

BRITISH COLUMBIA MINING OPERATIONS, 1898.

The development of mining operations in British Columbia has a very different record to that of other mineral regions. There has been no such rush to the gold fields of that Province, as there was to California and Australia fifty years ago. It was eight years after the California gold mines were opened when gold was first found on the Fraser river, but none of it was mined for two years after it was discovered, in 1856. The operations were pursued with considerable energy, but the conditions were not attractive to such swarms of gold seekers as went out by scores of thousands to Australia in 1852, and succeeding years. In the first two years of gold mining in Australia there was produced four times the quantity estimated, before those years, as the annual production of the whole world's gold mines. At the same time the California mines were yielding enormously. In 1852 Australia added \$44,000,000, to the gold production, and California \$60,000,000, the highest it has ever reached. In 1858, the total production in Australia and California has risen to 109 millions of dollars, which was six times the average annual production of all known gold mines for the first half of this century. We need not then wonder at the comparative indifference shown to the mineral resources of British Columbia when first announced, as the richer fields just opened were drawing into them the great bulk of those adventurous spirits to whom prospecting and mining are so attractive. The mining engineers who went to examine the conditions in British Columbia soon discovered that, though the precious metals were abundant over a vast territory, they could not be extensively developed without an expenditure of considerable capital. There was gold available for comparatively little labour as the following return shows:

YIELD OF PLACER GOLD IN BRITISH COLUMBIA.

Year.	\$	Year.	\$
1858.....	705,000	1874 to 1883....	5,098,000
1859 to 1863....	13,080,000	1884 to 1888....	3,663,900
1864 to 1868....	15,742,900	1889 to 1893....	2,264,800
1869 to 1873....	7,828,100	1894 to 1898....	2,588,700
1874 to 1878....	8,988,600		

The total production of placer gold, or gold secured by washing, from 1858 to 1898 in British Columbia, was \$59,960,800. For the first ten years the annual average was, \$2,822,000, for second ten years the average fell off to \$1,680,000, and there was a continuous yearly decline until in 1893, the production was only \$356,131. Since then the product has increased, that of 1898 being \$643,346. There is a very large stock of gold which can only be got out by extensive operations requiring expensive machinery. There has been a plant in operation only a few months for extracting gold from low grade gold-bearing quartz veins, which, but for this process of treatment, would have no value. The production of gold from lode mines has been as follows:—

Year.	Value.	Year.	Value.
1893.....	\$ 23,404	1896.....	\$1,244,180
1894.....	125,014	1897.....	2,121,820
1895.....	785,271	1898.....	2,201,217

The total production of gold from these mines since operations began in 1893, has been \$6,501,906, which sum, added to the total value of the placer gold produced, \$59,960,800, makes the total yield of gold in British Columbia to have been \$66,462,706. Metallurgists who are familiar with the new processes for recovering gold from refractory and low-grade ores are predicting that, the application of these methods will very largely increase the output of British Columbia gold. The prospects at present, however, are that silver will take the lead of gold in the Pacific Province. The days of doubt, distrust, indifference, in regard to the vast mineral wealth stored in the mountains of the Kootenay region have passed away. A few years ago, an agent of the Government found it difficult in this city to secure any attention to his proposal to spend money in prospecting for, and operating mines. To-day, there is universal interest felt in such enterprises, and millions of money are invested in mining properties, and mining machinery, from which, in a number of cases, the returns have been, and show every likelihood of long being, highly remunerative. An official return of the Government of British Columbia gives the shipments of ore last year, from the Rossland mines alone, as 116,367 tons and the gross value of the product, \$2,210,000. One company organized to operate in that district has a capital of \$5,000,000. Another has as its chairman, an ex-Governor General of Canada, while a third numbers amongst its directors the presidents of two of the largest banks in Canada. The mine they are working shipped last year 42,779 tons of ore of the net value of \$496,395. Those enterprises are by no means alone in their success, but they are selected as showing the substantial character of the mining operations being carried on in a region where a few years ago no capitalist would invest a dollar. One of the significant features of the mining region is a plant for generating electrical power and light, at Bonnington Falls, which is transmitted 32 miles over a rough and wooded country, from which a branch is sent off to the town of Trail, where a smelter is operated by electricity generated 32 miles distant. Electricians will be interested in the fact that, the current is carried from the power house to Trail and Rossland at a pressure of 20,000 volts, where it is transformed down to a pressure suitable for mines, smelters and towns.

In 1889, the number of mineral claims granted by the Crown was 432, the average claim being about 40 acres. The production of silver, lead and copper in British Columbia, in the years since 1887, was as follows:—

Years.	Silver.	Lead.	Copper.
1887 to 1892.....	\$ 285,087	\$ 78,591	\$
1893.....	195,000	78,996
1894.....	470,219	169,875	16,334
1895.....	977,229	532,255	47,652
1896.....	2,100,689	721,384	190,926
1897.....	3,272,36	1,390,517	266,258
1898.....	2,375,841	1,077,581	874,781
Totals.....	\$9,676,901	\$4,049,199	\$1,295,811