

duced 40,000 cedar shingles per day in 1883, which will be greatly increased the present year by the enlarged capacity of the mill.

A sawmill recently erected on Lake Union, where much building is being done, and several others in various parts of the city, will make the lumber product of the present year far exceed that of 1883. The fact that the immense product of these mills is used mainly in the construction of buildings in the city, shows to what a great extent building operations have been, and are, carried on there.

There are other wood-working industries, some of them quite extensive, which contribute to the prosperity of the city. The manufacture of furniture from the various kinds of hard and soft wood growing about Puget Sound is an industry rapidly assuming large proportions. The Washington Furniture Company employed fifteen men in 1883 in the manufacture of furniture of all descriptions. An enlargement of the capacity of the factory will increase its product the present year. Messrs. Newell & Preston have a mill cutting 10,000 feet of hardwood lumber daily, and a large chair factory, whose product reaches the home and San Francisco markets. The Hall & Paulson Furniture Company has a mill cutting hardwood for a large factory which is engaged in the manufacture of furniture of all descriptions. The pay roll of the company carries about seventy-five men and amounts to some \$4,000 per month.

Another branch of this industry is the barrel factory of the Mattulath Manufacturing Company, which covers about five acres of ground, all of it enclosed and nearly all roofed over. During 1883 the company's pay roll averaged 125 names and \$8,500 wages. There were produced 2,500 sugar barrels and 500 beef or fish barrels daily. The bulk of this product was shipped to San Francisco, though about 10,000 barrels per month were used at the lime kilns on San Juan and adjacent islands. The company had on hand at the beginning of the present year 10,000,000 feet of logs, chiefly cottonwood, of which the majority of barrels are made.

Machine shops and iron works have become quite an extensive industry in Seattle. There are several establishments which employ a large number of men, and produce many thousands of dollars worth of machinery and other forms of manufactured iron. The Washington Iron Works employed fifty men in 1883, and melted 1,000 tons of iron. The machine shops attached to the foundry turned out three mill engines, eight steamboat engines and one logging locomotive, besides doing a great quantity of general and miscellaneous work. The Puget Iron Works gave employment to twenty-six men in their foundry and machine shops in 1883, and turned out eight large engines, several logging cars, a sawmill, sixty hop stoves, fifteen hop furnaces and a large amount of custom work. The Industrial Iron Works employ five men and make a specialty of engines. The Railroad Machine Shops have ten men on the pay roll, and give their attention chiefly to repairing for the railroad and steamboats.

The establishments enumerated by no means represent all the industries of the city. There are a large number

of smaller factories of various kinds, whose total product is considerable, and which, in the aggregate, give employment to a great number of men. There is scarcely a branch of manufacturing which is at all adapted to the conditions and resources of the Puget Sound region which will not find Seattle a superior location. This is what has drawn so many to the city, has so largely increased their number and product within the past two years, and will in the future induce other and more considerable ones to establish themselves. The business men have always conducted themselves in a liberal and public-spirited manner. Instead of holding out inducements to capital for the purpose of making all they can out of the new-comer, they recognize the fact that the welfare of the city requires them to aid and encourage new enterprises to make a successful beginning and become firmly established. This is one of the secrets of the continued prosperity of Seattle, regardless of the condition of surrounding cities.

There is an industry which is at present unrepresented, but which, when a railroad across the Cascades is constructed, will surely become an important one, and that is the manufacture of flour. With an abundance of coal mined in proximity to the city, and the harbor full of vessels of the grain fleet, great milling interests must inevitably spring up. The shipments of grain and flour at this point must assume great proportions.

Shipbuilding is an industry for which Seattle is peculiarly adapted. Its frontage of deep water, unruffled by tempests, its abundance of all the materials of wood, iron and coal, the unrivaled spars and masts which the adjacent forests will supply, all combine to render this unexcelled for the advantages it offers to shipbuilders. There has never been an extensive shipyard on the Sound, though at Seattle quite a number of vessels, chiefly schooners and steamboats for local traffic and the lumber trade, have been constructed. The following table gives the status of this industry on Puget Sound during the past four years, the greater number being built at Seattle:

Year.	Steamers.	Sailing Vessels.	Tons.	Value.
1880.....	8	7	2,164.86	\$230,800
1881.....	7	12	3,592.08	382,900
1882.....	4	7	3,886.52	280,000
1883.....	18	12	3,946.00	417,000

Two beautiful fresh water lakes, lying north and west, towards which the city is rapidly spreading, are destined to play an important part in the shipbuilding industry. A bill is before Congress granting the right of way for a canal to connect these two lakes with the Sound. This canal will undoubtedly be constructed, and will be followed by the location of an immense shipyard and dry dock on Lake Washington. There is not in the world a place possessing greater advantages for a naval yard, not one so easily defended, and before many years this fact will be so thoroughly impressed upon Congress that a shipyard will be located there. Without waiting for this, however, private enterprise will make of this the greatest shipbuilding point on the Pacific Coast.

The mind naturally gravitates from the question of the construction of vessels to the use of them, and here,