

shops from the old Le Roi plant; the re-building of one of the copper furnaces and increasing its length to thirty-five feet; preparation for installation of a new lead furnace, and for re-building the lead furnaces; preparations for the installment of a new blower and of cranes for handling material in the blast furnace building; re-building of the Heberlein plant to reduce costs of operation and to take care of increased tonnage of lead ores; including the installation of a crane for handling the Heberlein pots, and of a 24 x 36 jaw crusher and grab bucket for handling sinter, and the purchase of additional Heberlein pots; the purchase of additional electric locomotives; of two Wedge roasters to take care of increased tonnage of lead ores; the installation of a gas-producer for the Dwight and Lloyd roasters, to replace firing with gasoline."

*Gold-Silver-Copper Ores of British Columbia.*—Three copper smelters were active in British Columbia during 1913. These were the Trail copper furnace of the Consolidated Mining and Smelting Company, treating the ores of the Rossland camp and other ores of the district; the Grand Forks plant of the Granby Consolidated Mining, Smelting and Power Co., and the Greenwood plant of the British Columbia Copper Company, treating chiefly the low grade ores of the Boundary district.

On the Coast the Tyee Copper Company's furnace at Ladysmith was idle throughout the year. Construction was continued by the Granby Company on their new furnace at Pyrox, Observatory inlet, Portland canal, which was completed and blown in on March 16, 1914.

The aggregate production of British Columbia copper smelters during the past five years including the foreign ores treated, was as follows:

|  | 1910.      | 1911.      | 1912.      | 1913.      |
|--|------------|------------|------------|------------|
| Ore smelted..... Tons.                 | 1,987,752  | 1,517,981  | 2,212,316  | 2,119,754  |
| Smelter products—                      |            |            |            |            |
| Matte..... "                           | 11,519     | 11,320     | 6,727      | 5,159      |
| Blister..... "                         | 13,918     | 10,710     | 17,069     | 15,270     |
| Metallic content of matte and blister— |            |            |            |            |
| Gold..... Ozs.                         | 197,181    | 175,189    | 184,815    | 213,279    |
| Silver..... "                          | 636,140    | 585,896    | 686,171    | 934,601    |
| Copper..... Lbs.                       | 36,890,283 | 29,855,868 | 36,174,185 | 33,370,176 |

*Trail Smelter.*—Statistics of the production of the Trail smelter, including both the copper and lead furnaces, have been published in the annual reports of the Company, the figures since 1896 having been as follows:—