

Development of Ports in Oregon During Past Year Extensive

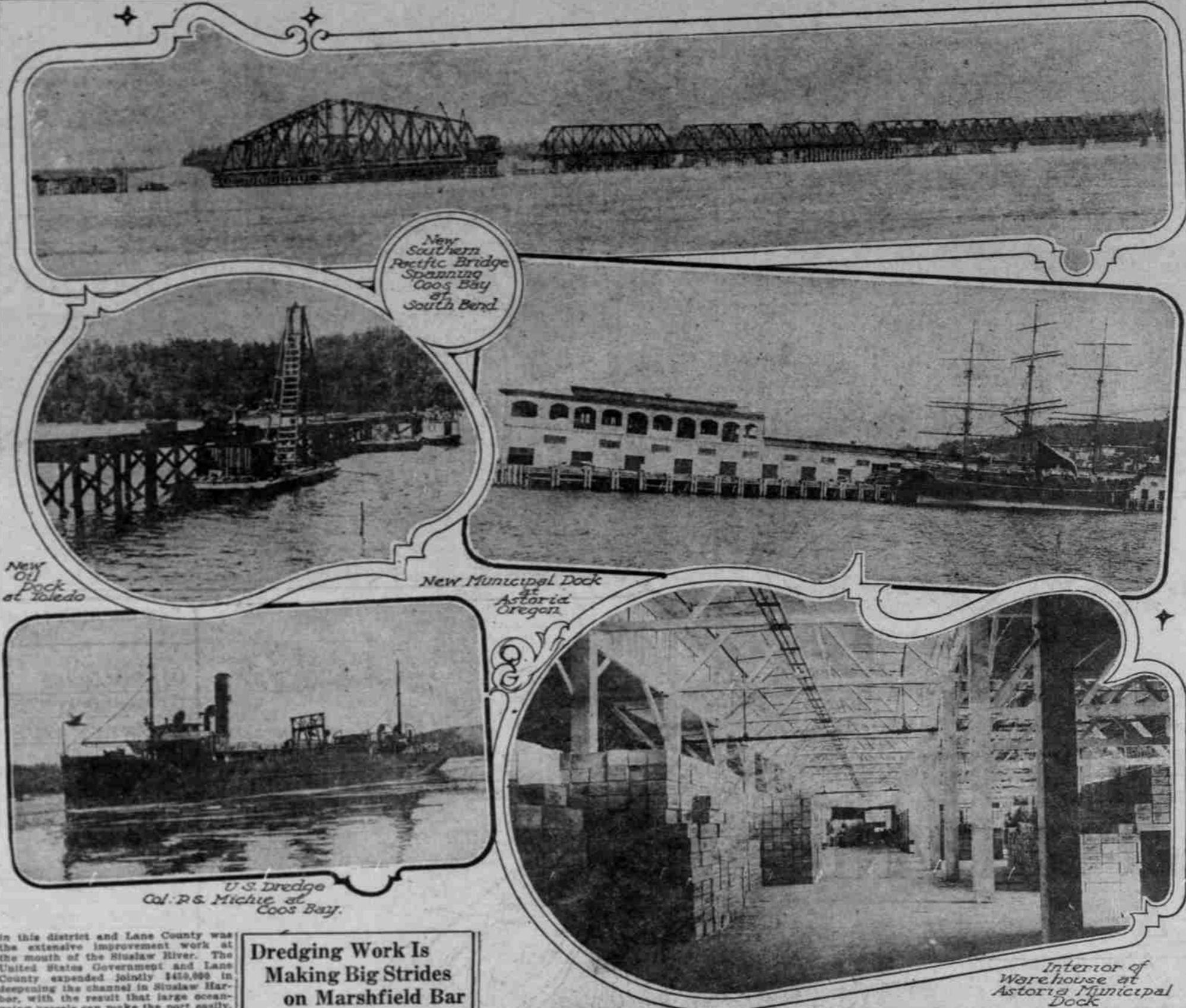
Fireproof Docks at Astoria Cost Nearly \$750,000

Sixty Acres Owned by Port, Part of Which Has Been Improved. Plans Made to Provide Best Shipping Facilities.

ASTORIA, Dec. 31.—(Special.)—The Port of Astoria has recently completed and now has in operation the first unit of what is considered the most modern equipped public dock on the Pacific Coast, as well as one of the finest publicly owned structures of the kind in the entire country. It is located at what is known as Smith's Point, in the western section of this city and is owned by the Port of Astoria, which embraces the entire country. The people authorized the issuing of bonds to defray the expense of the project, and \$750,000 already has been expended in the purchase of frontage and the erection of docks to provide facilities for handling the great ocean commerce of the Columbia River.

The main warehouse stands on Pier No. 1, which is 1200 feet in length. The enclosure covers four acres of space, sufficient to store thousands of tons of freight. The building is constructed of block masonry, with firewalls, and is equipped with an automatic sprinkling system. The structure is as fireproof as it is strong. The insurance rate on freight stored there is but 41 cents, the lowest rate fixed for any dock on the Pacific Coast.

The dock is 1200 feet long, and extends the entire length of the main warehouse on either side, with berthing spaces for 200 vessels. It has a depth of 1620 feet. Railroad tracks extend the entire length of the main warehouse on either side, with berthing spaces for 200 vessels. It has a depth of 1620 feet. Railroad tracks extend the entire length of the main warehouse on either side, with berthing spaces for 200 vessels. It has a depth of 1620 feet.



In this district and Lane County was the extensive improvement work at the mouth of the Hualalai River. The United States Government and Lane County expended jointly \$450,000 in deepening the channel in Siuslaw Harbor, with the result that large ocean-going vessels can make the port easily.

Dredging Work Is Making Big Strides on Marshfield Bar

With Operations of Dredge Col. P. S. Michie, Depth of Water on Bar Increased From 15 to 30 Feet in Six Months.

MARSHFIELD, Or., Dec. 31.—(Special.)—In the past year the principal improvement on Coos Bay was done by the Government dredge Col. P. S. Michie, which, after a tryout in 1914, developed the fact that the craft had not been sufficiently equipped with power. Under the conditions of 1914 the work of the Michie was not satisfactory to the engineering board and she was ordered away to the North for additional power. On returning to Coos Bay last Spring the vessel was placed in charge of Junior Engineer James Polhemus, with Charles L. Potter, the Government bar dredge expert directing and advising how the work should be conducted. When the dredge left there was 30 feet of water on the bar, whereas, when the dredge started work in May, there was between 15 and 19 feet.

September, only a few days being lost, due to rough weather or fog. The dredge was operated from daylight to dark on the bar, making two eight-hour shifts in the long days of Summer. The average crew on double shift is 28 men. Since the middle of May, 1915, when the Michie started work, up to the date of her leaving for the Columbia River, 500,000 cubic yards of sand have been removed from the bar.

When the dredge first started work there was only 18 feet of water on the bar at mean lower low water, and when the last survey was made September 24, 1915, it showed a channel 600 feet wide with a ruling depth of 25 feet at mean lower low water and a narrow channel 300 feet wide and 30 feet deep at mean lower low water.

than any other dredge in the United States. Mariners and others expected the dredge to cut 100 feet in depth in west winds and seas accompanying them, but no noticeable shoaling occurred. It took the dredge Michie on an average of 45 minutes to fill the bins (1200 cubic yards), and the dredged material was taken one mile to sea and dumped into deep water. Three loads were dredged every four hours, the biggest day's work being 14,192 yards, and the biggest month's clean-up being 322,621 yards, in August.

The dredge is operated by the United States War Department, engineers' office, First District, at Portland, Charles L. Potter, Lieutenant-Colonel, Corps of Engineers being in charge. James H. Polhemus, United States Junior Engineer, was in local charge of the dredge during 1915. Mr. Polhemus personally directed the dredging that showed such extensive excavation the past year. The dredge has been used on the Columbia River during the rest of the year, due to rough conditions of the bar. The Michie was able to work successfully on the bar, contrary to the opinions of many of the navigators, and has set a record for like work, probably better than the businesses of all others in the community.

Channel at Toledo Deepened. Through the co-operation of the Port of Toledo and the Government, the channel between Yaquina Bay and Toledo has been deepened to accommodate the safe passage of seagoing vessels.

Tillamook Work Progresses. TILLAMOOK, Or., Dec. 31.—(Special.)—It was through the united efforts of the Port Commissions of Tillamook and Bay City that the Government undertook the task of constructing a two-mile jetty at the mouth of the bay. This work was commenced under the supervision of the War Department in the Spring of 1915 and partition in the Spring of 1916 and will continue for at least another year. An expenditure of \$550,000 was authorized by Congress to complete the project, part of the cost, however, being raised by the two ports of the bay.

Portland's Advantages as Factory Center Are Great

Wealth of Raw Material, Ideal Climatic Conditions and Adequate Shipping Facilities Are Factors—Present Industrial Development Totals \$50,000,000.

Portland ranks among the leaders of the Pacific Northwest in industrial development. It has over 300 industries in various lines. Its payroll is skilled workers of its factories and shops is upward to \$10,000,000 a year. The industrial investment in Portland in buildings, equipment and material is about \$10,000,000.

These facts, both here and abroad, in order to bring about the full realization of these aims, the consumers of the Pacific Northwest are being educated of what the economy of quality. The publications of Portland and of Oregon are co-operating with the Chamber of Commerce in the bureau to educate the consumer to realize the economy of adopting and practicing this policy.

The success of these institutions in attracting the establishment of industries. The Portland Chamber of Commerce believes that this is not only the logical, but the only inducement to offer to proposed industries. This assures a maximum of efficiency and knowledge of the business, not possible if each business were offered. The Portland Realty Board, not affiliated with the Chamber of Commerce, through some of its individual members for the purpose of developing various factory site communities, is offering free sites to legitimate industries. Industrial incentives are being planned for the purpose of caring for the smaller industries not needing a building of their own.

Community Needs Stimulated. Conditions influencing the commodity in question are carefully noted for the purpose of ascertaining how they affect the sale of the commodity in question. When this is determined, the consumer, as a class, in studying to see what influence can be brought to bear on the individual members of that class in order to change or stimulate the commodity needs in the commodity in question.

Shipping With Atlantic Seaboard Makes Big Gain

Portland's Share in Intercoastal Commerce Reached Total of \$10,764,907 in 1915—Volume of Outgoing Traffic Larger—More Vessels Available.

Portland's share in the trade between the Pacific and Atlantic coasts of the United States was valued at \$10,764,907 last year. That is in excess of what the valuation of the entire exportation of wheat from the Pacific coast to the Atlantic coast, of some of the other commodities of the Pacific coast, and that is more valuable than early estimates provided for.

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Business originating here, which the Eastern centers must take cognizance of, some of which moved in limited quantity before when only rail transportation was depended on and now has increased through lower tariffs and ability to handle in larger lots, is exchangeable with commodities from beyond the Mississippi River, and until the blockading of the canal that territory was contributing to the cargoes delivered here.

Table titled 'DOMESTIC SHIPMENTS FROM PORTLAND BY WATER' showing Merchants' Exchange Records for 1915 and 1914. Columns include year, commodity, and value. Commodities listed include barley, coal, flour, fruit, grain, hardware, hides, iron, liquors, machinery, millfeed, oats, potatoes, rice, shingles, wheat, and wool.

Other Projects on Oregon Coast Are Showing Progress

Siuslaw Harbor Improved—South Jetty of Nehalem River Completed—Channel at Toledo Deepened—Tillamook Bay Work Big.

Michie after she had been tried out here in 1914. The Port of Coos Bay bonded itself for \$600,000, and with the proceeds began on its project of dredging a channel 500 feet wide and 25 feet deep at low water from the C. A. Smith mill to the bar. This project also included turning basins 500 feet wide in front of the cities of Marshfield and North Bend. A contract for the dredging was entered into with the Puget Sound Dredging & Dredging Company, of Seattle. The contract price for removing the sludges was 12 cents a cubic yard.

Inlets Also Dredged. In addition to the work on the main channel the Port did a great deal of dredging in North Inlet, Kentuck Inlet, Haynes Inlet, Wilanch Inlet, Catching Inlet and some in Isthmus Inlet. The total cost of dredging of the inlets amounts to about \$20,000. The Port also established a proposed harbor line marked it with special numbered piling, and now is beginning to mark the course of the navigable channel of all the inlets.

Channel at Toledo Deepened. Through the co-operation of the Port of Toledo and the Government, the channel between Yaquina Bay and Toledo has been deepened to accommodate the safe passage of seagoing vessels. The Port of Toledo expended \$50,000 and the Government \$28,000 on the improvement of the channel. The improvement of the channel is having a marked effect on the lumber industry in this district, as there is no longer any serious barrier to water shipments of lumber to the port. Three steamers are now carrying lumber regularly from this port to California.

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