

Great Ports Of The Nation—Seattle

Commerce of the Northwest city has jumped tremendously in ten years, caused the construction of piers half a mile long and is giving magnificent returns to the people for their investment

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WHEN a city's population jumps from 80,000 to 343,000 in 20 years, recording a gain of 263,000, there are sound economic reasons back of it. In 1902 there were 80,000 people in Seattle, and the 1922 directory estimate of the metropolitan area is 343,000. Mere geographical advantage, coupled with wealth of natural resources, could not have brought about this gain if there had not been the progressive western spirit. So it is that Seattle, always with its eyes on its future as a world port, has inaugurated an experiment in port development the control of which may be destined to have a far-reaching and significant effect upon the future organization of seaports of this nation.

To understand why Seattle has invested millions of public money in docks and terminals one should realize the natural advantages which are Seattle's. Seattle is the metropolis, commercial, transportation and shipping center of the Pacific Northwest, which in 1921 produced 119,000,000 bushels of wheat; 48,000,000 bushels of oats; 9,838,000 bushels of corn; 11,377,000 bushels of barley; 2,542,000 bushels of rye; 8,800,000 tons of hay; 35,635,000 bushels of apples; 2,988,000 bushels of pears; 1,775,000 bushels of peaches.

The total value of agricultural, horticultural, dairy products, wool, poultry and live stock sales in the territory in which Seattle is the predominant city in 1921 amounted to \$550,000,000. To this must be added the tremendous revenue which comes from the minerals, timber and fisheries. The Pacific Northwest is produc-

ing in excess of a billion dollars worth of new wealth every year. Then add the commerce of Alaska



Harold Crary

amounting to more than \$100,000,000 annually.

Seattle is the supply point which can reach the 200,000 farmers in the Pacific Northwest. It enjoys terminal rail rates, made to meet the water rate on the intercoastal service. The farming

and mining sections ship to Puget Sound, where rail meets sail.

Seattle is the nearest American port to the 475,000,000 people in China, Japan and the Philippines, growing markets for United States trade.

In 1920 there were 52 more foreign sailings to the Far East through the straits of Juan de Fuca than from the Columbia River ports, San Francisco, Los Angeles, and San Diego combined. These lines, like the American, want the short route to the Orient. So do shippers. Seattle is 96 miles nearer to New York than any California port.

Four times as much Chinese and Japanese exports to the United States came through the Straits of Juan de Fuca in 1920 than through all other Pacific Coast gateways combined.

The fact that Seattle is the only major port in the United States in which no dredging has to be done for ship channels is an asset of prime importance. Outside of Seattle, the principal ports, San Francisco, New York, New Orleans, Gulf ports, Baltimore, Philadelphia, Boston have required in the past and will require in the future an expenditure of millions to provide ship channels.

The ample depth of water in Puget Sound, the minimum being 156 feet, makes it possible for ships, no matter how large, to come to this port and find a berthage without even the aid of a pilot or a tow.

But this unique advantage, unless coupled up with modern facilities, would have availed Seattle nothing, and as a pioneer it created in 1911, through legislative act, a corporation known as the Port Commission. The law conferred broad and comprehen-



Largest commercial dock in the world—more than half mile long, one city block wide, with five miles of railroad trackage

sive powers on this new form of municipality. To date this specialized form of municipal corporation owns terminal properties valued at approximately \$16,000,000.

These include piers and cargo sheds, concrete warehouses for general storage, cold storage plants, a million bushel grain elevator located on tidewater, a terminal icing plant, large reservoirs and bulking equipment for Oriental oils, marine ways, mooring basins and special accommodations for taking care of the great fishing fleet which goes yearly to the waters of Alaska and Puget Sound.

These public terminals handle approximately one-third of the waterborne commerce of Seattle harbor; and during the past three years have handled in excess of 60 per cent of the transpacific freights. When one considers that in 1918, under stress of war tonnage, the Washington Customs District, with Seattle the leading port in that district, handling 80 per cent of the transpacific freight, was second district in the United States, one com-

prehends the vast volume of business that has been handled over these public terminals in the recent years.

The great gain of directly operating these publicly owned terminals as a business concern in Seattle lies in the fact that the terminals are open to all commerce, at all times, upon equal terms. In other words, the publicly operated terminal is a free highway, over which commerce may pass, into which any railroad can bring its freight, or any steamship line its cargo.

While in other ports steamship companies are required to pay rental for piers, or a certain amount to get preferential assignments, or a certain amount for berthage, a ship can sail into the harbor of Seattle from any place in the world, can secure a berth at one of these publicly operated docks, without any cost whatsoever for berthing.

When one compares this situation with the Port of New York, where steamship lines are paying now as high as \$300,000 per year for a narrow and inefficient terminal, one grasps the sig-

nificance of the Port of Seattle, with its publicly owned and publicly operated terminals free to the shipping world.

Another factor which makes the Port of Seattle terminal one of the most efficient and economical in the United States, both for the rail and water carrier, is the large size of the ocean piers. Of the seven existing piers of the Port of Seattle, all of them are larger than the average ocean terminal found in other ports. Two of these terminals, Smith Cove Pier A and Smith Cove Pier B, are the largest commercial terminals of pier construction to be found in any port in the world. These two piers are each approximately a half mile in length; one is 310 feet wide, and the other is 365 feet wide. Each of the piers has approximately four miles of railroad trackage, thus enabling some 300 cars to be stored on the pier at one time. These two piers will accommodate at one time twenty ocean freighters of the 8,800-ton type built by the Shipping Board.



Seattle—showing some of the sixty-eight piers and part of the retail section

Smith Cove Pier A has handled seven such ocean freighters at one time, loading and discharging cargo without any noticeable congestion.

Along the whole length of these piers on either side two parallel tracks have been laid. Cargo can be loaded directly from car to vessel. No trucking is required on the docks and the freight is handled almost entirely by mechanical equipment. During the past four years quite a large percentage of the cargo has been thus handled directly at an average cost running around 20 cents a ton. The Seattle Port Commission claims it is a trail-blazer in the matter of reducing the high cost of terminal operations.

rape seed and maize from the *Mandasan Maru* at 39 cents per ton. Six 55-ton boilers were loaded from car to ship's hold at an average of a boiler every 13 minutes.

The Port Commission, in laying out its terminals, did not consider the ocean pier the complete terminal unit but regarded such a terminal unit as complete only when the ocean pier was supported by a terminal warehouse. Thus, the Port Commission has constructed not only warehouses for general miscellaneous cargo but has also built a bulk grain elevator, two large cold storage plants, and storage plants for vegetable oils with a capacity of approximately two and a half million gallons.

warehouses, particularly the plant at Spokane Street Terminal, where the latest facilities have been provided for freezing, handling and storing the fish products of Alaska, have been an inestimable boon to the independent fishermen. Sharp freezing rooms that can be lowered to a temperature of 30 degrees below zero have been installed for freezing the largest fish and the storage rooms are capable of handling over 4,000,000 pounds of fish at one time.

In the large seven-story cold storage building at this terminal which has a capacity of 20,000 tons or approximately 600 railroad cars of freight requiring refrigeration, will be found apples



Great traveling crane used on the Seattle piers—lifts 65 tons, carries 30 tons
Courtesy of Manning, Maxwell and Moore

On the dock it has a 325-horsepower gantry traveling crane, one 125-ton steel derrick, several 35-ton locomotive cranes, a 12-ton stiff-leg derrick, and also a large amount of movable equipment such as tractors, and trailers, portable incline conveyors, electric stack elevators, gravity roll conveyors, and other equipment.

Since unloading records are 5,768 barrels of oil from steamer *City of Spokane* at a cost of nine cents per barrel; 3,000 tons of bean cake and sugar from the same vessel, handled by tractors, trailers and loading platforms at 20 cents per ton; 1,000 tons beans,

In addition to the ownership of the six terminal units the Port of Seattle owns a considerable upland acreage, which has been leased to encourage industrial development.

The Port of Seattle is the pioneer of all Harbor Boards in the establishment of public cold storage terminal plants and these warehouses and facilities are the largest and finest in the West.

Ranking a close second to the great lumber industry of the Northwest, the fish industry has made Seattle the leading port in the United States in the volume and value of fish products of all kinds. The specialized cold storage

and pears from the interior, barreled berries from the surrounding valleys, reindeer meat from Alaska, and beef, eggs, butter and cheese for the local markets.

The Port of Seattle also has its own ice manufacturing plant—50 tons being the output per day—although this capacity can be increased to 100 tons per day with the addition of a small amount of equipment. A large sized storage house, capable of holding 5,000 tons of ice gives an opportunity for the manufacture of ice during the winter months. This ice is used for icing railroad cars and supplying boats with

crushed ice as well, large quantities of which are used by the fishermen's fleet.

At the Bell Street Terminal cold storage plant of 10,000 tons capacity, situated on the central waterfront, dairy products and vegetables are stored for local consumption. Also this plant is given over largely to the storage of mild cured salmon and salt her- ring.

The aim of the terminals there, both public and private, to allow quick loading and unloading of ships so that as little time as possible will be spent in port, thereby bringing about a great reduction in the cost of operating a carrier, has been of distinct advantage to this city.

Seattle has an advantage over any California port in mileage to the Far East, the advantage to Vladivostok being 296 miles, to Yokohama 273 miles.

to Hong Kong 302 miles, to Batavia 280 miles, to Manila 476 miles and to Alaska 800 miles. This saving in distance, added to the lack of congestion at terminals here, and with the most modern mechanical equipment, means a big saving to the ship operator.

The profits of the public terminals, instead of being distributed as dividends to stockholders, have been reinvested in additional properties which in their turn are increasing the earning. Taxpayers have received, in addition to the shape of added properties, returns to the extent of 100 per cent on their investment from business operation alone.

Seattle has 190 miles of waterfront. The combined areas of the wharves, public and private, is 101 acres. The spur track capacity of these wharves is 2,100 cars, and there is a berthing capacity of all piers here for 110 400-foot ships. The storage capacity of the wharves and adjacent warehouses is 700,000 tons of merchandise, 5,000 cars of steel and machinery, 35,000 tons for cold storage, 5,000,000 bushels of grain, 12,000 tons of coal, 1,500,000 gallons of fuel oil, and 26,000,000 gallons of vegetable oil.

The number of tons of cargo which can be loaded under normal conditions

on vessels at Seattle per 24 hours is as follows:

General Merchandise.....	\$75,000
Steel and Heavy Machinery.	68,000
Lumber (B. M. feet).....	8,000,000
Grain:	
(a) Bulk	10,000
(b) Sacked	48,000



Publicly owned terminal with capacity for 20,000 tons of perishable products in refrigerated space

Oil:	
(a) Fuel Oil (barrels)..	10,000
(b) Vegetable Oil	7,000
Coal	30,000

Seattle has another advantage in that it has a great fresh-water or inner harbor and it is the only port in the United States having both fresh and salt water harbors. In 1917 Seattle and the Government, as a joint enterprise, dug a canal and built locks, capable of accommodating a vessel 780 feet long, connecting Puget Sound with the fresh waters of Lakes Union and Washington, which form the boundaries of the city limits. Here ships can load without adjustment of tides and crafts can also rid themselves of sea-growths by going into the inner harbor. The War Department now has before it a recommendation that it widen the canal to 300 feet, deepen it to a depth of 37 feet at low tide, and build another an dlarger lock to facilitate the movement of the largest cargo carriers.

Activities of the public terminals, in building terminals attractive to ship operators, have been reflected in the enterprise shown by owners of private terminals, many of which are excellently suited for needs of individual lines. One of the largest private terminals in Harbor Island, where warehouses

are built in separate units and where the cargo sheds, warehouses, oil bulk- ing plants and storage yards all have the latest mechanical appliances. This terminal was built with a war-time rush, work starting February 1, 1918.

Goods are often moved by tractor trains direct from shipside to the num- bered section of the warehouse desig- nated for term- storage without even touching the dock or transit shed floor. There is also a battery of steel storage tanks for bulk oil and similar commodi- ties. Thirty such tanks, with a ca- pacity of ten thou- sand gallons each, are surrounded by a concrete wall. In another section are wooden jack- eted tanks for fish oil, an Oriental nut warehouse and special facili- ties for handling Oriental cargo.

Seattle for years has been known to ship owners as the cheapest port be- cause there is no compulsory towage or pilotage and with the facilities for ex- peditious hauling of cargo there is a quick turnaround of the ship. Also, a vessel is sure of a return cargo be- cause of the heavy offerings of lumber, wheat and flour. In May of this year the port became also the cheapest for the shipper for an arrangement was en- tered into whereby the railroads and steamship companies absorb the han- dling and terminal charges on through cargo, thus relieving the shipper of these expenses formerly assessed against his tonnage. Also, cargo which formerly had to move out within ten days to get the preferential rail import rate, can now remain here one year and still get the rate when it is shipped. This has stimulated the reconditioning, partial manufacturing and distribution of imports, especially from the Orient, much of this business being taken away from Minnesota transfer and from some of the eastern distributing centers.

Along with the public development of terminals here has gone the exten- sion of privately owned terminals, and Seattle to-day has 68 docks, public and private, with an area of 142 acres, cap- able of accommodating 120 400-foot ships and the docks have rail facilities for 3,000 cars. The privately owned

docks are modern and compete with the big publicly owned and operated terminals.

Recognition of Seattle as the port where the American merchant marine must meet the foreign competition on the Pacific is found in the allocation by the Shipping Board of five eight-million-dollar combination passenger and freight ships for the run from Seattle to China, Japan and the Philippines. Freight is being transported on these boats from Seattle to Yokohama in ten days, which is faster than freight and commodities are moved from New York to Minneapolis. Recently a shipment of silk was landed in New York 14 days after it left Yokohama, transshipment being made through Seattle.

Puget Sound is the gateway where the British, American and Japanese lines are fighting for supremacy on the Pacific, and the Shipping Board has recognized that if it is to compete with foreign lines it must move cargo on the shortest, most expeditious route.

Seattle is a striking example of what a community can do when it believes in itself and takes advantage of its natural resources and location. Not many years ago, Seattle was a mill town on the tide flats and hillside. People from outside said: "You cannot build a city here. You are cut off from the world by the Cascades." Seattle Spirit answered: "Then we will build a railroad over and through them." Today electric engines haul great trains over these majestic mountains which water the famous irrigated sections.

Seattleites were told they had no building site; that they couldn't build a city on a mountain. So they said: "Be thou cast into the seas," and it was done. They washed away great hills and with the surplus dirt built up tide flats and factory sites.

What has made possible Seattle being the metropolis of the Pacific Northwest to-day, and a city looking forward to a million population, is a spirit born in the early days when the men of the little community set out with their own hands to build the railroad that would not come otherwise; a spirit that in the days of '93 gave Seattle the distinction of being one of the few American cities to escape a bank failure; that sent to the Johnstown sufferers a relief fund when Seattle was in the ashes; that financed the Alaska-Yukon-Pacific Exposition in forty-eight hours, and opened it complete, on time.

There are many middle-aged people in Seattle to-day who remember the community as a frontier trading post of a few thousand persons thirty-five years ago. Then it had no railroad, one crude dock, no outside commerce, and was cut off from the East by the

Cascades Mountains. It was in 1897 that a steamer, the *Portland*, arrived from Alaska with the first word of the Klondike gold strike. Seattle changed to a bustling metropolitan city with its name on the lips of people in all parts of the world. A more picturesque argosy never sailed the seas than the armada which bare the gold seekers and supplies to the Northland.

The history of Seattle's development is fraught with the romance of empire development. It is interwoven with the progress of the great West. It is part of the Alaskan gold rush and the civilizing of the vast empire of the North. Seattle's progress is a chapter of the modernization and awakening of the Sampsons of the East—Japan and China, oldest and richest of Far Eastern empires and of the new country that stretches across Northern Asia and Siberia.

In 1902 there were 80,000 people in Seattle, in 1910 there were 207,000, and in 1920 the population had jumped to 315,652, and to-day it is 343,000. In 1900 Seattle's bank deposits were \$17,000,000 and in 1920 they were \$154,530,000. The assessed valuation in 1900, based on a 50 per cent value was \$40,000,000 and in 1920 was \$245,832,000. In 1900 less than 700,000 tons of cargo passed over Seattle piers, and in 1920 this had increased to 5,227,000 tons. There was an increase of nearly 1,000 per cent in the commerce moving through the Puget Sound gateway in ten years and in 1918 under stress of wartime cargo movement the Washington Customs District, of which Seattle is the chief port, was the second in the United States, being surpassed only by New York.

Seattle citizens, aroused because a railroad had selected a rival Sound city as its western terminal with the intention of keeping Seattle a lumber camp, showed their pluck and men and women of the community started to build a railroad of their own. Then James J. Hill saw in Seattle a world city and built the Great Northern terminals in Seattle. Then came the Northern Pacific, the Chicago, Milwaukee & St. Paul, and then E. H. Harriman, although he had his railroads in three other Pacific Coast gateways, extended the Union Pacific System to Seattle. Seattle is also Pacific coast terminus of the Burlington System.

Thus, Seattle has five American trans-continental railroad lines and physical connections with two Canadian trans-Pacific systems, more transportation than serves any other Pacific port. The Japanese and British promptly recognized the advantages

of Seattle as a port. Trans-continental railroads terminating in Seattle have a combined acreage of railroad yards of 2,621 acres, with 450 miles of track. Spur track capacity of the wharves, both ship side and land side, is 2,000 cars. To accommodate its ever-increasing foreign coastwise trade Seattle has sixty piers, and seven terminals are municipally owned and operated.

Location has established Seattle as the American port through which passes the larger part of the exchange of commodities between the United States and the consumers and producers of Alaska and of the Orient. The gold, copper and fish of Alaska, and the rubber, oil, silk, hides, tea and other raw materials of the Orient come to Seattle, and the ships that bring them carry back lumber, wheat iron and steel, machinery, clothing, and the hundreds of other manufactured articles that the people of the countries of the Pacific require.

Seattle is also the ocean-gate through which the lumber, wheat, fruit, copper, lead and other raw products of the Northwestern part of the United States make their way to tidewater and thence by ships to the Atlantic, to Europe, and to world markets.

LEGAL BACKGROUND OF THE STRIKE INJUNCTIONS

(Continued from page 16.)

case." For my part, letters and conversations that I have received and had with several lawyers in different parts of the United States, who have really studied these questions, prove to me that the views of many eminent lawyers in the United States are in accord with the views which I have expressed herein and at utter variance with the admittedly hasty views, on this important question, which Mr. Untermyer has so glibly expressed. As yet I have found no lawyer, except Mr. Untermyer, who stood "simply aghast" at the terms of that injunction order.

If you are seeking a fine
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for a New York
Office,
See announcement
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