

the most economical means of development for all properties in the main fissure zone.

"Some indication of the wide scope of the company's proposed operations may be gathered from the list of mining properties, situated along the main fissure zone above referred to, which will be affected by the construction of the tunnel. They are as follows, reading from south to north: Ben Bolt, Jumbo, Chicago No. 1, Chicago No. 2, the Portland Canal property (a group of about 16 claims), O. K. fraction (two claims), Portland Wonder, Glacier Creek (six claims), Stewart Mining and Development Company (ten claims). In addition to these company claims there are a number of individual claims, practically all on both sides of Glacier Creek.

"It will be seen that the Portland Canal Tunnels, Limited, will serve a very extensive mineralized area, in which are situated a large proportion of the most prominent mining properties in the camp, the construction of the tunnel placing them in direct connection with railway shipping facilities to tidewater."

Information quoted from a report by Mr. Elmendorf makes it appear that conditions are favourable to success in developing much ore. He mentions that 15,000 tons of ore has been taken out of the small stopes of the Portland Canal Mining Company's property, which would have shown more profit had this tunnel been available.

Consolidated Mining and Smelting Co.'s Exhibit.

The Consolidated Mining and Smelting Company, of Canada, Limited, made an exhibit at the Trail exhibition, concerning which the Rossland Miner said:

"It was a complete exhibit. In it was shown raw ore from every mine owned by the company; then the forms which the ore passed through in the process of extraction by the fire process; crushed silver-lead and gold-copper ores; also briquettes, matte, and bullion. In miniature the method of refining the bullion was displayed in the shape of anodes and cathodes from the refinery; then there was the refined gold, silver and lead, also copper and bluestone (sulphate of copper). There was a gold brick—not the kind sold to 'come-ons' in New York, but of almost pure gold, valued at \$14,000—and a bar of silver weighing 1,264 oz. The pig lead was of the finest quality, containing only a fraction of one per cent. in impurities. And there was lead pipe, ranging in size from half an inch to four inches in diameter, of any weight required.

"Large photographs of the Trail smeltery, the Centre Star and War Eagle mines at Rossland, the Snowshoe mine at Phoenix, and the St. Eugene mine at Moyie, also formed part of the exhibit, which was in the charge of Richard Truswell, foreman of the company's refinery at Trail, and John F. Miller, superintendent of the refinery."

Consolidated M. and S. Co.'s Operations.

Following the foregoing notice of the Consolidated Mining and Smelting Company's exhibit of its products, the time is opportune to give some information concerning the company's operations during its last fiscal year, which ended June 30, 1912. It may be, though, that the figures that follow will not agree in full detail with those that will shortly be available when the company's printed report shall have been issued, for these were obtained before the report was prepared.

Le Roi.—During the latter part of the fiscal year about 4,000 tons of ore was shipped monthly from this mine; its aggregate output for the year was 39,345

tons. A number of small bodies of high-grade ore were worked. Not much work was done on the lower levels, the chief operations having been on several levels down to the 600-foot. Only one stope each on levels 8 and 9 was worked. The lower levels will have attention later; meanwhile prospecting is done as operations are carried along. It is satisfactory to note that there has been a gradual improvement in the general average grade in the ore mined.

Concentration Experiments.—A small plant has been put in on Le Roi ground for the purpose of making concentration experiments with some of the more silicious ore from this mine. Encouraging laboratory results have been obtained, so one unit of the Elmore Vacuum Process plant has been put in, together with some plant from the ore testing works at the St. Eugene mine. The capacity of the experimental plant is about 40 tons a day.

War Eagle.—On the thirteenth level of this mine, at a depth of about 2,000 feet from the surface, two shoots of ore have been worked, these giving ore containing comparatively high value in gold. Their joint length is about 450 feet, and they occur on the present lowest level of this mine. A cross-cut is being driven from the Centre Star twelfth level to open the War Eagle at 150 feet deeper than its thirteenth level. This cross-cut will be about 1,000 feet long; when the mine was visited two months ago, the cross-cut had been driven about 250 feet. As progress had been at the rate of 170 to 180 feet a month, it is probable this drive is now in more than 600 feet.

Other Rossland Properties.—During the year the company took over the Virginia and Iron Horse properties, which lie north of its Idaho and Enterprise mines, and east of the Iron Mask.

St. Eugene, East Kootenay.—Production has fallen off very seriously at this mine. For six months ended December 31, 1911, only 13,374 tons of ore was mined and milled, and from this there was produced 1,957 tons of lead-silver concentrates averaging 56 per cent. lead and 26.5 oz. silver per ton. This compares proportionately with 47,705 tons mined in the year ended June 30, 1911, from which was obtained 7,708 tons of concentrate containing an average of 59.4 per cent. lead and 26.5 oz. silver per ton. Figures of production, if any, during the first half of the current calendar year were not obtained. At the time above mentioned as that at which information was applied for, some 20 to 25 men had been put on to do further prospecting in the St. Eugene mine, after operations had been suspended for a while.

The ore-testing plant at the St. Eugene concentrating works was not much used during the fiscal year under notice.

Sullivan.—Additions to plant, equipment, buildings, etc., were completed, these including ore-crushing and sorting plants, and a compressor driven by water power. Besides maintaining shipments of lead ore, there was also sent to Trail 898 tons of iron sulphide.

Molly Gibson.—A cross-cut tunnel was driven about 800 feet to allow of ore being mined to a greater depth of 250 feet. The concentrating plant was put in order for the purpose of concentrating the lower grade ore. Both crude ore and concentrate are the shipping products from this mine, which is situated north of the west arm of Kootenay Lake and about 20 miles from Nelson.

Richmond Eureka.—Production was small at this Slocan mine during the last fiscal year, only 1,628 tons