

the general rule throughout the mining districts of the world. This is the transition from the occurrence of high grade bonanza ore bodies, capable of profit under the expensive process of smelting, to masses of lower grade requiring a treatment by milling.

"This Centre Star report goes on to say that for the company's fiscal year ending September 30, 1903, the ore sales amounted to 88,387 tons, with average assay contents of gold, 0.50 oz.; silver, 0.40 oz.; copper, 0.99 per cent., in which ore 'the net profit in excess of all expenditures was \$228,358.90.'

"The report of the War Eagle mine shows that for its fiscal year the ore sales have been 60,039 tons, the average assay contents of which were, gold, 0.418 oz.; silver, 1.02 oz.; copper, 1.45 per cent., having a smelter gross value of \$9.87 per ton. The excess of revenue over expenditure was \$68,512.21, of which \$38,171.74 was charged off to depreciation, leaving \$30,340.47 as net profit for the year.

"These figures indicate that the ore has certainly not as yet reached a limit in grade so low as to be unworkable by even the present methods, although the manager is possibly right in anticipating the transition to which he refers.

"The Coast mines are rapidly assuming an importance as a factor in the production of the Province which they never before occupied, there having been mined and treated some 103,524 tons of ore—nearly four times as much as formerly, an increase which is due almost entirely to mines in the Mt. Sicker district of Vancouver Island."

Among the statistical tables there is one showing the quantity of ore mined and shipped during 1903 in each district in the Province, the number of shipping mines, and the men employed. The totals of this table are as follows: Tons of ore shipped, 1,286,176; number of shipping mines, 125; number of mines that shipped more than 100 tons in 1903, 74; men employed in these mines, above ground 1,531, below ground 945, total, 2,476. By an unfortunate omission of the number of men employed in the mines in the Trail Creek Mining Division, viz., 635 below ground and 192 above, total 827, the last quoted figures are incorrect. It has been ascertained from the Department of Mines that the total should have been shown as 3,303.

The Provincial Mineralogist gives as well details relative to the several leading mineral productions of the Province. Briefly summarizing these the following information is obtained:

**COAL.**—There were mined in 1903, 1,450,663 tons of coal, of which total output 1,168,194 tons were sold as coal, and 282,469 tons converted into coke, producing 165,543 tons of the latter. This represents, as compared with the production of 1902, a decrease of about 16 per cent in the quantity of coal sold (and an increase of about 29.3 per cent in the amount of coke produced. Of the coal sold, 546,723 tons were exported to the United States and 2,725 tons to other countries. The Vancouver Island collieries exported (chiefly to California) 403,438 tons and the Crow's Nest Pass collieries (to Montana and Idaho, largely

for railway consumption) 146,010 tons of coal. It is noted that whilst in 1902 the Vancouver Island collieries sold in British Columbia only about 4,000 tons of coke and exported 12,000 tons, the whole of the 1903 production of 15,779 tons was consumed at local smelters, as well as 3,719 tons taken from the stock on hand at the beginning of the year. The Crow's Nest Pass collieries mined in 1903 589,888 tons of coal, of which 340,337 tons were sold as such, and 249,551 tons were sent to the coke ovens, producing 149,764 tons of coke, of which 27,758 tons were exported to the United States (to Northport (Washington) and Montana smelters) and the remainder used at the smelters of the Kootenay and Boundary districts of British Columbia. The gross output of coal at these last-mentioned collieries in 1903 showed an increase of nearly 50 per cent over that of 1902, while the increase in the production of coke was 38.8 per cent. Additional ovens have recently been built, increasing the output capacity by at least 25 per cent, so that a larger production of coke is looked for in 1904.

**GOLD.**—The placer gold production for 1903 was \$1,060,420, a decrease of about \$12,720, or 1 per cent, from the year 1902, but showing an increase over 1901 of \$90,320. The Atlin and Liard divisions of Cassiar are the only districts that in 1903 gave an increased production of placer gold. In the first-named division the increase was obtained chiefly from the working by improved methods, and on a larger scale, of an old high channel found in the benches of Pine and Spruce Creeks. The productive work in this district is still largely in the hands of individual miners or small partnerships of miners. The increase in the Liard division was due to the successful operations of the Thibert Creek Hydraulic Company. The Cariboo district as a whole, which includes the Cariboo (Barkerville) and Quesnel Mining Divisions, shows a drop in production of about \$65,000. In the Cariboo division the production was slightly diminished as compared with 1902, yet it showed a decided increase over that of other recent years. The output here was due almost entirely to small hydraulic concerns held by individuals or partnerships. The large companies, of which there are several, have not as yet arrived at a productive stage. In the Quesnel division individual miners did well, but the hydraulic mining companies had a poor season, owing to the shortage of water caused by the light snowfall during the winter of 1902-3. In the section drained by the Lower Fraser River, where at low water placer gold mining is carried on the bars and flats, heavy rains in summer and fall kept the streams full, so that there was little or no "low water," and consequently a decreased production of gold. Dredging for gold was continued, but although not with commercial success the dredging companies have confidence that they will yet be able to raise and save the gold they believe to be in the river beds. The production of gold from lode mines was \$4,812,616, a decrease of 1½ per cent as compared with that of 1902. There was a serious falling off in the gold production of the Rossland and