

good grade of pig-iron, until, in 1891, it was closed down. In 1901 Pennsylvania capital was interested in it. The Pacific Coast Company was organized to acquire and operate it. The plant was modernized, and about \$100,000 was expended on it, and in December, 1901, the manufacture of pig-iron was resumed. Ores from Texada Island, and from Hamilton, Skagit County, Washington, were used, mixed in the proportion of 700 tons of Texada ore to 50 tons of Hamilton ore. The Texada ore was arranged in large heaps, and roasted to get rid of the sulphur, and also to render it porous, to facilitate reduction. The principal flux was limestone, and the chief fuel was charcoal, with a little coke from Cokedale, in Skagit County. Castings were made three times a day. The pig-iron was sold to the various foundries around Puget Sound, Oregon and British Columbia."

As the attempt did not meet with success, the plant was soon shut down. This fact has not had a deterring effect; on the contrary, new efforts have, during the past year, been made to re-open the works, and the possibility of this American iron industry resuming has stimulated prospecting for iron ore on the coast of British Columbia.

On account of the great percentage of ash in the coke—say 15 per cent.—the amount of coke required to melt a ton of pig-iron may be estimated at $1\frac{1}{4}$ tons. With coke at \$6 per ton the cost of fuel would therefore, amount to about \$7.50 per ton of pig iron.

To be on the safe side, let us estimate the iron content of the magnetites at say, 55 per cent. It will then take about 1.8 tons of ore to make one ton of pig iron. Assuming the cost of roasted magnetite at the furnace at \$2.50 per ton, including in this figure 50 cents as royalty to the mine owner, then the cost of ore per ton of pig iron will be \$4.50. The cost of lime per ton of pig-iron may be estimated at 50 cents. The cost of labor is higher in British Columbia than in other Provinces of the Dominion. Assuming a furnace capacity of 150 tons per 24 hours, and a production of two tons of pig-iron per man employed, at \$3.50 per day, the cost of labor will be \$1.75 per ton pig-iron. The following is the approximate cost, based on the above figures:

Ore (magnetite 55 per cent. iron) 1.8 tons at \$2.50 per ton.	\$ 4.50
Coke 1.25 tons at \$6 per ton	7.50
Lime	0.50
Labor at \$3.50 per day	1.75