

sequence of the acquisition of the Birkenhead Iron Works, lately the property of Messrs. Laird & Co., ship builders and engineers. Last year also the works at Coventry and Birmingham of the Mulliner-Wigley Co., Ltd., were purchased. In these works gun mountings, etc., are produced, and the manufacture of field artillery and naval guns is contemplated. The new firm of "Cammell, Laird & Co., Ltd.," is now one of the largest and strongest in the world, controlling as it does, in addition to these lately acquired, the Cyclops Steel & Iron Works, Sheffield; Derwent Iron & Steel Works, Workington; Yorkshire Steel & Iron Works, Peniston; Grimesthorpe Ordnance Steel Tyre & Spring Works; Old and New Oaks Collieries, near Barnsley.

"We Pull for Leschens" is what you read on the large leather collars of the horses attached to the waggons of A. Leschen & Sons Rope Co., in St. Louis, New York, Chicago and Denver. These are the waggons in which they deliver their reels and coils of Hercules and Patent Flattened Strand and all other kinds of Wire Rope.

A. Leschen & Sons Rope Co. also manufacture and erect Aerial Wire Rope Tramways of every description; likewise underground and surface wire rope haulage plants. Their engineers in charge of the different departments have had years' experience and are thoroughly competent.

920 to 932 North First St., St. Louis, Mo., is the home address of A. Leschen & Sons Rope Co.

#### MINING RETURNS AND STATISTICS.

Returns of British Columbia's mineral and coal production during 1903 are now available, or at least sufficiently so to enable a fair idea of progress to be gathered therefrom. From the figures, it is reasonably clear that both in respect to tonnage and values an advance has been made, considerable as touching to the former, and satisfactory enough in the latter case. This increase, is however, almost entirely attributable to the development of the copper-gold mines on the Coast and in the Boundary and Rossland districts, while excellent showing made by the Crow's Nest Pass Coal Company, in East Kootenay, compensates for the decrease in output from the Vancouver Island collieries occasioned by the prolonged labour troubles in the spring of the year. On the other hand, a large falling off is noticeable in silver and lead production and the placer gold yield is also less than that of last year. In 1903, zinc ore was mined and marketed successfully for the first time on anything like a considerable scale.

##### VANCOUVER ISLAND.

Coal production was divided among the three collieries as follows: Western Fuel Co., 289,136 tons, of which 178,960 tons were exported and 110,176 tons sold in local markets; Wellington, 271,305 tons; Comox, 309,708 tons. In 1902, the Vancouver Island mines produced 1,173,293 tons of coal. Mineral output returns are not yet fully available, but it is computed that an increase has been made in the year of between 50 and 75 per cent., a consular report estimating the value of the copper mined at half a million dollars.

##### ATLIN, CASSIAR AND Omineca.

From returns made by the banks and express companies, the value of the gold recovered during the past season is given as between \$100,000 and \$430,000, to which \$50,000 may well be added to include gold taken out by individual miners of which no record was made. In Cassiar but one company was operative, its clean-up realizing about \$25,000. Placer gold production from Omineca was most insignificant, and will probably not exceed the valuation of \$10,000.

##### CARIBOO.

The yield will be in the neighbourhood of \$375,000 as against \$500,000 in 1902.

##### FORT STEELE DISTRICT.

Official returns from the Mining Recorder's office show that 169 claims are held in this district under crown grants or certificates of improvements, 103 claims were recorded in 1903, 87 transfers of mineral claims were made and 400 free miners' certificates were issued.

##### REVELSTOCK.

Probably placer gold to the value of \$5,000 was taken out during the season.

##### LARDEAU.

Shipments of ore from the Lardeau show an advance in 1903, but not commensurate with the considerable mine development and improvement instituted during this period, of which the effect has not yet become manifest. The value of the product, chiefly represented in lead and silver shipments, is placed at \$250,000.

##### SLOCAN, NELSON AND YMIR.

The tonnage of galena shipped was in round figures, 14,000 tons, and 2,000 tons of zinc, of a roughly approximate value of \$1,000,000.

Ore receipts at the Hall Mines' smelter, Nelson, for the eleven months to November 30th, 1903, were as follows: From Nelson and Kootenay Lake, 3,418 tons; Rossland, 180 tons; Slocan, 4,720 tons; Boundary 93 tons; East Kootenay, 894 tons; Ymir, 2,619 tons; Lardeau, 173 tons, and Republic (Washington), 5,399 tons; total, 17,406 tons. Of these ores 2,155 tons were dry, and 9,251 tons were lead ores. The metal contents were 762,494 ozs. silver, 7,572 ozs. gold, 2,925 lbs. copper, and 8,629,432 lbs. lead. The foregoing tonnage and metal contents do not include Silver King or Emma (Boundary) ores. Probable total receipts for December from all sources excepting the two mines just mentioned were 1,820 tons.

The company shipped to the Selby Smelting and Lead Co., San Francisco, 3,433 tons lead bullion, containing 655,270 ozs. silver, 6,324 ozs. gold, and 6,697,940 lbs. lead, total value \$574,327; and to the Granby Consolidated Mining, Smelting and Power Co., Grand Forks, 383 tons copper matte, containing 119,804 ozs. silver, 144 ozs. gold, and 372,003 lbs. copper, total value \$102,054. Probable shipments of bullion during December, 400 tons. The company purchased 4,600 tons Silver King ore, containing 119,525 ozs. silver and 347,333 lbs. copper, and the lessee of the mine, Mr. Davys, estimates that the tonnage for December will be 300 tons. Receipts of ore from the Emma mine totalled 182,621 tons. Lead ores shipped to United States smelters by the Company during the year amounted to 2,946 tons.

##### ROSSLAND.

Rossland is credited with a tonnage output of from 350,000 to 377,000 tons—a considerable advance over the 1902 production of 330,000 tons. The ore receipts at the Canadian Smelting Works, Trail, during 11 months ended November 30 last were 157,736 tons, as follows: From Rossland, 135,516 tons; Boundary, 6,000; Slocan, 5,178; Lardeau, 2,047; Republic (Washington), 4,638 tons; Windemere, 806 tons; East Kootenay, 366 tons, and miscellaneous, 770 tons. The approximate tonnage from Rossland for December was placed at 12,000 tons, and from all other parts, possibly 1,000 tons. This would give a total of 170,736 tons as the year's receipts. The total tonnage smelted in 1903 was about 175,000 tons, producing 8,500,000 lbs. lead, 2,900,000 lbs. copper, 82,500 ozs. gold, and 1,850,000 ozs. silver.

During the year the daily capacity of the lead refinery was increased from six and a half tons to twenty tons, and a plant was erected for handling the slimes. The refinery turned out some 150,000 ozs. silver of the fineness of 999, several thousand ounces of mint gold, and a quantity of copper sulphide. The antimony will be recovered later and will be used in making babbit metal.

The copper matte from these works was refined at Tacoma, and the lead bullion, other than that refined at Trail, was shipped to San Francisco, California. The lead produced was sold chiefly in Eastern Canada, China and Japan. The silver refined was sold for coinage for the Philippines. The gold went to the United States Government assay office, Seattle, Washington. It is stated that the gold and silver shipped, as above stated, were the first shipments ever made of these precious metals, the product of smelting and refining in Canada.