PORTLAND IN LEAD AS MANUFACTURING CITY

Position as Industrial Center of Pacific Northwest Is Undisputed. Output Gaining Each Year in Volume and Value.

PORTLAND has long been the recognized manufacturing center of the Pacific Northwest. No other city in this territory approaches Portland in the value of its manufactured output, the number of its manufactories or the number of men employed in these plants. The city's industrial payroll ranks second only to San Francisco on the Pacific Coast and it is growing rapidly each year.

Many conditions combine to make Portland the manufacturing headquarters of the Pacific Northwest. In the first place its transportation facilities are unrivaled. No other city has a water grade by which commodities can be shipped to and from the interior. The great Columbia River, navigable for hundreds of miles, is an invaluable asset. But besides affording passage for ships, the valley cut by the river gives practically a level grade through the mountains. The Hill and Harriman railroads, down opposite banks of the Columbia, give Portland a decided advantage over other Coast cities which must do their shipping with the East and with the interior over steep grades.

Portland's possession of the only fresh water harbor on the Pacific Coast is another big advantage. Its central location on the American coast line makes it convenient for all coastwise business, while vessels from its harbor run regularly to the markets of the Orient.

Another thing in Portland's favor is its vast extent of waterfront. Not only do its factories line the Willamette River for several miles, but additional plants have been opened up on tributary waterways. The great peninsula district on the north border of the city is one of the finest manufacturing sites in America, with both rail and deep water transportation immediately at hand. That capital fully appreciates this fact is indicated by the gigantic enterprises that have grown up on the Peninsula within the past few years.

The immense waterpower tributary to Portland is another factor of great importance. Power is transmitted now from the falls of the Willamette at Oregon City and from the Clackamas River at Cazadero. The development of power on the Cazadero is now being greatly extended. Another large power project is being carried out by the Mount Hood Railway & Power Company. Throughout the state, too, available waterpower is almost unlimited.

As a manufacturing center Portland is also helped by the great stores of raw materials at its very doors. First among these is its timber. The vastness of Oregon's forest wealth almost passes belief. Its lumber mills lead all lines of manufacturing and its lumber goes to every market on the Pacific. The finer grades of lumber are numerous. They have already built up a big furniture manufacturing business, which is certain to increase in proportions. Conditions in Oregon are ideal for dairying, and Portland has a large output of cheese and butter; the ranges and farms of Oregon, Washington and Idaho furnish the cattle, sheep and hogs for Portland's packing plants; building stone, various ores, clay for tile and brick, and many other commodities used in manufacturing are plentiful, while grain is one of the leading products.

The growth of manufacturing in Portland has been very rapid. Not only have advantageous conditions attracted capital here, but several agencies have been actively advertising these advantages. Among them is the Manufacturers' Association, which has brought a number of important plants to Portland and is still busy attracting capital here for investment. A new agency in the same field is the industrial bureau of the Portland Commercial Club.

It is difficult to determine just what is the extent of manufacturing in Portland at present. Estimates that have been made vary considerably. The following table has been prepared by R. W. Raymond, of the Commercial Club, but does not include plants established during 1910:

Total number of manufacturing plants, 681; capital invested, $26,578,351; officials and clerks, 1514; salaries paid these men, $2,096,757; wage earners, 13,419; wages paid, $9,982,291; value of materials used, $23,741,930; miscellaneous expenses, $2,605,244; value of output, $40,331,247.

These figures are far under those prepared by others who are also in close touch with local manufacturing. The disparity is doubtless caused principally by the fact that Mr. Raymond includes in his table only manufactories within the city limits, whereas a large portion of the manufacturing district and some of the largest plants are outside the city. From his table, for instance, have been omitted all the industries on the Peninsula. These include the great Swift packing plant, the Monarch lumber mill and other large plants. In fact, the Peninsula is Portland's largest single manufacturing district, and its industries are just as properly included in the city's total as if they were inside the boundaries.

What the manufacturing statistics would show if the plants on the outskirts of the city, as well as those within its limits, were included, it is impossible to say. The Manufacturers' Association several months ago gave out the following figures: total number of manufactories, 2000; capital invested, $65,000,000; annual output, $35,000,000.

Mr. Raymond, discussing the five-year period from 1905 to 1910, said recently:

"The factory increase for the entire United States, outside industrial New York, in the last five-year Government period was one factory to each 100,000 population. On this basis Portland should have added two new factories. She actually gained 244, a net gain of 56 per cent in five years. The gain from 1900 to 1905 was only 7 per cent. Factories are distributed among a smaller number of lines than in 1905, showing more intelligent concentration on lines most profitable.

"Raw materials increased from $17,000,000 in 1905 to $23,741,930 in 1910. Increase in number of men employed and wages paid is most significant. In the five-year period there was an addition of more than 5000 men to the pay-rolls, a gain of 64 per cent. Pay envelopes of 1905 contained $5,250,000; those of 1910 contained approximately $10,000,000, a gain of 80 per cent.

"Lumber and timber employ 2000 hands and pay $1,500,000 in wages. The car repair shops employ 1200 hands and pay nearly $1,000,000 in wages. Planing mills employ 1000 hands and pay $700,000 in wages. Foundries and machine shops employ 950 men and pay $800,000.

"In value of product, lumber and timber rank first, with $6,133,204; flour and grist mills second, with $3,727,315."

While Portland is the center, all parts of Oregon have their manufacturing enterprises. Oregon City, with the falls of the Willamette at its door, has some of the largest manufacturing plants in the West, including great paper factories and woolen mills. There are large woolen mills in several Oregon cities, as well as numerous flour mills, fruit canneries, milk condensers, cheese factories and similar enterprises. Oregon as a manufacturing state is gaining rapidly and its future is beyond estimation.

MORE THAN 100 MILES OF STREETS IMPROVED

Year's Record Shows That Portland's Hard-Surface Area Is Being Extended With Great Rapidity—Many Sewers Laid.

THE amount of municipal improvement work performed in Portland in 1910 under the direction of the City Engineer's office far surpassed the best record previously made. More hard-surface pavement was laid, greater lengths of sidewalk were built and a greater mileage of sewers constructed than in any other single year in the city's history.

The records of the City Engineer's office show that 105.74 miles of street were improved, as follows: Asphalt, 27.360; stone blocks, 1.625; bitulithic, 23.196; Hassam, 10.727; macadam, 4.190; gravel, 2.898; earth graded, 35.199; concrete, 1.049.

The following is a summary of street improvements, expressed in miles, finished up to January 1, 1911:

Asphalt, 46.120; stone blocks, 6.606; wood blocks, 1.606; bitulithic, 54.031; Hassam, 14.278; macadam, 62.773; gravel, 32.979; plank roadway, 5.042; elevated roadway, 2.927; vitrified brick, .656; graded streets (earth grade), 150.604; bituminous macadam, .152; concrete, .049, a total of 428.552 miles.

In addition there is .370 miles of steel bridge and .195, mile of reinforced concrete bridge.

The following roadway improvement work was commenced during 1910, but has not yet been completed and accepted, hence is not included in the figures given above: Asphalt, 7.980; bitulithic, 1.514; Hassam, 2.463; stone blocks, .495; concrete, .031, a total of 12.503 miles.

There was laid during the year a total of 172.539 miles of sidewalk of which 6.759 miles was wood and the balance of cement. Of this 1730 pieces, all cement, a total of 126,870 lineal feet, were laid by private individuals in accordance with instructions of the City Engineer. The total amount of cement walk in place in the city on January 1, 1911, was 513.177 miles.

The total cost of roadway improvement work performed during 1910 was $4,091,261.76.

There was expended in the laying of sewers during 1910 the sum of $965,-715.06. The mileage of sewers constructed was 298.245, made up as follows: Twenty-four-inch circular brick and stone, 467 feet; 66-inch concrete, 2.318 feet; 42-inch concrete, 2566 feet; 60-inch concrete, 897 feet; 57-inch concrete, 1017 feet; 54-inch concrete, 2490 feet; 51-inch concrete, 757 feet; 45-inch concrete, 5211 feet; 36-inch concrete, 2361 feet; 33-inch concrete, 2748 feet; 32-inch concrete, 3040 feet; 30-inch concrete, 6353 feet; vitrified pipe ranging in diameter from six inches to 24 inches, 544,457 feet; 25½ inches by 36 inches egg-shaped concrete, 556 feet; 26 inches by 24 inches egg-shaped concrete, 4280 feet.

The total mileage of sewers in place January 1, 1911, was 298.245.

During 1910 there were issued from the office of the City Engineer 4574 permits to open streets for the laying of gas, sewer and water mains and 144 permits for private grading.

All street improvement work, such as sewers, sidewalks and pavements, is a direct charge against the properties benefited. All such work is performed under the direction of the City Engineer by contractors who are awarded the work by the Executive Board, a body that acts in the capacity of an advisory committee to the Mayor. Special improvements are paid for by short-term bonds carrying 6 per cent interest. These are guaranteed by the city which collects from property holders in annual installments.