bin capacity for grain in process of cleaning.

#### Lumber Docks.

**West Oregon Lumber Company Dock:** Quay dock, 370 feet in length and 134 feet in width.

**Clark & Wilson Lumber Company Dock:** Quay dock, 580 feet in length and 90 feet in width.

**Peninsula Lumber Company Dock:** Quay dock, 1,012 feet in length and 125 feet in width.

**North Pacific Lumber Company Dock:** Quay dock, 650 feet in length and 105 feet in width.

**Eastern & Western Lumber Company Dock:**—Quay dock, 655 feet in length and 156 feet in width.

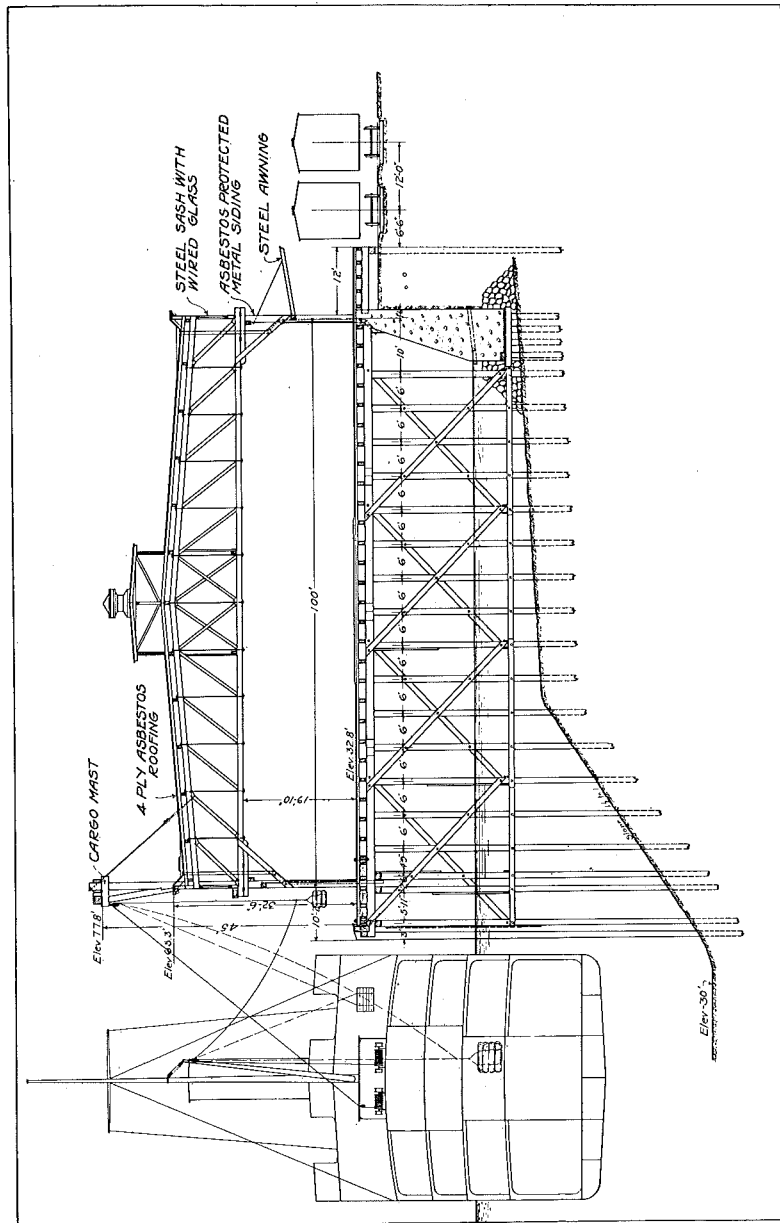
**Portland Lumber Company Dock:** Quay dock, 455 feet in length and 138 feet in width.

**Inman-Poulsen Lumber Company:** Quay dock, 825 feet in length and 188 feet in width.

**East Ash Street Dock:** Lumber storage and shipping quay dock.

**St. Johns Lumber Company Dock:** Quay dock, 570 feet in length and 90 feet in width.

These docks have large areas of ground in rear of and connected with the docks used for lumber storage. They have connection with the railroads serving the port.



CROSS SECTION OF ONE LEVEL SECTION OF DOCK NO. 1, PORTLAND MUNICIPAL TERMINAL NO. 1

**Fuel Docks.**

**Associated Oil Company:** Quay dock, 395 feet in length.

Tank storage capacity:

Crude oil.....6,720,000 gallons

Refined oil..... 430,920 gallons

**Standard Oil Company:** Quay dock, 400 feet in length.

Tank storage capacity:

Crude oil.....2,726,346 gallons

Refined oil.....3,191,958 gallons

**Union Oil Company of California:** Quay dock, 397 feet in length.

Tank storage capacity:

Crude oil.....3,690,000 gallons

Refined oil..... 840,000 gallons

**The Shell Company:** Quay dock, 350 feet in length.

Tank storage capacity:

Crude oil.....4,620,000 gallons.

Refined oil.....2,100,000 gallons

These oil companies have all necessary facilities for fueling vessels at their docks; for delivering fuel oil to vessels while at berth receiving or discharging cargo, two fuel barges, one of 168,000 gallons and one of 84,000 gallons capacity are available, each barge provided with boiler and pump, with delivery to steamers at the rate of 42,000 gallons per hour.

**Coal Bunkers:** Pacific Coast Coal Company operates a modern 5,000-ton gravity discharge, ship-loading plant, with capacity of 300 tons coal per hour, with reserve ground storage of 10,000 tons. Berthing space ample for largest steamers.

The Port of Portland Commission has a coal dock with ground storage capacity for 3,000 tons.

Besides these fixed coal fueling facilities there are available in the port a large number of lighters or barges, which are frequently employed in coaling vessels while berthed or at anchor.

**Crane, Derrick and Repair Facilities:** In addition to the locomotive crane and derrick facilities available at Municipal Terminals and dry docks, shipbuilding and ship repair plants have sheerlegs ranging in lifting capacity of from 60 to 75 tons. The Port is well supplied with ship repair facilities, capable of handling such work of any magnitude, both at their plant and at the dry docks. One particularly important ship repair equipment, which has been in operation more than a year, is a floating repair shop, which is available for service not only in the port, but also at any shipping point below Portland, where large carriers take on cargoes of lumber from the mills located between Portland and Astoria.

This floating plant, which is a two-story structure on a barge 40 by 100 feet, carries machine shop below, and tool room, rigging loft, bunk room and galley above. It is fitted out with a very complete repair equipment, of which the following are the principal items:

Lathes, bolt and pipe threading machines, shaper and drill presses, air compressors, blacksmith forges and punch and shears, electric and acetyline welding outfits, etc.

efficient day and night police patrol, working under the direction of

**Harbor Protection:** The harbor is under the protection of an the Harbormaster. Two powerful fire boats, maintained by the city of Portland, are always available for immediate service.

**Railroads serving the port:**

Union Pacific,  
Southern Pacific,  
Northern Pacific,  
Great Northern,  
Spokane, Portland & Seattle,  
Oregon Electric,  
Portland Railway, Light & Power Co.

The railroads serving the port and its extensive tributary territory have the advantage of being operated over most favorable water grades, made possible by the only break through the Cascade and Sierra Nevada Range between British Columbia and Southern California, by the Columbia river. This makes the most accessible route to the Columbia river basin and the intermediate region between the Cascades and the Rocky Mountains.

The maps and photographs accompanying this report illustrate, it is believed, in a comprehensive manner, the principal descriptions and details given therein.

Very respectfully,

G. B. HEGARDT,  
Engineer.



# Annual Report of Secretary

## RECEIPTS AND EXPENDITURES FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1920.

### CONSTRUCTION FUND (CAPITAL ACCOUNT).

#### Receipts.

##### Bond Issues:

Harbor Development Bonds, Series Two.	\$ 702,217.50	
Harbor Development Bonds, Series Three	906,672.20	
Harbor Development Bonds, Series Four	1,936,755.55	
		<u>\$3,545,645.25</u>

##### Plant, Portland Municipal Terminal No. 4:

Repair work for others.....	\$ 294.01	
Sundry work for others.....	78.49	
Electric current sold.....	4.70	
Discount allowed.....	17.28	
Telephone tolls collected.....	1.30	
Accident claim allowances.....	10,500.00	
Cement sacks returned.....	137.25	
Materials sold.....	530.80	
Cartage, etc., for others.....	52.64	
		<u>11,616.47</u>

##### Harbor Development:

Port of Portland's proportion of joint survey expense.....		<u>4,329.93</u>
---	--	-----------------

##### Insurance:

Return premiums, adjustments, etc....		<u>787.57</u>
---------------------------------------	--	---------------

Balance December 1, 1919.....		<u>\$3,562,379.22</u>
		<u>464,555.29</u>

\$4,026,934.51

#### Expenditures.

##### Plant, Portland Municipal Terminal No. 1:

Paved roadway.....	\$ 1,041.87	
Offices, Warehouse B.....	95.20	
Sundry betterments.....	871.98	
		<u>2,009.05</u>

##### Plant, Portland Municipal Terminal No. 2:

Sundry betterments.....		<u>902.77</u>
-------------------------	--	---------------

##### Plant, Portland Municipal Terminal No. 3:

Sundry betterments.....		<u>584.76</u>
-------------------------	--	---------------

Forward \$ 3,496.58

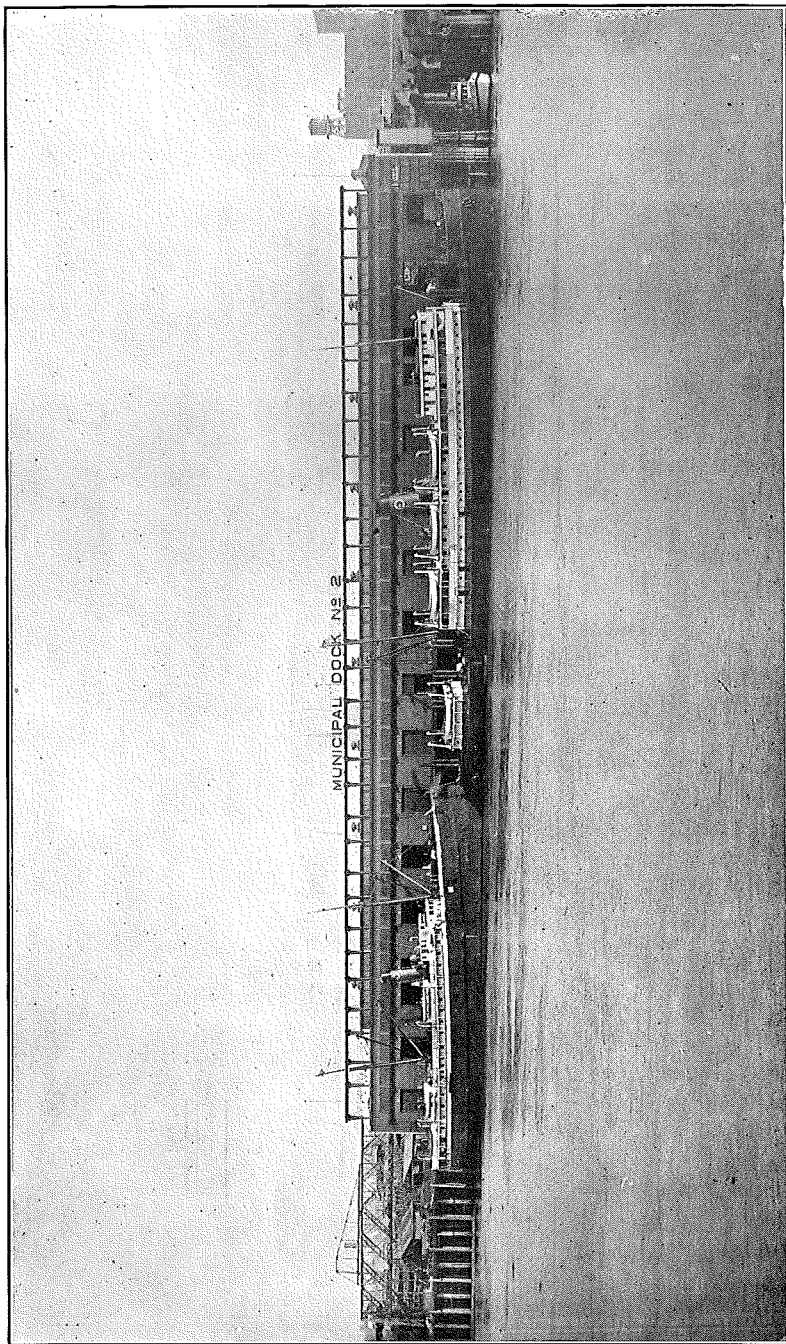
	Forward	\$ 3,496.58
<b>Plant, Portland Municipal Terminal No. 4:</b>		
Grain Elevator.....	\$ 290,497.75	
Pier No. 1.....	13,916.46	
Extension Pier No. 1 and Pier No. 2...	173,299.55	
Shed Extension Pier No. 1.....	133,105.21	
Oil Storage Plant.....	100,595.77	
Boiler House and Heating Plant.....	12,813.11	
Pier No. 5.....	96,949.10	
Bulk Storage Plant.....	174,561.59	
Administration Building.....	9,593.44	
Cafeteria .....	3,121.13	
Welfare Building.....	11,649.18	
Detached and temporary buildings.....	1,508.87	
Dredging, filling and leveling.....	129,580.86	
Bulkheads .....	19,554.20	
Clearing .....	1,060.75	
Roadways .....	12,745.75	
Trackage .....	109,717.84	
Track scales.....	6,680.40	
Water supply.....	9,158.05	
Fire protection and sprinkler system...	36,128.26	
Sewer system.....	1,149.24	
Electrical wiring equipment and service	30,635.63	
Lawn .....	705.95	
Operating construction, track equipment	3,363.28	
Sundries .....	17,857.30	
Engineering and superintendence.....	46,725.78	
		1,446,674.45
<b>Plant, Dry Dock:</b>		
Construction .....	\$ 548,280.00	
Engineering expense.....	8,614.91	
		556,894.91
<b>Plant, Street Railway:</b>		
Construction .....	\$ 40,952.21	
Engineering expense .....	1,179.72	
Sundries .....	62.50	
		42,194.43
<b>Plant, Stark Street Municipal Boat Landing:</b>		
Sundry betterments.....		1,238.47
<b>Harbor Development:</b>		
Investigation Swan Island Project.....		8,791.46
<b>Real Estate:</b>		
Street assessments.....	\$ 257.74	
Sewer assessments.....	118.40	
Widening Kellogg Street.....	697.97	
Mortgage release.....	50.00	
		1,124.11
<b>Equipment:</b>		
Portland Municipal Terminal No. 1.....	\$ 898.32	
Portland Municipal Terminal No. 2.....	950.71	
Portland Municipal Terminal No. 3.....	302.97	
Portland Municipal Terminal No. 4.....	26,117.61	
Field .....	14,794.36	
General .....	7,703.36	
Maintenance .....	8.69	
		45,772.40
	Forward	\$2,106,186.81

	Forward	\$2,106,186.81
<b>Bond Issues:</b>		
Expense of selling and issuing.....		4,695.97
<b>Insurance:</b>		
Liability and fire.....		16,025.37
<b>Interest:</b>		
On bonded indebtedness.....		16,875.00
		<u>\$2,143,693.15</u>
Balance November 30, 1920.....		1,883,241.36
		<u>\$4,026,934.51</u>

## GENERAL FUND (OPERATING ACCOUNT).

## Receipts.

<b>Revenue from operation:</b>		
Portland Municipal Terminal No. 1.....\$	67,863.27	
Portland Municipal Terminal No. 2.....	65,547.07	
Portland Municipal Terminal No. 3.....	26,027.20	
Portland Municipal Terminal No. 4.....	191,402.43	
Public levee .....	4,491.91	
Miscellaneous rentals.....	146.00	
		\$ 355,477.88
<b>Interest:</b>		12,864.91
On daily balances.....		<del>12,750.74</del>
<b>Taxes:</b>		
Current .....	\$ 348,168.34	
Delinquent .....	8,596.52	
		\$ 356,764.86
<b>Sundries:</b>		
Sales of prints.....\$	67.69	
Return premiums on insurance.....	1,968.82	
Port of Portland's proportion to joint port pamphlet.....	2,716.83	
Repairs chargeable to others.....	35.00	
Deposit to cover damage caused by drunken auto driver.....	125.00	
Telephone tolls, etc.....	12.49	
Refunds, etc.....	15.80	
		4,941.63
<b>Transferred:</b>		
From Special Fund "C".....\$	7,274.08	
From Special Fund "D".....	6,147.75	
From Construction Fund.....	1,330.83	
		14,752.66
		<u>\$ 744,821.94</u>
Balance December 1, 1919.....		<del>\$ 744,687.74</del>
		122,113.80
		<u>\$ 866,801.57</u>
		<u>866,935.74</u>



HARBOR VIEW, PORTLAND MUNICIPAL TERMINAL NO. 2

**Expenditures.**

<b>Administration:</b>		
Salaries and wages.....	\$ 32,925.69	
Supplies and expense.....	43,513.76	
		\$ 76,439.45
<b>Operation Portland Municipal Terminal No. 1:</b>		
Salaries and wages.....	\$ 25,777.75	
Supplies and expense.....	5,667.78	
		31,445.53
<b>Operation Portland Municipal Terminal No. 2:</b>		
Salaries and wages.....	\$ 37,564.90	
Supplies and expense.....	2,069.56	
		39,634.46
<b>Operation Portland Municipal Terminal No. 3:</b>		
Salaries and wages.....	\$ 14,303.88	
Supplies and expense.....	454.31	
		14,758.19
<b>Operation Portland Municipal Terminal No. 4:</b>		
Salaries and wages.....	\$ 116,519.79	
Supplies and expense.....	6,678.15	
		123,197.94
<b>Maintenance:</b>		
Plant .....	\$ 7,565.17	
Equipment .....	5,233.44	
		12,798.61
<b>Insurance:</b>		
Fire .....	\$ 25,019.44	
Liability .....	3,996.12	
		29,015.56
<b>Interest:</b>		
On bonded indebtedness.....		280,360.00
<b>Bond Redemption:</b>		
First installment, elevator series one...		50,000.00
<b>Sundries:</b>		
Refunds of overpayments.....		125.04
<b>Transferred:</b>		
Sinking Fund "A".....	\$ 1,000.00	
Sinking Fund "B".....	28,125.00	
Sinking Fund "C".....	18,432.00	
Sinking Fund "E".....	3,072.00	
Sinking Fund "F".....	2,424.00	
Sinking Fund No. 1.....	5,205.00	
1920 Sinking Fund Installments....	\$ 58,258.00	
Special Fund "A".....	5,000.00	
		63,258.00
		\$ 721,032.78
Balance November 30, 1920.....		145,902.96
		<u>\$ 866,935.74</u>

## SINKING FUND "A."

(For redemption of \$50,000 Dock Bonds, Series A.)

## Receipts.

<b>Interest:</b>		
Earnings on securities.....	\$ 434.45	
Daily balances .....	17.52	
		\$ 451.97
<b>Sinking Fund Securities:</b>		
Bonds redeemed .....		1,000.00
<b>Transferred:</b>		
1920 installment from General Fund....		1,000.00
		\$ 2,451.97
Balance December 1, 1919.....		1,305.45
		<u>\$ 3,757.42</u>

## Expenditures.

<b>Sinking Fund Securities:</b>		
U. S. Certificates of Indebtedness.....	\$ 1,012.08	
U. S. Treasury Certificates.....	500.94	
		\$ 1,513.02
Balance November 30, 1920.....		2,244.40
		<u>\$ 3,757.42</u>

## SINKING FUND "B."

(For redemption of \$1,250,000 Dock Bonds, Series B.)

## Receipts.

<b>Interest:</b>		
Earnings on securities.....	\$ 8,670.36	
Daily balances .....	180.80	
		\$ 8,851.16
<b>Sinking Fund Securities:</b>		
Bonds redeemed .....		34,000.00
<b>Transferred:</b>		
1920 installment from General Fund....		28,125.00
		\$ 70,976.16
Balance December 1, 1919.....		33,454.31
		<u>\$ 104,430.47</u>

## Expenditures.

<b>Sinking Fund Securities:</b>		
U. S. Certificates of Indebtedness.....	\$ 34,410.79	
U. S. Treasury Certificates.....	3,506.56	
U. S. Liberty Bonds, Fourth Loan.....	541.10	
U. S. Victory Gold Notes.....	319.41	
		38,777.86
Balance November 30, 1920.....		65,652.61
		<u>\$ 104,430.47</u>

## SINKING FUND "C."

(For redemption of \$900,000 Dock Bonds, Series C.)

## Receipts.

## Interest:

Earnings on securities.....	\$ 5,630.68
Daily balances .....	121.08

\$ 5,751.76

## Sinking Fund Securities:

Bonds redeemed .....	23,000.00
----------------------	-----------

## Transferred:

1920 installment from General Fund....	18,432.00
Balance December 1, 1919.....	22,804.43

\$ 69,988.19

## Expenditures.

## Sinking Fund Securities:

U. S. Certificate of Indebtedness.....	\$ 23,277.89
U. S. Treasury Certificate.....	2,504.68

\$ 25,782.57

Balance November 30, 1920.....	44,205.62
--------------------------------	-----------

\$ 69,988.19

## SINKING FUND "E."

(For redemption of \$100,000 Dock Bonds, Series E.)

## Receipts.

## Interest:

Earnings on securities.....	\$ 753.73
Daily balances .....	23.25

\$ 776.98

## Sinking Fund Securities:

Bonds redeemed .....	3,000.00
----------------------	----------

## Transferred:

1920 installment from General Fund....	3,072.00
--	----------

\$ 6,848.98

Balance December 1, 1919.....	3,504.96
-------------------------------	----------

\$ 10,353.94

## Expenditures.

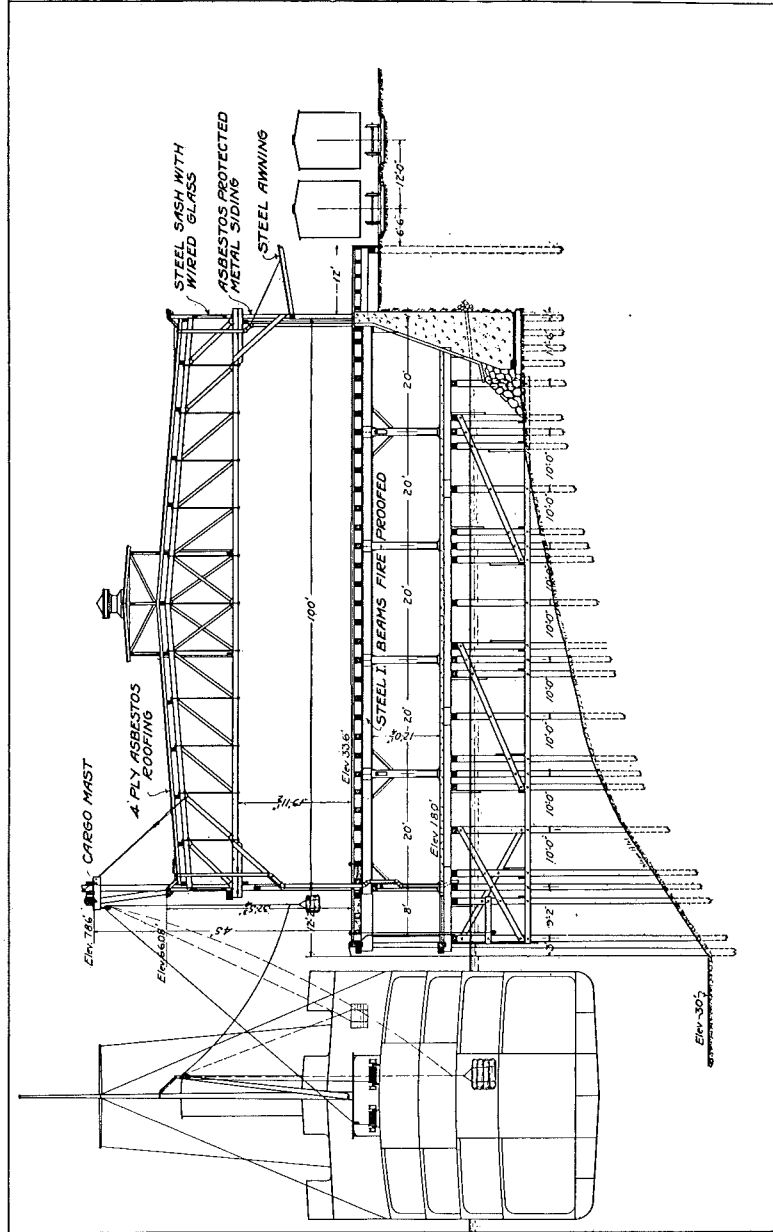
## Sinking Fund Securities:

U. S. Certificate of Indebtedness.....	\$ 3,036.25
U. S. Treasury Certificate.....	1,001.88

\$ 4,038.13

Balance November 30, 1920.....	6,315.81
--------------------------------	----------

\$ 10,353.94



CROSS SECTION DOCK NO. 2 AT PORTLAND MUNICIPAL TERMINAL NO. 2  
The southerly 300-foot portion of Dock No. 1 is of like dimension and construction.



## SINKING FUND "F."

(For redemption of \$100,000 Dock Bonds, Series F.)

## Receipts.

<b>Interest:</b>		
Earnings on securities.....	\$ 445.00	
Daily balances .....	44.93	
		\$ 489.93
<b>Sinking Fund Securities:</b>		
Bonds redeemed .....		8,000.00
<b>Transferred:</b>		
1920 installments from General Fund...		2,424.00
		\$ 10,913.93
Balance December 1, 1919.....		8,174.16
		<u>\$ 19,088.09</u>

## Expenditures.

<b>Sinking Fund Securities:</b>		
U. S. Certificate of Indebtedness.....	\$ 8,096.65	
Balance November 30, 1920.....		10,991.44
		<u>\$ 19,088.09</u>

## SINKING FUND NO. 1.

(For redemption of \$60,000 Dock Bonds of former City of St. Johns.)

## Receipts.

<b>Interest:</b>		
Earnings on securities.....	\$ 602.03	
Daily balances .....	38.43	
		\$ 640.46
<b>Sinking Fund Securities:</b>		
Bonds redeemed .....		4,000.00
<b>Transferred:</b>		
1920 installment from General Fund...		5,205.00
		\$ 9,845.46
Balance December 1, 1919.....		5,332.69
		<u>\$ 15,178.15</u>

## Expenditures.

<b>Sinking Fund Securities:</b>		
U. S. War Savings Certificate.....	\$ 846.00	
U. S. Certificate of Indebtedness.....	4,048.34	
U. S. Treasury Certificate.....	500.94	
		\$ 5,395.28
Balance November 30, 1920.....		9,782.87
		<u>\$ 15,178.15</u>

## SPECIAL FUND "A."

## Receipts.

<b>Interest:</b>		
Earnings on securities.....	\$ 257.50	
Daily balances .....	379.57	
		\$ 637.07
<b>Special Fund Securities:</b>		
Bonds redeemed .....		1,000.00
<b>Transferred:</b>		
From General Fund.....		5,000.00
		\$ 6,637.07
Balance December 1, 1919.....		17,043.73
		<u>\$ 23,680.80</u>

## Expenditures.

<b>Special Fund Securities:</b>		
U. S. Certificate of Indebtedness.....	\$ 1,012.08	
U. S. Treasury Certificate.....	6,011.28	
		\$ 7,023.36
Balance November 30, 1920.....		16,657.44
		<u>\$ 23,680.80</u>

## SPECIAL FUND "C."

(Subscription of employees to Fourth Liberty Loan.)

## Receipts.

<b>Interest:</b>		
Daily balances .....		\$ 111.16
<b>Special Fund Securities:</b>		
Installments paid by employees.....	\$ 45.00	
Bonds transferred to Sinking Fund B...	500.00	
Accrued interest .....	41.10	
		\$ 586.10
Balance December 1, 1919.....		6,576.82
		<u>\$ 7,274.08</u>

## Expenditures.

<b>Transferred:</b>		
To General Fund, closing account.....		\$ 7,274.08

## SPECIAL FUND "D."

(Subscription of employees for Victory Gold Notes.)

## Receipts.

## Interest:

Daily balances .....	\$	87.22
----------------------	----	-------

## Special Fund Securities:

Installments paid by employees.....\$	1,009.80	
Bonds transferred to Sinking Fund B...	300.00	
Accrued interest .....	19.41	
		\$ 1,329.21
Balance December 1, 1919.....		4,731.32

---

---

	\$	6,147.75
--	----	----------

## Expenditures.

## Transferred:

To General Fund, closing account.....	\$	6,147.75
---------------------------------------	----	----------

---

---

**REVENUE AND EXPENSES FOR FISCAL YEAR ENDING  
NOVEMBER 30, 1920.**

**Revenue.**

**Taxes:**

1920 Tax Roll.....	\$ 335,517.93	
1921 Tax Roll.....	1,055.09	
Delinquent Tax Rolls.....	20,191.84	
		\$ 356,764.86

**Interest:**

On daily balances.....	\$ 15,343.06	
On securities .....	16,793.75	
Accrued on bonds sold.....	7,152.75	
		39,289.56

**Revenue Portland Municipal Terminal No. 1:**

Work for others.....	\$ 17,540.50	
Wharfage .....	23,657.52	
Dockage .....	1,683.08	
Storage .....	19,086.32	
Rental of equipment.....	4,019.49	
Public scales .....	50.51	
Rents .....	744.20	
Water .....	343.70	
Miscellaneous .....	45.58	
		67,170.90

**Revenue Portland Municipal Terminal No. 2:**

Work for others.....	\$ 29,992.03	
Wharfage .....	26,598.14	
Dockage .....	17.88	
Storage .....	6,068.29	
Rental of equipment.....	1.10	
Rents .....	853.55	
Water .....	77.99	
Miscellaneous .....	96.01	
		63,709.99

**Revenue Portland Municipal Terminal No. 3:**

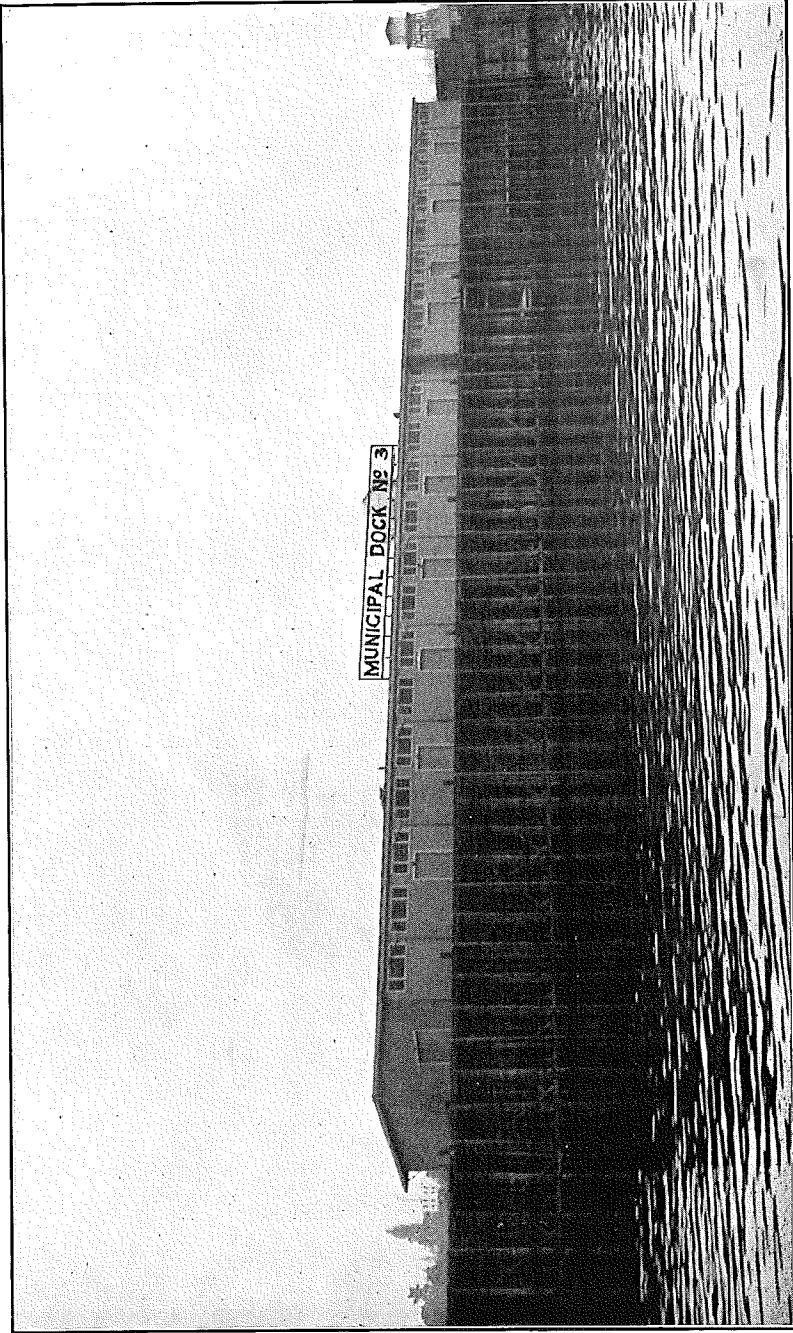
Work for others.....	\$ 10,379.46	
Wharfage .....	3,926.43	
Dockage .....	1,235.22	
Storage .....	10,141.87	
Rents .....	349.12	
Water .....	11.00	
Sundries .....	37.80	
		26,080.90

**Revenue Portland Municipal Terminal No. 4:**

Work for others.....	\$ 115,614.33	
Wharfage and elevation.....	42,067.92	
Dockage .....	378.93	
Storage .....	19,688.62	
Rental of equipment.....	10,396.48	
Rents .....	750.00	
Water .....	342.17	
Sundries .....	797.06	
		190,035.51

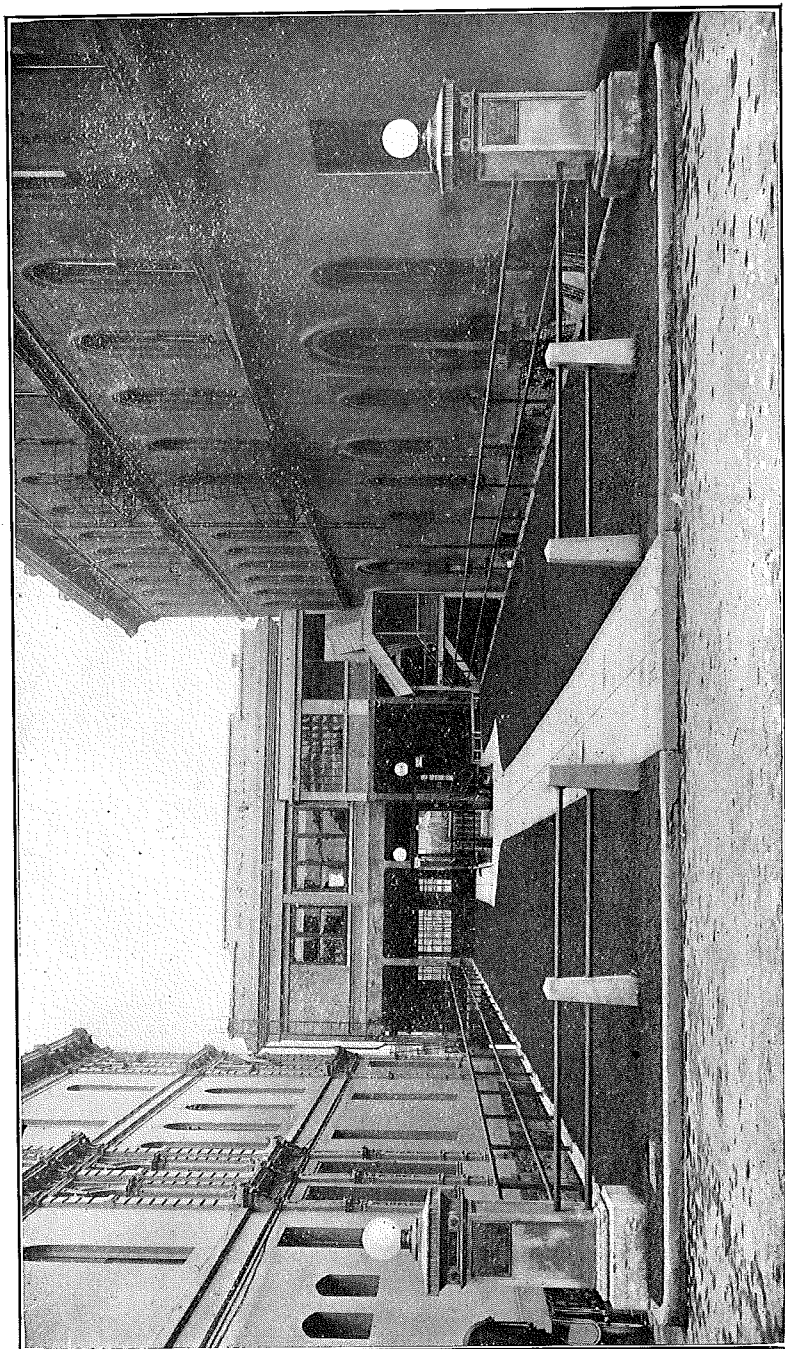
Forward                      \$ 743,051.72

	Forward	\$ 743,051.72
<b>Miscellaneous Revenue:</b>		
Public levee .....	\$ 4,812.50	
Street ends .....	146.00	
Sale of prints.....	9.91	
Cartage and sundries.....	10.03	
		<u>4,978.44</u>
		\$ <u>748,030.16</u>
	<b>Expense.</b>	
<b>Interest:</b>		
On bonded indebtedness.....		\$ 297,235.00
<b>Administration:</b>		
Salaries and wages.....	\$ 33,376.85	
Supplies and expenses.....	39,979.90	
Insurance .....	547.43	
Maintenance and repairs.....	1,921.50	
		<u>75,825.68</u>
<b>Operation Portland Municipal Terminal No. 1:</b>		
Work for others.....	\$ 7,850.89	
Salaries and wages.....	18,104.59	
Supplies .....	1,914.74	
Fire protection .....	226.50	
Telephone, light, power, water, heat....	1,384.38	
Demurrage .....	22.42	
Claims .....	1,952.68	
Sundries .....	188.56	
Insurance .....	2,823.32	
Maintenance and repairs.....	1,853.35	
		<u>36,321.43</u>
<b>Operation Portland Municipal Terminal No. 2:</b>		
Work for others.....	\$ 22,109.99	
Salaries and wages.....	15,466.31	
Supplies .....	854.00	
Fire protection .....	117.00	
Telephone, light, power, water, heat....	758.11	
Right of Way lease.....	300.00	
Claims .....	29.26	
Sundries .....	75.23	
Insurance .....	1,801.30	
Maintenance and repairs.....	2,416.40	
		<u>43,927.60</u>
<b>Operation Portland Municipal Terminal No. 3:</b>		
Work for others.....	\$ 7,629.14	
Salaries and wages.....	6,605.26	
Supplies .....	246.97	
Telephone, light, power, water, heat...	115.13	
Sundries .....	69.07	
Insurance .....	969.67	
Maintenance and repairs.....	398.10	
		<u>16,033.34</u>
	Forward	\$ 469,343.05



..... / HARBOR VIEW, PORTLAND MUNICIPAL TERMINAL NO. 3

	Forward	\$ 469,343.05
<b>Operation Portland Municipal Terminal No. 4:</b>		
Work for others.....	\$ 82,772.82	
Salaries and wages.....	37,906.59	
Supplies .....	4,753.10	
Fire protection .....	1,047.14	
Telephone, light, power, heat.....	1,349.28	
Right of Way lease.....	1.96	
Demurrage .....	126.00	
Claims .....	190.08	
Sundries .....	923.92	
Insurance .....	13,343.57	
Maintenance and repairs.....	6,446.77	
		<u>148,861.23</u>
<b>Equipment:</b>		
Depreciation .....		13,208.54
<b>Reserve for Maintenance:</b>		
Plant and equipment.....		15,810.53
<b>Harbor Development:</b>		
Survey of Swan Island Project.....		4,371.53
<b>Bond Issues:</b>		
Expense .....		4,734.72
		<u>\$ 656,329.60</u>
Surplus .....		91,700.56
		<u>\$ 748,030.16</u>



FRONT STREET VIEW OF MUNICIPAL BOAT LANDING, FOOT OF STARK STREET  
Reinforced concrete structure containing the executive offices of The Commission of Public Docks, Harbor Master's Office, rest  
rooms and comfort stations. A landing float with float bridge approach is provided for the  
accommodation of launches and pleasure boats.



## BALANCE SHEET, NOVEMBER 30, 1920.

## Assets.

## Cash:

General Fund .....	\$ 145,902.96	
Construction .....	1,883,241.36	
Sinking Fund .....	139,192.75	
Special Fund .....	16,657.44	
Contingent Fund .....	20,000.00	
		\$ 2,204,994.51

## Investments:

Sinking Fund Securities.....	\$ 297,630.98	
Special Fund Securities.....	11,000.00	
		308,630.98

Accounts Receivable ..... 40,527.00

Real Estate ..... 1,511,785.85

## Plant:

Portland Municipal Terminal No. 1....	\$ 653,779.63	
Portland Municipal Terminal No. 2....	287,723.35	
Portland Municipal Terminal No. 3....	57,881.41	
Portland Municipal Terminal No. 4....	4,352,849.52	
Municipal Dry Dock.....	617,042.91	
Municipal Street Railway.....	42,194.43	
Stark Street Municipal Boat Landing..	45,780.76	
Woodward Ave. Municipal Boat Landing	4,730.31	
		6,061,982.32

## Equipment:

Portland Municipal Terminal No. 1....	\$ 12,821.67	
Portland Municipal Terminal No. 2....	2,322.15	
Portland Municipal Terminal No. 3....	1,875.50	
Portland Municipal Terminal No. 4....	71,157.30	
General .....	6,269.66	
Field .....	21,550.77	
Maintenance .....	436.69	
		116,433.74

Delinquent Taxes ..... 54,352.99

## Deferred Charges:

Prepaid insurance .....	\$ 27,060.81	
Bond discounts .....	431,367.50	
		458,428.31
		\$10,757,135.70

**Liabilities.**

Accounts Payable .....\$ 202,142.91

**Bonded Indebtedness:****Bonds Authorized:**

Dock bonds .....\$2,500,000.00  
 Elevator bonds ..... 3,000,000.00  
 Harbor bonds ..... 5,000,000.00  
 St. Johns Dock Bonds 60,000.00

\$10,560,000.00

**Unsold Bonds:**

Dock bonds .....\$ 99,800.00  
 Elevator bonds ..... 500,000.00

\$ 599,800.00

**Bonds Redeemed:**

Elevator bonds .....\$ 50,000.00

Bonds Outstanding .....\$ 9,910,200.00 \$10,112,342.91

**Capital.**

Surplus .....\$ 552,574.09

**Reserves:**

For delinquent taxes....\$	54,352.99		
For maintenance .....	37,865.71	92,218.70	644,792.79
	<u>          </u>	<u>          </u>	<u>          </u>

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

	*1914.	1915.	1916.	1917.	1918.	1919.	1920.
Apples .....	3	110	404	13	.....	.....	.....
Asphalt .....	.....	.....	531	210	.....	3,080	3,400
Autos and parts .....	2	.....	2	.....	28	116	71
Ballast and gravel .....	2	.....	743	600	.....	.....	2,271
Books and stationery .....	.....	.....	.....	.....	.....	.....	275
Building material .....	.....	.....	.....	.....	.....	.....	1,585
Canned fish .....	536	119	.....	22	244	75	1,585
Canned goods .....	1,533	3,854	4,940	5,149	690	2,117	3,161
Cans and tops .....	297	386	15	38	35	82	494
Cascara bark .....	7,287	7,986	18,189	21,122	13,038	21,115	15,115
Cement .....	.....	17	.....	.....	.....	863	83
Cocoanut and cocoa meal .....	35	720	1,163	145	.....	214	1,444
Coal .....	.....	.....	.....	.....	68	121	38
Contractors' equipment .....	.....	.....	.....	55	30,946	3,005	718
Copra .....	.....	.....	.....	.....	649	666	210
Cordwood .....	.....	.....	524	2,919	9,793	5,690	.....
Cotton .....	.....	.....	.....	107	111	.....	.....
Crates and boxes .....	3	42	77	175	33	10	98
Drugs and chemicals .....	31	372	434	1,174	22,491	22,002	35,543
Drygoods and merchandise .....	107	563	16	.....	.....	122	722
Feed, hay and grain .....	224	2,647	509	58	7	82	4,313
Flour .....	1,061	1,787	167	18	10,642	27,736	836
Fruit and vegetables, fresh .....	31	16	86	26	68	239	257
Furniture .....	185	242	55	.....	.....	4	153
Groceries and confectionery .....	774	1,295	139	23	71	594	677
Hardware .....	2,669	2,406	166	197	36	51	2,146
Hemp and cordage .....	528	6	21	5	16	.....	72
Hides, leather and rubber goods .....	40	212	.....	.....	113	6	68
Hops .....	.....	20	.....	.....	.....	254	146
Household goods .....	85	103	40	.....	32	40	1,017

\*Seven months only.

**FREIGHT RECEIVED AT PORTLAND MUNICIPAL TERMINAL NO. 1—Continued**  
(Tons of 2000 Pounds.)

	*1914.	1915.	1916.	1917.	1918.	1919.	1920.
Iron and steel.....	4,632	2,754	754	2,682	3,243	274	7,783
Liquor .....	55	40	.....	.....	.....	.....	.....
Livestock .....	16	.....	.....	3	4	11	2
Lumber .....	797	4,380	5,406	10,211	13,871	13,174	5,690
Machinery .....	76	981	464	1,446	895	901	1,458
Manufactured wares .....	429	418	26	.....	.....	21	3,276
Metal .....	.....	.....	.....	.....	65	2,014	12
Miscellaneous .....	1,112	775	378	113	111	825	1,015
Oil and grease.....	.....	.....	.....	.....	.....	.....	3,045
Packing house products.....	170	390	.....	147	29	146	29
Paints and oils.....	617	1,182	87	10	552	141	352
Paper .....	981	913	3,096	451	685	1,802	835
Piling .....	.....	.....	256	.....	229	795	2,128
Pipe and plumbers' supplies.....	1,155	1,818	176	51	2	114	963
Rags and waste.....	.....	.....	139	519	59	124	58
Sacks .....	334	28	6	.....	.....	20	66
Salt .....	.....	.....	69	70	303	143	29
Scrap metal .....	.....	99	1,422	3,131	1,903	2,021	1,767
Seeds, bulbs and spices.....	14	130	82	.....	.....	16	94
Ship knees and trenails.....	.....	.....	20	.....	444	225	.....
Shooks and staves.....	263	46	785	4,262	4,821	1,101	179
Sugar .....	15	10	153	6	76	425	41
Sulphur .....	3,185	1,232	3,255	697	.....	.....	.....
Tea .....	.....	.....	.....	.....	.....	.....	293
Tin and tinplate.....	37	1,901	5,177	6,511	10,698	4,477	4,450
Wheat .....	.....	.....	.....	.....	.....	.....	234
Wire and fencing.....	1,960	1,801	26	.....	30	.....	144
Wool .....	31	615	846	1,652	1,078	1,024	168
	*31,312	43,159	50,115	64,019	128,215	118,868	109,289

\*Seven months only.

**FREIGHT RECEIVED AT PORTLAND MUNICIPAL  
TERMINAL NO. 2.**

(Tons of 2000 pounds.)

	*1915.	1916.	1917.	1918.	1919.	1920.
Apples .....		31	329	135	26	.....
Asphalt .....	752	160	1,000	1,229	5,688	3,487
Autos and parts....	1	5	.....	.....	316	347
Books and stationery .....	.....	.....	.....	.....	373	189
Canned milk .....	.....	.....	412	263	1,763	820
Canned goods .....	.....	1	.....	11	931	2,856
Canned salmon .....	22	360	37	.....	40	240
Cement .....	.....	1,931	1,434	3,763	13,281	17,853
Coal .....	.....	.....	.....	.....	.....	36
Copra .....	.....	.....	1,440	2,371	.....	.....
Cordwood .....	106	2,342	4,493	3,076	.....	3
Cotton .....	.....	.....	.....	.....	.....	83
Crates and boxes....	.....	.....	110	32	725	.....
Building material ..	1	.....	.....	.....	220	139
Drugs and chemicals .....	.....	5	.....	.....	608	305
Drygoods and mer- chandise .....	.....	.....	.....	2	422	1,283
Feed, hay and grain 19	.....	61	173	158	2,927	1,290
Fertilizer .....	.....	80	.....	76	23	48
Flour .....	.....	.....	.....	.....	2,236	3,651
Fruits and vegeta- bles, fresh .....	.....	31	59	112	608	780
Groceries and confec- tionery .....	.....	20	.....	3	4,351	2,144
Hardware .....	.....	.....	.....	.....	1,502	1,323
Hemp and cordage..	.....	25	.....	87	357	58
Hides, leather and rubber goods....	.....	1	.....	3	324	178
Hops .....	.....	16	3	10	5	36
Household goods and furniture .....	.....	3	4	9	620	637
Iron and steel.....	.....	.....	.....	146	239	789
Livestock .....	4	.....	.....	.....	11	1
Lumber .....	.....	1,853	8,596	1,607	1,106	1,435
Machinery .....	4	18	227	133	636	946
Manufactured wares .....	.....	.....	.....	.....	352	10
Metal .....	.....	60	.....	.....	37	.....
Miscellaneous .....	10	2	290	221	1,778	3,166
Oil and gasoline.....	.....	.....	.....	.....	361	31
Paints and oils.....	3	55	10	168	448	366
Paper .....	2,315	9,604	8,384	10,712	39,591	43,769
Pipe and plumbers' supplies .....	.....	39	20	.....	416	293
Plaster and lime....	.....	.....	.....	1,110	3,251	232
Potatoes .....	.....	1,641	3,104	1,754	1,750	1,446
Rags and waste.....	.....	.....	.....	.....	.....	185
Sacks and burlap... 8	.....	14	12	.....	98	138
Seed .....	.....	.....	.....	.....	305	214
Salt .....	.....	.....	.....	.....	809	5

\*Seven months only.

**FREIGHT RECEIVED AT PORTLAND MUNICIPAL  
TERMINAL NO. 2—Continued.**  
(Tons of 2000 pounds.)

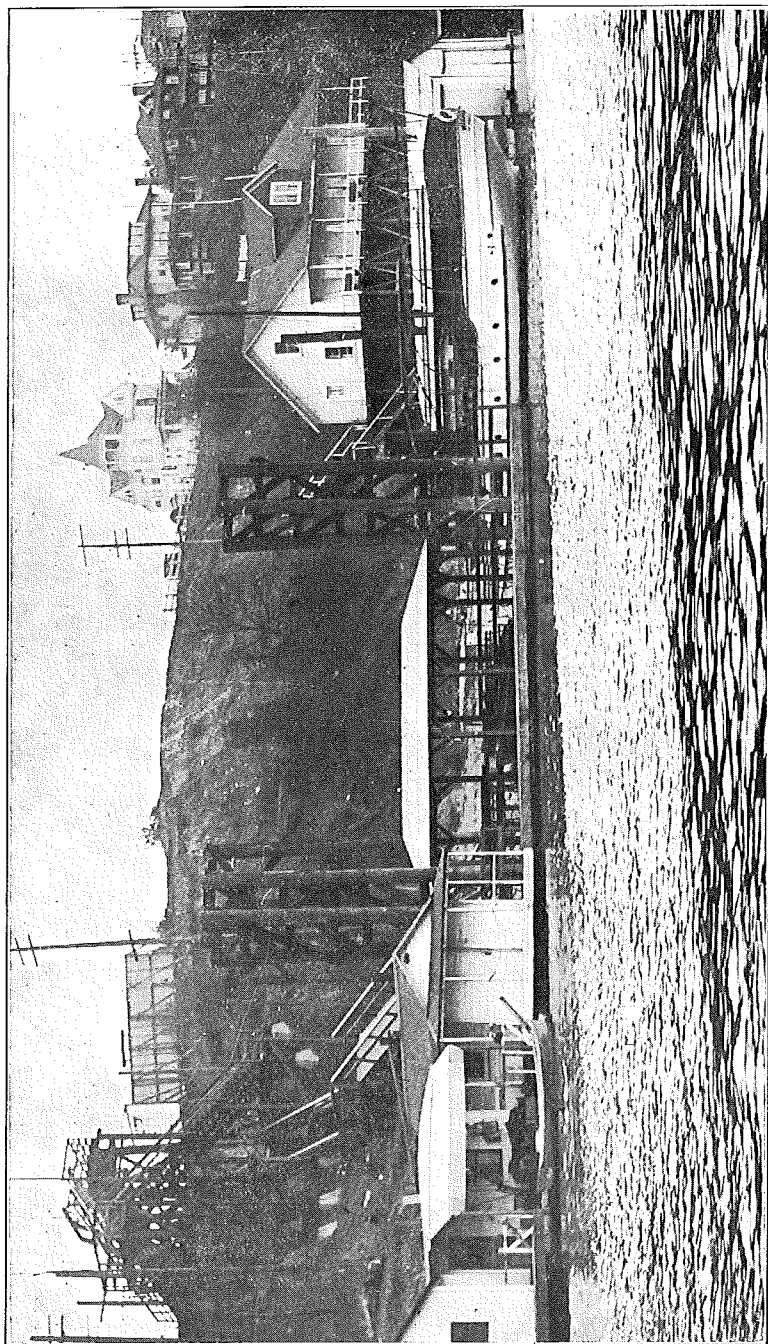
	*1915.	1916.	1917.	1918.	1919.	1920.
Sugar .....					513	177
Shells .....					124	.....
Shooks and staves.. 16			33	1,268	153	136
Shipknees .....		180	1,066	2,589	38	.....
Sulphite .....			871	130	735	.....
Sulphur .....	2,355	22			41	.....
Tin and tinware....					82	11
Vinegar and cider...					209	.....
Wire and fencing... ..		61	118	62	74	146
Wheat .....	16	232	343	1	.....	.....
Wool .....		23	37	82	118	102
	5,632	18,876	32,605	31,323	90,621	91,384

\*Seven months only.

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

	*1918.	1919.	1920.
Asbestos .....	255	14	.....
Asphalt .....	.....	599	1,008
Box shooks .....	.....	2,849	.....
Building material .....	59	.....	16
Canned goods .....	43	.....	9
Cord and slabwood .....	12	.....	.....
Coal .....	588	.....	.....
Cotton .....	19	102	52
Drugs and chemicals .....	15	19	21
Feed, hay and grain .....	89	57	785
Fertilizer .....	.....	25	.....
Flour .....	6,	1,977	2,397
Fresh fruit and vegetables .....	11	8	2
Furniture .....	18	.....	.....
Groceries .....	8	2	.....
Household goods .....	101	33	12
Hardware .....	70	2	80
Iron and steel, etc. ....	117	139	11
Lumber .....	28	4,417	196
Lead .....	.....	43	.....
Livestock .....	53	64	31
Machinery .....	103	23	3
Meats .....	4	2	.....
Milk .....	165	102	.....
Miscellaneous .....	38	51	190
Oakum .....	166	.....	.....
Oats .....	.....	667	.....
Paints and oils .....	222	5	.....
Potatoes .....	10	13	2
Pipe and plumbers' supplies .....	1	106	1
Rags and waste .....	237	106	135
Sacks .....	8	.....	.....
Salt .....	22	.....	.....
Shingles .....	19	.....	.....
Shipknees and treenails .....	95	133	.....
Tubing .....	19	.....	.....
Vehicles .....	1	.....	3
Wheat .....	1	3,530	.....
Wool .....	431	450	608
	*3,034	15,538	5,562

\*Seven months only.



VIEW OF MUNICIPAL BOAT LANDING AT THE FOOT OF WOODWARD AVENUE



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

	*1919.	1920,
Ammonia .....	615	490
Autos and parts.....	275	203
Bamboo .....	118	84
Barrels and boxes.....	56	156
Bones .....	89	246
Box shooks .....	534	141
Building material .....	77	419
Canned goods .....	4	193
Canned milk .....	131	3,058
Cigars and tobacco.....	392	119
Coal .....		986
Copper .....	57	.....
Cotton .....	771	7,507
Cotton seed cake.....	202	506
Drugs and chemicals.....	40	1,200
Egg case fillers.....	57	156
Feed, hay .....	25	2,796
Flour .....	13,338	14,828
Fruit and vegetables.....	111	114
Groceries and confectionery .....		1,116
Hardware .....	212	1,038
Hemp and maguey.....	9,092	2,861
Household goods .....	9	683
Iron and steel.....	16,057	21,364
Lumber .....	3,247	11,268
Machinery .....	1,464	857
Malze .....	116	.....
Malt .....	30	.....
Manufactured wares .....	15	315
Miscellaneous .....	333	11,486
Metal .....	37	131
Molasses .....		8,018
Oats .....	355	.....
Oils .....	35	4,021
Packing house produce.....		83
Paper .....	4,739	5,069
Phosphate rock .....		7,301
Piling .....		1,177
Pipe and plumbers' supplies.....	1,016	1,446
Rope and cable.....	469	.....
Rugs and matting.....	86	1,169
Sacks and burlap.....		3,499
Shingles .....	771	.....
Shoes and leather goods.....		1,131
Soda .....	1,226	.....
Sugar .....	7	132
Sulphur .....		12,184
Tea .....	7	105
Tinplate .....	1,629	2,083
Wheat .....	868	5,288
Wire and fencing.....	643	3,185
Wool .....		1,181
	*59,355	141,393

\*Seven months only.

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

	Received.	*1914.	1915.	1916.	1917.	1918.	1919.	1920
From foreign ports.....		9,018	7,882	8,798	7,483	12,413	5,768	4,074
From Atlantic ports.....		10,860	15,102	619	.....	.....	.....	13,113
From Pacific Coast ports.....		1,491	3,916	5,519	4,227	933	7,185	9,329
From river points.....		73	1,912	4,342	4,327	13,623	10,444	13,011
Via cars and teams.....		9,870	14,347	30,837	47,482	101,246	95,471	69,762
		31,312	43,159	50,115	64,019	128,215	118,868	109,289
<b>Delivered.</b>								
To foreign ports.....		1,218	1,843	1,657	3,745	10,385	38,953	11,974
To Atlantic ports.....		1,006	3,239	45	135	.....	.....	494
To Pacific Coast ports.....		6,192	1,491	2,767	3,185	4,347	1,832	1,685
To river points.....		306	1,347	1,382	3,364	1,931	1,069	5,550
Via cars and teams.....		21,885	34,263	42,680	51,126	105,766	80,458	70,007
		30,607	42,183	49,131	61,555	122,429	122,312	89,710

\*Seven months only.

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

	Received.				Delivered.			
	*1915.	1916.	1917.	1918.	1919.	1920.		
From foreign ports.....	2,355	1,875	1,580	2,418	.....	599		
From Atlantic ports.....	.....	.....	.....	.....	.....	309		
From Pacific Coast ports.....	752	1,272	1,010	9,972	26,496	27,083		
From river points.....	2,453	13,359	14,977	8,911	42,747	43,997		
Via cars and teams.....	72	2,370	15,038	10,022	21,378	19,344		
	5,632	18,876	32,605	31,323	90,621	91,282		
To foreign ports.....	1,829	4,471	6,545	629	1,327	.....		
To Atlantic ports.....	.....	.....	.....	.....	.....	96		
To Pacific Coast ports.....	14	6	52	.....	15,950	9,456		
To river points.....	2,393	491	1,239	1,557	2,480	5,555		
Via cars and teams.....	946	12,208	23,005	27,429	74,985	75,878		
	5,182	17,176	30,841	29,615	94,742	90,985		

\*Seven months only.

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

<b>Received.</b>	<b>*1918.</b>	<b>1919.</b>	<b>1920.</b>
From Pacific Coast ports.....	211	4,855	1,586
From river points.....	1,056	240	167
Via cars and teams.....	1,767	10,443	3,809
	3,034	15,538	5,562
<b>Delivered.</b>			
To foreign ports.....		28	.....
To Atlantic ports.....		.....	2,396
To Pacific Coast ports.....		133	19
To river points.....	168	219	519
Via cars and teams.....	2,410	14,019	5,878
	2,578	14,399	8,812

\*Seven months only.

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

<b>Received.</b>	<b>*1919.</b>	<b>1920.</b>
From foreign ports.....	9,600	38,181
From Atlantic ports.....	.....	12,184
From Pacific Coast ports.....	1,179	132
From river points.....	6,172	6,405
Via cars and teams.....	42,404	84,485
	59,355	141,387
<b>Delivered.</b>		
To foreign ports.....	40,710	87,240
To Pacific Coast ports.....	250	327
To river points.....	757	710
Via cars and teams.....	13,089	39,392
	54,806	127,669

\*Seven months only.

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

Foreign Exports (Tons).											
Month—	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
January .....	17,287	43,993	47,946	68,682	79,806	71,191	14,769	20,780	4,775	42,931	51,587
February .....	24,184	40,846	33,625	38,889	24,789	55,359	22,843	2,481	17,070	22,219	32,556
March .....	26,722	38,043	26,518	49,120	28,238	73,242	26,475	10,812	19,260	24,037	53,746
April .....	25,027	28,577	26,715	11,066	34,117	31,272	18,210	12,724	25,029	16,050	54,178
May .....	19,893	24,984	25,796	61,447	62,732	14,295	18,460	16,063	30,477	58,811	63,528
June .....	23,635	16,036	26,853	41,180	27,752	35,016	.....	21,826	20,015	49,899	107,710
July .....	25,746	14,072	13,134	52,262	39,199	30,865	.....	11,529	13,106	41,933	95,956
August .....	33,125	11,094	36,457	39,498	44,366	32,942	2,033	23,056	3,561	48,644	81,508
September .....	20,581	40,442	52,349	87,404	26,021	43,480	8,896	11,771	12,280	43,255	92,056
October .....	54,782	67,936	64,071	70,030	73,818	53,626	.....	13,312	30,730	55,322	110,030
November .....	37,918	38,354	59,622	57,159	75,739	40,798	4,572	10,826	30,176	44,820	22,877
December .....	65,688	56,103	73,920	70,949	66,397	35,709	1,672	16,324	21,501	43,998	97,730
Totals.....	374,588	420,480	487,006	647,686	582,974	517,795	117,930	171,504	227,980	491,919	863,462

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

Month—	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
January .....	6,780	1,165	5,516	1,265	4,070	825	3,656	2,026	1,328	359	544
February .....	10,375	5,491	3,677	4,397	7,222	102	430	1,610	3,778	524	3,894
March .....	1,416	3,937	4,375	8,169	4,543	5,272	4,364	1,128	468	623	2,149
April .....	7,873	7,936	5,258	398	2,172	4,794	2,519	373	1,672	946	1,303
May .....	99	3,823	1,371	5,881	15,998	12,137	5,177	515	3,120	1,691	2,392
June .....	4,471	4,267	8,215	7,506	3,865	2,899	1,860	493	1,009	1,139	5,589
July .....	2,633	2,435	5,053	771	7,405	4,608	2,993	494	1,795	692	3,785
August .....	7,139	11,840	4,890	7,523	4,489	2,577	7,819	537	169	389	5,682
September .....	13,273	3,050	3,143	5,400	6,139	1,627	1,207	1,533	2,411	2,758	2,235
October .....	13,654	6,898	1,696	4,829	1,851	429	533	1,945	185	1,555	21,031
November .....	15,542	16,838	274	9,318	6,904	577	1,395	5,041	49	3,623	2,288
December .....	7,114	3,898	7,894	2,104	659	636	1,451	3,390	885	2,697	7,523
Totals .....	90,369	71,578	52,362	57,561	65,317	36,483	33,404	19,085	16,869	16,996	58,415

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

Month—	Domestic Exports (Tons).											
	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	
January .....	29,810	30,140	32,816	50,506	50,724	30,723	32,509	32,874	17,532	5,520	23,055	
February .....	22,428	19,371	31,473	47,190	57,876	40,384	30,871	29,917	13,012	7,657	14,322	
March .....	28,224	34,008	37,467	57,560	63,999	39,203	36,309	25,805	13,234	10,449	14,372	
April .....	29,311	28,888	40,349	64,602	59,635	39,061	45,213	34,249	14,961	13,060	14,703	
May .....	30,290	34,811	50,677	68,495	59,636	45,411	45,475	36,480	17,118	24,280	11,351	
June .....	26,773	35,152	39,273	60,690	52,506	47,604	24,425	23,738	10,406	16,811	9,890	
July .....	24,691	32,457	44,682	49,609	54,868	51,799	22,433	21,544	13,984	12,147	10,334	
August .....	23,485	37,402	45,366	52,015	58,450	41,722	34,348	22,156	21,858	17,155	9,018	
September .....	20,062	34,841	49,011	64,737	49,182	48,926	33,442	23,003	16,260	17,027	13,727	
October .....	21,537	38,516	55,012	79,035	55,140	51,245	39,599	24,620	10,609	8,598	17,815	
November .....	27,505	40,821	53,925	68,410	41,614	40,795	35,298	22,321	14,050	14,385	17,080	
December .....	25,187	37,223	53,334	62,168	30,512	42,407	33,773	23,488	14,299	8,369	10,208	
Total .....	309,303	403,630	533,385	725,017	634,142	519,280	413,695	320,195	177,323	155,458	165,875	

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

Domestic Imports (Tons).											
Month—	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
January...	51,817	75,855	96,173	93,541	81,100	74,240	83,794	76,577	100,140	92,406	122,604
February.	72,366	92,826	74,948	81,938	96,678	61,057	69,539	69,499	85,593	100,428	124,160
March....	84,751	81,704	98,682	94,180	86,159	80,227	119,572	88,285	104,722	103,556	105,783
April.....	77,940	104,632	105,114	107,688	75,878	75,177	63,400	84,924	90,159	79,288	99,872
May.....	82,550	111,096	91,075	73,434	82,202	81,022	92,337	99,629	100,002	107,361	81,873
June.....	99,370	109,242	104,679	103,246	85,933	99,377	75,065	89,619	96,900	101,343	94,298
July.....	81,074	117,660	82,179	116,966	92,301	66,956	94,616	94,490	92,952	119,261	125,035
August....	99,182	109,183	102,571	106,407	102,479	101,399	80,787	70,048	73,168	93,516	132,688
September	90,419	111,017	96,669	85,833	70,543	76,405	73,990	81,864	88,168	115,159	79,915
October...	96,966	87,470	93,986	103,514	63,901	83,862	85,488	91,409	103,581	103,931	113,922
November.	105,240	97,142	99,675	70,695	76,867	80,621	87,999	74,187	81,436	71,463	129,489
December.	86,066	92,272	88,358	95,617	75,381	74,534	106,947	106,670	90,816	99,805	107,120
Totals..	1,027,741	1,190,099	1,136,109	1,133,059	990,422	954,877	1,033,534	1,027,201	1,107,637	1,187,517	1,316,759



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

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Acetate of Lime, lbs. . .	.....	.....	342,700	.....	.....	.....	.....	.....	422,234	.....
Ammonia, lbs. . . . .	.....	.....	.....	.....	.....	.....	.....	.....	1169,466	.....
Ammunition, lbs. . . .	.....	.....	.....	.....	.....	.....	.....	.....	33,779	.....
Autos, Trucks and Parts, lbs. . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barley, bushels . . . .	.....	1,250,578	2,014,110	2,153,599	2,071,461	673,851	.....	.....	376,614	229,934
Beef Casings, lbs. . . .	.....	.....	49,053	78,050	.....	.....	.....	.....	.....	.....
Bones, tons . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Box Shooks, tons . . .	.....	.....	.....	.....	.....	.....	.....	814	44	*196,411
Bran, tons . . . . .	.....	.....	38	.....	.....	.....	.....	.....	.....	.....
Building Materials, tons	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Butter, lbs. . . . .	.....	.....	.....	.....	.....	.....	.....	.....	21	1,351
Candy, lbs. . . . .	.....	.....	.....	.....	.....	.....	8,045	.....	.....	2,248
Canned Goods, cases . .	.....	880	2,808	.....	.....	.....	.....	.....	10,957	.....
Canned Salmon, cases .	.....	200	8,732	710	2,395	.....	.....	.....	*345,030	84,026
Carbon Block, lbs. . . .	.....	.....	.....	4,400	27,735	8,938	.....	2	244,576	*779,724
Caustic Soda, tons . . .	.....	.....	.....	.....	.....	.....	.....	.....	22,500	.....
Chemicals, tons . . . .	.....	.....	.....	.....	.....	.....	.....	.....	1,311	.....
Cheese, lbs. . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,690
Clothing, Dry Goods, lbs. . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,373
Coal, tons . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	14,848	.....
Cotton, bales . . . . .	.....	.....	3,716	.....	.....	.....	.....	.....	800	.....
Cascara Bark, sacks . .	4,341	13,169	7,715	2,921	1,791	.....	.....	*2,278,735	*16,115,859	.....
Doors, Wooden, lbs. . .	.....	.....	.....	.....	.....	.....	.....	.....	*787,793	*94,231
Dynamite, lbs. . . . .	.....	.....	51,850	89,323	.....	357,500	.....	.....	15,500	.....

\*Pounds.

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

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Egg Cases, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	597,286	401,160
Electrical Goods, pkgs. ....	.....	.....	.....	.....	.....	.....	.....	.....	*410,412	*174,310
Excelsior, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51,256
Feed, tons ....	.....	.....	.....	.....	.....	.....	.....	1,443	28	.....
Fertilizer, tons ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,530
Flour, bbls. ....	743,079	650,426	786,202	416,417	355,965	85,903	97,980	1,568,175	2,756,440	2,020,190
Fruit, boxes ....	13,858	6,221	6,424	4,285	.....	.....	.....	.....	*336,248	*216,238
Hardware, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	454,423	394,911
Hides, tons ....	.....	75	362	249	.....	.....	.....	.....	*256,346	*297,675
Hops, lbs. ....	.....	.....	180,307	281,380	.....	.....	.....	.....	*476,933	27,424
Iron and steel, tons. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lard, lbs. ....	.....	8,590	382,503	372,502	19,130	16,701	.....	.....	.....	.....
Loganberry Juice, gals. ....	.....	.....	.....	.....	.....	.....	.....	.....	2,925	3,494
Lumber, M. ft. ....	76,780	113,047	176,091	157,233	60,675	22,317	68,333	45,551	78,242	.....
Machinery, tons ....	1	1	13	2	3	27	17	11	3,875	741
Malt, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	59,700	.....
Meat, lbs. ....	.....	.....	5,329	7,870	.....	4,375	.....	.....	8,221	.....
Merchandise, tons ....	133	176	236	657	407	11	1	13	184	1,250
Metal, tons ....	.....	.....	.....	72	20	1,210	367	1,409	22,667	.....
Oats, bushels ....	.....	.....	.....	.....	.....	.....	.....	.....	26,055	20,518
Paper, tons ....	97	135,316	8,006	609,047	968,460	.....	161,699	.....	3,820	3,373
Produce, tons ....	.....	.....	22	226	1,808	6,014	.....	.....	3	.....
Rubber Goods, lbs. ....	60	.....	.....	.....	.....	.....	.....	.....	3,268	.....
Salt Fish, lbs. ....	.....	.....	50,000	.....	.....	.....	.....	9,600	.....	.....
Seeds, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	33,000	.....
Shingles, bdls. ....	.....	.....	.....	.....	1,520	.....	.....	.....	300	.....

\*Pounds.

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

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Shoes, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	2,500	1,277
Soap, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	10,218	60,160
Staves and Heads, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	510,980	957,600
Tallow, lbs. ....	523,722	971,973	2,353,831	443,354	.....	.....	.....	.....	155,059	2,700
Tin Plate, tons. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,403
Tobacco, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	1,525,840	.....
Wheat, bushels ....	7,718,861	7,340,194	8,469,769	7,825,172	10,688,609	1,698,463	1,760,403	.....	2,011,273	11,587,375
Wool, lbs. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73,516

\*Pounds.

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

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Antimony, cases .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,255
Buckwheat, bushels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,486
Camphor, tubs .....	35	.....	.....	20	.....	30	13	.....	4	.....
Cement, bbls. ....	9,825	12,600	.....	.....	.....	.....	.....	.....	.....	.....
Coal, tons .....	14,785	8,413	44,482	4,535	.....	120	90	30	165	1,370
Cocanut Oil, bbls. ....	.....	.....	.....	.....	.....	.....	.....	1,782	.....	.....
Coffee, sacks .....	1,225	8,742	17,316	15,624	5,526	4,173	652	.....	.....	3,361
Copra, tons .....	.....	.....	.....	.....	.....	722	10,373	9,421	4,522	2,472
Corn, bushels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45,818
Cottonseed Oil, barrels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	250
Cake Meal, tons .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,835
Creosote, bbls. ....	.....	.....	14,466	210	14,346	11,905	.....	.....	.....	25,724
Curios and Merchandise, pkgs. ....	24,713	23,174	11,699	30,387	18,166	57,949	13,262	8,647	10,665	15,087
Cedar Lumber, M. feet .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100
Eggs, cases .....	.....	.....	.....	7,100	2,400	8	36	.....	.....	.....
Flax, bales .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	620
Fire Bricks, tons .....	4,278	2,257	6,222	2,571	.....	.....	.....	.....	.....	.....
Fire Clay, tons .....	1,322	1,243	398	350	.....	.....	.....	.....	.....	.....
Firecrackers, cases .....	67	.....	93	615	.....	210	487	.....	.....	907
Fish, barrels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,543
Furs, bales .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	545
Glass, cases .....	.....	.....	.....	24,939	.....	.....	.....	.....	.....	.....
Grain Rags, bales .....	4,275	3,422	3,221	10,428	15,086	8,578	53	156	2,359	7,930
Graphite, barrels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,038
Gum Copal, packages .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,095
Hair, bales .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	595
Hardwood, M. ft. ....	5,445	7,721	10,272	8,330	1,873	3,436	359	770	17	.....

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

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Hemp, bales .....	10,436	8,817	34	7,257	3,215	7,658	4,694	2,684	38,136	16,157
Hides, bbls. ....						8,850	6,159	1,336	1,810	2,876
Iron and Steel, tons .....	2,999	362	1,193	5,456	177	68	357	477	272	
Linseed, bags .....					19,121	26,053	12,656		5,148	45,343
Liquor, casks .....	439	477	326	359	84					
Liquor, cases .....	9,607	6,161	6,411	5,744	641					
Machinery, pkgs. ....										
Maize, bushels .....				20,857	93,896			479	1,465	105
Matting, rolls .....	1,811	516		186	172	347			2,305	
Mill Feed, tons .....					1,233	250	16		386	11,286
Nitrate Soda, bags .....									25	
Oats, bushels .....										37,159
Peanuts, bags .....	6,461	10,382	1,100	16,433	3,400	2,931		21,525	22,300	
Pepper, bags .....	1,008	775	275	905	50		2,993		100	10,105
Pig Iron, tons .....	6,050	1,642	1,530	3,250	100					883
Pineapples, cases .....			1,026	1,501						1,000
Provisions, pkgs. ....	29,636	13,617	9,891	18,408	18,517	27,738	29,980	9,099	18,728	14,872
Rice, sacks .....	18,754	9,174	2,170	26,996	10,315	14,606	18,722	7,414	1,457	6,338
Rubber, pkgs. ....									17,656	
Rye, bushels .....								1,300		
Seeds, bags .....			1,175	2,271	10,736	2,397	4,621	3,884	2,730	23,015
Silk, Silk Goods, bales .....	14	1	7	20	26	126	154	115	205	289
Soya Bean Oil, barrels .....										*6,221
Spices, bags .....										1,009
Sugar, bags .....	1,398	715	736	697	2,211					4,551
Sulphur, tons .....	5,264	6,217	4,441	7,432	7,724	7,026	609		150	

\*Tons.

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

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Tallow, tons	.....	.....	.....	.....	.....	.....	.....	22	13	.....
Tapioca, bags	2,610	1,720	895	1,210	.....	.....	.....	.....	.....	570
Tea, pkgs.	5,066	2,554	4,639	3,922	3,417	6,755	3,522	5,695	3,502	6,041
Tin, slabs	1,634	97	355	410	318	932	1,463	100	764	1,100
Tobacco, Cigars, pkgs.	.....	.....	.....	.....	.....	.....	.....	.....	357	659
Walnuts, bags	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,297
Walrus Tusks, bales	.....	.....	.....	.....	.....	.....	.....	.....	.....	619
Wheat, bushels	.....	.....	.....	.....	.....	.....	.....	25,631	.....	27,793
Wood, Pulp, rolls	.....	.....	.....	5,408	409	.....	.....	.....	.....	.....
Wool, bales	.....	.....	.....	.....	.....	.....	.....	5,316	100	910



TABLE 7.—(Continued.)  
DOMESTIC IMPORTS BY OCEAN GOING VESSELS AT PORTLAND, OREGON.  
(Merchants' Exchange Records, Portland, Oregon.)

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Merchandise, tons .....	40,561	36,872	52,319	93,197	92,629	39,791	43,253	57,064	25,383	32,782
Miscellaneous, pkgs. ....	457,254	420,276	468,379	.....	.....	4,279	.....	.....	.....	.....
Molasses, gals. ....	.....	.....	.....	.....	.....	.....	.....	.....	416,667	*4,103
Oil, bbls. ....	4,218,101	4,501,443	4,723,011	4,252,497	4,069,585	5,190,410	5,266,640	5,694,754	4,995,487	5,478,158
Paints and Oils, pkgs. ....	80,294	75,539	104,367	65,200	75,140	45,620	30,325	31,062	19,131	47,975
Paper Pulp, bdls. ....	.....	.....	.....	548	.....	.....	.....	.....	.....	.....
Pineapple, canned, cases..	.....	.....	.....	.....	.....	.....	.....	.....	.....	59,972
Plaster, sacks .....	97,612	115,214	106,634	113,345	83,880	48,996	66,201	36,644	10,904	.....
Powder, cases .....	.....	1,811	6,214	24,946	16,349	1,165	5,132	9,952	11,414	3,933
Rice, sacks .....	2,285	2,091	4,073	10,031	11,347	9,652	15,902	43,813	33,007	33,631
Rye, bushels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,143
Salmon, cases .....	50,365	85,363	99,705	189,657	121,312	105,995	100,881	113,592	51,277	78,598
Salt, sacks .....	212,081	290,718	282,804	198,377	201,280	157,714	222,657	201,272	197,837	247,793
Sash and Doors, pkgs. ....	21,163	4,354	11,441	460	624	.....	.....	.....	.....	.....
Shingles, bdls. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Soap, cases .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sugar, sacks .....	638,862	489,345	589,703	620,372	545,787	415,583	472,043	541,113	500,524	49,666
Suphur, sacks .....	11,679	21,622	15,174	9,213	9,750	2,781	7,010	4,323	1,884	542,066
Tanbark, cords .....	418	451	537	.....	455	.....	408	368	16	13,016
Tinplate, tons .....	.....	.....	.....	.....	11,904	630	235	146	365	450
Tobacco, pkgs. ....	19,311	14,941	10,890	16,243	5,548	3,267	8,049	15,904	5,744	354
Vegetable Pulp, sacks .....	.....	.....	.....	.....	.....	52,743	51,405	23,600	9,400	3,759
Wool, bales .....	1,811	354	920	483	557	2960	563	366	106	11,644

\*Tons.



TABLE 8.  
DOMESTIC EXPORTS BY OCEAN GOING VESSELS FROM PORTLAND, OREGON.  
(Merchants' Exchange Records, Portland, Oregon.)

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Barley, bushels .....	600,522	848,409	43,291	136,583	3,503	72,202	667	1,446	2,519	
Canned Fruit, cases .....	18,428	68,769	80,148	114,307	54,875		76,731	43,389		
Canned Goods, cases .....										
Canned Salmon, cases .....	71,381	80,454	34,822	133,042	138,100	12,754	17,217	7,590	140,141	
Cheese, cases .....							11,111	3,729	9,346	
Coal, tons .....			1,310	1,348	940	882	779	882		
Condensed Milk, cases .....		59,541	60,050	64,639	86,067	99,664	120,167	44,667	40,056	
Corn, bushels .....								5,316		
Dried Fruit, cases .....	76,341	56,595	163,965	176,947	86,658					
Flour, bbls. ....	339,673	364,549	431,788	500,225	641,231	600,746	488,338	139,541	170,171	200,019
Fruits, Vegetables, tons .....				2,227	1,945	2,511	2,241	1,393	615	913
Grain Bags, bales .....					771	1,099	1,226	4,847	1,574	1,531
Hardware, tons .....					3,479	2,145	1,390	1,204	778	1,065
Hay, tons .....	1,649	1,948	1,978	5,546	392	405	190			
Hides, bbls. ....			1,306	1,353	392					
Hops, bales .....	6,931	12,945	2,534	848	657	628	3,758	1,209	797	3,862
Iron and Steel, tons .....	106	344	704	3,146	1,672	399	265	541		
Liquors, pkgs. ....	2,069	1,866	1,878	2,302	5,640	1,073	614	1,017	309	1,317
Lumber, M. ft. ....	2,172	808	2,136	6,080	4,265					
Machinery, pkgs. ....	126,168	169,454	228,997	193,352	146,838	107,630	71,438	55,662	56,619	46,720
Merchandise, tons .....	2,343	2,098	1,982	2,269	518	384	1,073	9,338	17,357	14,381
Millfeed, tons .....	36,295	23,038	30,567	47,535	43,135	53,429	58,528	30,033	10,168	14,525
Oats, bushels .....	13,824	18,014	24,269	19,526	25,817	19,072	20,621	4,063	6,504	6,445
Paper, tons .....	173,792	342,333	733,102	555,882	358,657	859,586	788,014	35,848	14,065	61,683
Potatoes, sacks .....	15,717	16,271	18,169	18,987	23,683	32,760	25,394	22,161	15,086	33,472
Rice, sacks .....	12,073	17,093	12,990	43,592	26,114	66,941	64,628	11,119	7,519	6,428
Seed, sacks .....	115	1,950	8,504	7,940						
Shingles, bbls. ....					3,380	5,498	4,357	3,050	2,303	2,543
Shooks and Staves, tons ..	2,366	1,564	2,247	2,151	3,000	25,382	19,232	13,860	4,297	3,788
					3,100	4,687	4,415	5,190	3,453	1,362

TABLE 8.—(Continued.)  
**DOMESTIC EXPORTS BY OCEAN GOING VESSELS FROM PORTLAND, OREGON.**  
 (Merchants' Exchange Records, Portland, Oregon.)

Commodity and Unit—	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Tallow, tierces .....	.....	.....	.....	2,642	2,100	548	1,017	315	403	.....
Vinegar, bbls. ....	.....	.....	.....	.....	.....	.....	.....	.....	3,056	1,456
Wheat, bushels .....	3,143,763	4,822,382	7,141,169	5,037,318	3,184,834	1,553,376	819,305	1,009	98,500	13,741
Wool, bales .....	5,963	6,383	2,432	710	1,215	151	268	214	463	1,174

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

Year.	Wheat		Barley		Oats	
	Foreign.	Coastwise.	Foreign.	Coastwise.	Foreign.	Coastwise.
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	3,568,481	.....	2,104	.....	112,492
1911	7,718,861	3,143,763	.....	.....	.....	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	.....	14,065
1920	11,578,275	13,711	.....	2,519	20,518	61,813

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.	Coastwise.	Foreign.	Coastwise.
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	146,838
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

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

Commodity—	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Bags and Burlap.....	\$502,854	\$ 869,496	\$1,244,962	\$1,236,294	\$1,224,587	\$412,807	\$ .....	\$201,745	\$596,663
Butter .....	.....	.....	.....	.....	.....	.....	.....	11,836	.....
Cement .....	15,074	.....	.....	.....	.....	8,077	.....	.....	.....
Chemicals .....	.....	138,037	36,286	.....	.....	.....	.....	.....	.....
Coal .....	36,086	5,389	24,104	20,171	6,324	.....	11,522	20,968	.....
Coffee .....	109,107	270,303	326,305	19,380	9,912	11,744	.....	38,044	.....
Coke .....	13,405	11,822	14,375	89,853	81,626	11,610	.....	.....	.....
Copra .....	.....	.....	.....	9,640	.....	.....	.....	.....	.....
Corn .....	.....	.....	.....	.....	58,962	168,802	2,029,876	732,940	384,972
Cotton, Mfs. ....	22,266	.....	.....	66,374	6,930	.....	.....	.....	.....
Creosote .....	.....	53,150	36,689	38,150	42,997	24,879	27,071	20,214	87,440
Earthenware .....	70,839	79,291	93,081	76,825	.....	.....	.....	.....	127,625
Equipment for Vessels.	.....	.....	.....	38,544	31,075	25,660	37,071	20,109	38,075
Fibres .....	229,821	.....	242,849	106,380	.....	.....	269,146	141,063	.....
Fire Brick .....	18,652	15,007	19,864	.....	171,996	322,748	120,391	109,511	114,551
Hemp .....	.....	.....	.....	3,494	.....	.....	.....	.....	.....
Hides, Pelts & Tallow	.....	.....	.....	.....	.....	.....	.....	.....	1,267,093
Household Goods .....	.....	.....	.....	17,133	21,293	112,135	29,867	42,198	40,529
Iron and Steel.....	83,686	39,841	145,156	106,219	32,033	55,676	38,826	35,865	78,847
Lumber .....	.....	.....	.....	.....	.....	.....	.....	111,087	26,004
Malt Liquor .....	13,710	.....	.....	96,920	93,173	32,200	73,419	.....	.....
Maple Sugar .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Machinery .....	.....	.....	.....	.....	.....	.....	.....	10,979	.....
Matting .....	4,608	4,442	.....	.....	.....	.....	.....	.....	8,568
Miscellaneous .....	939,272	831,629	823,708	595,575	228,886	376,572	224,103	266,840	844,327
Nitrates .....	.....	.....	.....	.....	.....	.....	.....	.....	84,531
Oats .....	.....	.....	.....	.....	.....	.....	27,175	20,438	.....

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—	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Oil Cake .....	.....	.....	.....	.....	10,284	.....	.....	.....	19,822
Oils .....	28,383	37,147	27,469	154,938	11,249	16,008	8,541	9,034	.....
Peanut Oil .....	.....	.....	.....	.....	.....	.....	.....	.....	35,678
Peanuts .....	.....	.....	.....	.....	.....	.....	4,666	.....	.....
Provisions .....	.....	.....	.....	.....	.....	.....	.....	.....	61,027
Rice .....	104,537	106,593	101,487	65,153	61,821	72,502	72,429	6,321	15,805
Rubber .....	.....	.....	.....	.....	.....	.....	.....	.....	1,415,750
Seeds, Plants and Bulbs	91,946	33,435	60,802	98,016	124,237	160,234	63,104	31,512	875,472
Silk .....	5,900	29,379	36,793	33,400	41,500	.....	67,216	36,278	146,043
Soya Bean Oil .....	.....	.....	.....	.....	.....	.....	.....	.....	561,457
Spices .....	38,814	13,149	13,639	17,871	5,844	.....	.....	.....	.....
Spirits .....	37,094	38,295	61,112	17,960	.....	.....	.....	.....	.....
Sugar .....	.....	.....	.....	.....	.....	.....	.....	.....	42,752
Sulphur .....	146,852	111,643	125,492	183,926	62,856	84,809	.....	.....	.....
Tapioca .....	18,556	10,657	7,078	4,772	.....	.....	.....	.....	.....
Tea .....	101,002	107,225	86,338	74,813	71,459	64,426	104,194	81,438	38,219
Tin, in bars .....	71,490	91,235	48,814	3,477	10,704	4,221	6,419	36,490	53,299
Tobacco .....	.....	.....	.....	15,125	9,799	19,501	13,447	17,178	.....
Toys .....	35,887	41,386	40,738	24,221	3,260	15,526	.....	.....	19,650
Vegetables .....	.....	.....	.....	.....	.....	.....	54,949	25,002	.....
Wheat .....	.....	.....	.....	15,392	.....	.....	78,900	.....	40,200
Wood .....	.....	248,821	251,766	.....	9,727	14,344	11,285	30,387	.....
Wool and Wool Mfs. ..	.....	16,267	21,315	20,498	6,605	10,633	7,111	1,167,911	18,323
Totals .....	\$2,739,841	\$3,203,639	\$3,890,222	\$3,250,514	\$2,439,139	\$2,025,114	\$3,380,728	\$3,225,388	\$7,042,702

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

	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<b>Africa—</b>									
British East .....	\$ 391	\$ 1,015	\$ 4	\$ 39	\$	\$	\$	\$	\$
British South .....	9								
French .....	48								
Canary Islands .....		20	114						
Egypt .....		5	17						349
<b>Asia—</b>									
China .....	29,248	39,113	53,581	101,502	71,842	117,986	70,957	42,805	296,161
East Indies, Br. ....	12,055	10,561	5,655	74,148	384	1,548	1,535	126,742	289
East Indies, Dutch....	26,465	15,415	109,334	27,176	9,959	13,336		76,256	3,318
Hong Kong .....	129,863	171,416	146,318	93,885	68,799	69,429	68,257	42,278	114,165
India, British .....	504,981	875,302	1,193,096	1,250,578	1,279,910	419,695		126,113	598,368
Japan .....	551,811	544,327	595,848	571,632	392,117	454,269	440,036	169,433	834,973
Korea .....		25							
Kwantung .....									
Persia .....	321								191,308
Russia, Asiatic .....									
Straits Settlements ..	109,187	78,461	43,439	17,505	13,725	125			776,115
All other ports .....	600	2,310	6,174	451		4,249		36,490	1,463,147
Siam .....									
<b>Oceania—</b>							91		1
Australia .....	35,033	28	18,744	14,508	73,816		1,658,877	1,532,129	6,391
British Oceania .....	3,357	4,008	1,262			111,035	313,196	80,033	346,934
Hawaii .....							300		
New Zealand .....	11,746	10,648	8,014	20	4,251	14,895	3,941	143,862	88,384
Philippines .....	237,028	162,149	238,753	158,704	122,617	330,823	185,938	123,645	1,356,055

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

	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<b>Europe—</b>									
Austria Hungary .....	20,850	18,695	16,330	10,116	100	50	.....	.....	.....
Belgium .....	58,414	42,206	54,318	121,250	.....	.....	.....	.....	8,263
Denmark .....	1,307	1,372	3,971	5,249	1,142	610	125	.....	983
France .....	49,686	72,782	50,503	29,181	13,955	3,941	10,632	1,224	38,485
Germany .....	212,686	239,492	314,274	195,249	1,101	11,686	.....	177	1,162
Gibraltar .....	.....	.....	.....	.....	.....	.....	.....	.....	799
Greece .....	32,429	19,625	12,172	11,260	4,995	6,813	.....	.....	4,560
Italy .....	48,483	37,460	27,798	25,494	7,114	8,700	4,104	3,188	13,410
Malta .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Netherlands .....	22,549	77,389	52,818	18,436	.....	20,023	2,509	.....	140,424
Norway .....	23,910	21,768	21,430	32,377	10,396	1,992	1,035	799	7,303
Portugal .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russia .....	75	344	64	15	.....	.....	.....	.....	.....
Spain .....	7,327	3,865	476	1,986	1,232	1,883	.....	.....	.....
Sweden .....	27,212	14,414	13,737	14,910	46,769	181	.....	.....	164
Switzerland .....	4,970	343	1,336	60	62	14	16	.....	44
Turkey .....	1,065	15	171	.....	.....	.....	.....	.....	.....
United Kingdom .....	325,406	320,556	356,098	248,046	103,191	114,324	274,072	192,228	184,044
<b>North America—</b>									
Canada .....	131,226	179,838	222,449	128,298	111,089	301,775	341,338	474,095	518,706
Cuba .....	20,249	18,314	17,005	13,461	6,053	4,311	3,493	2,641	12,557
Guatemala .....	.....	.....	6,357	4,980	13,291	10,575	.....	.....	.....
Jamaica .....	.....	.....	.....	180	.....	.....	276	.....	.....
Mexico .....	98,710	15,479	36,763	28	.....	.....	.....	.....	.....
Nicaragua .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Panama .....	47	177	27	193	.....	.....	.....	1,250	.....
West Indies, Br. ....	.....	167	2	.....	215	800	.....	.....	.....



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

	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
South America—									
Argentina .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brazil .....	.....	198,453	255,668	79,581	65,950	46	.....	.....	.....
Chile .....	97	.....	6,059	.....	.....	.....	.....	.....	35,678
Colombia .....	1,000	.....	.....	.....	.....	.....	.....	.....	.....
Ecuador .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peru .....	.....	82	.....	6	617	.....	.....	.....	163
All other ports.....	.....	.....	43	.....	.....	.....	.....	.....	.....
Totals .....	\$2,739,841	\$3,203,639	\$3,890,222	\$3,250,514	\$2,439,139	\$2,025,114	\$3,380,728	\$3,225,388	\$7,042,702

TABLE 13.

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

Commodity—	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Autos and Cycles.. \$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....
Barley .....	1,276,841	1,956,229	974,994	1,398,242	.....	.....	.....	.....	.....
Caustic Soda .....	.....	.....	.....	.....	.....	.....	.....	.....	227,964
Coap .....	.....	.....	.....	.....	.....	.....	.....	.....	85,388
Copper .....	.....	.....	.....	.....	55,470	.....	.....	642,053	.....
Cordage .....	.....	.....	.....	.....	.....	.....	.....	8,058	.....
Cotton .....	1,000	208,843	.....	.....	.....	.....	.....	.....	6,855,507
Explosives .....	.....	.....	11,086	.....	.....	.....	.....	.....	.....
Fuel, Gas and Oil .....	.....	.....	.....	.....	.....	.....	.....	.....	12,219
Fish .....	.....	4,535	9,391	64,647	60,257	36,105	.....	.....	.....
Flour .....	3,073,993	2,214,485	2,728,595	1,898,832	1,199,136	3,600	6,751,045	23,088,049	16,931,906
Fruits .....	.....	5,885	.....	18,905	.....	.....	.....	.....	.....
Hides .....	.....	31,766	176,347	8,679	.....	.....	.....	.....	.....
Hops .....	.....	.....	.....	42,207	.....	.....	.....	.....	217,768
Iron and Steel Mfs. ....	.....	.....	.....	.....	63,617	163,025	102,150	1,156,280	2,999,506
Lard .....	.....	8,615	55,392	.....	.....	.....	.....	.....	.....
Lumber .....	930,848	1,663,835	3,086,656	1,482,742	634,473	830,808	1,835,117	1,550,953	5,304,302
Machinery .....	.....	.....	13,604	.....	.....	.....	.....	.....	891,539
Miscellaneous .....	22,703	51,956	34,028	47,500	28,592	5,519	80,129	92,898	1,036,909
Milk, Condensed .....	2,030	.....	.....	7,225	.....	.....	39,270	.....	287,598
Oats .....	.....	94,277	3,825	751,446	39,000	.....	.....	.....	.....
Oatmeal .....	.....	.....	.....	.....	.....	.....	253,193	.....	.....
Paper .....	.....	.....	15,348	14,483	148,000	131,928	.....	121,928	488,066
Railroad Ties .....	.....	.....	.....	.....	.....	.....	64,869	.....	614,146
Salmon, Canned .....	.....	.....	.....	.....	.....	.....	.....	.....	97,392
Tablefood Preps. ....	.....	.....	.....	.....	.....	.....	121,679	85,417	.....
Tallow .....	50,360	59,014	34,298	4,296	.....	.....	.....	171,312	.....

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

Commodity—	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Tin Plate .....	.....	.....	.....	.....	.....	.....	.....	.....	391,874
Tobacco .....	.....	.....	.....	.....	.....	.....	.....	261,710	.....
Wheat .....	5,895,993	6,965,232	5,672,938	15,030,500	7,027,704	3,019,710	957,993	3,237,930	6,298,579
Wood Mfs. ....	.....	.....	8,763	21,649	.....	.....	.....	.....	.....
Wood Pulp .....	.....	.....	.....	38,161	.....	.....	.....	.....	.....
Total .....	\$9,976,927	\$12,585,284	\$13,806,500	\$20,406,266	\$10,654,491	\$4,190,695	\$10,205,445	\$30,518,519	\$42,812,891

TABLE 14.

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

	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<b>Africa—</b>									
Br. East .....	500 \$	16,957	65,540	1,656,644	276,160	6,579	\$ 45,911	\$ 27,630	\$ .....
Br. South .....	50,829						59,787		175,967
Portuguese .....	13,197								833,460
Egypt .....									
<b>Asia—</b>									
China .....	609,925	565,290	1,033,433	445,097	336,594	140,768	301,144	978,783	3,306,796
China, Jap. ....	35,501	15,952	347,650						304,049
E. Indies, Dutch..			216	3,000					785
British East Indies									6
Hong Kong .....	1,790,798	1,329,300	1,469,818	537,679		87		357,717	780,229
India, British .....	27,624	124,996	135,417	255,387	8,200	218,572			140,684
Japan .....	947,490	2,147,498	2,159,741	108,043	1,500		176,150	25,000	11,933,714
Korea .....			70						910
Russia, Asia. ....		1,838	661						
Straits Settlements	273		1,047	2,206					1,041
Siam .....			100						509
<b>Europe—</b>									
Belgium .....		239,093	182,209	191,070					
Denmark .....			2,880						
France .....	48,477	11,719	8,412	297,584	216,460		6,068,371	26,035,785	13,232,658
Germany .....		14,029	10,706	1,266					
Italy .....					205,195			450,000	
Netherlands .....		8,055	1,642	190,361					58,675
Norway .....									46
United Kingdom ..	5,783,962	7,123,784	6,293,783	14,113,878	6,425,528	3,034,791	1,891,690	782,568	8,176,302
Spain .....									851,372
Sweden .....		1,567							272,158
Turkey in Europe..		3,149							

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

	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<b>North America—</b>									
Canada.....	.....	.....	26,098	40,384	312	151,296	.....	334,759	367,420
Costa Rica.....	.....	.....	.....	.....	.....	.....	1,339	.....	564
Guatemala.....	.....	.....	.....	.....	.....	.....	11,428	.....	.....
Mexico.....	111,015	5,683	8,287	17,941	33,984	3,600	.....	19,243	11,900
Panama.....	17,125	.....	267,804	119,911	626,440	30,169	691,500	183,924	315,782
Honduras.....	.....	300	.....	.....	.....	.....	.....	.....	.....
Nicaragua.....	.....	.....	1,037	.....	.....	.....	.....	.....	12,067
Salvador.....	.....	.....	.....	.....	.....	.....	8,424	.....	8,668
<b>South America—</b>									
Argentina.....	.....	.....	37,820	.....	.....	.....	.....	14,751	25,000
Bolivia.....	.....	.....	.....	.....	.....	.....	36,968	.....	34,922
Chile.....	34,804	127,846	403,825	244,113	890,007	114,190	391,426	62,219	305,195
Cuba.....	.....	.....	.....	.....	.....	.....	.....	.....	92,555
Ecuador.....	.....	.....	940	.....	.....	.....	.....	.....	.....
Peru.....	.....	41,232	167,237	539,390	195,749	19,396	228,541	199,927	165,634
<b>Oceania—</b>									
Australia.....	340,232	499,099	853,936	1,475,647	1,438,362	464,524	352,553	237,025	666,441
French Oceania.....	.....	5,306	29,259	.....	.....	.....	.....	17,298	.....
New Zealand.....	5,841	58,231	43,021	37,337	.....	6,723	.....	.....	9,798
Philippine Islands.....	159,334	244,360	253,911	129,528	.....	.....	.....	732,103	727,174
	\$9,976,927	\$12,585,284	\$13,806,500	\$20,406,266	\$10,654,491	\$4,190,695	\$10,205,445	\$30,518,519	\$42,812,891

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 TRADE—		
	No.	Entered	Cleared	No.	Entered	Cleared	No.	Entered	Cleared
1908.....	166	405,218	179	420,028	...	...	557	536,614	537
1909.....	89	236,339	97	243,915	...	...	704	661,705	686
1910.....	100	275,390	103	279,553	...	...	823	878,304	774
1911.....	112	301,236	114	301,675	...	...	834	916,908	803
1912.....	139	370,466	132	347,800	...	...	856	973,108	839
1913.....	163	445,703	170	452,296	...	...	989	1,177,495	947
1914.....	143	385,135	163	406,001	...	...	944	1,123,281	912
1915.....	101	228,610	138	293,462	...	...	826	1,032,536	776
1916.....	41	85,356	48	91,654	...	...	630	691,832	639
1917.....	21	32,782	61	107,114	...	...	539	720,214	515
1918.....	14	11,309	93	173,330	...	20	420	550,136	445
1919.....	14	15,916	140	346,641	...	51	453	592,684	434
1920.....	82	282,010	193	589,188	19	65,970	594	1,107,430	481

\*Entries prior to 1918 included in Pacific Trade.