

having been reported and at several properties stamp mills have been erected and machinery installed.

The year at Rossland has been relatively uneventful though in several directions progress has been satisfactory. Thus during this year the Rossland Power Company's large concentrating mill for the treatment of the lower grade ores of the War Eagle and Centre Star mines was completed, as was also an Elmore plant at the White Bear, and a mill at the Velvet-Portland. Promising new ore discoveries are also reported to have been made at depth in the case of two of the more important mines. An unusually dry summer, causing a shortage of water, interfered considerably with milling operations, but though these, as yet, have failed to yield results equal to anticipations, there is full warrant for the belief that initial difficulties will in due course be overcome and that the very considerable tonnage of low-grade ore, already developed in the district but at present unmarketable, will, by economical concentration treatment, be thus turned to commercial account. Production from the district shows an immaterial decrease compared with the 1903 returns.

Progress in the Boundary district has been most marked, whereof the considerable tonnage increase is but partly indicative. During the year the big copper mines at Phoenix and near Greenwood have been worked on the same extensive scale, while new ore bodies have been developed and important additions have been made to mine and smelter equipments. In this connection it is to be noted in passing that Americans have now secured controlling interests in the most considerable mining undertakings in the district. During the summer a consolidation of several copper mines in Phoenix and Deadwood camps was effected, but the concern is unfortunately heavily handicapped from the start by an excessive capitalization upon which it will be difficult to make adequate return. The feature of the year, however, has been the successful exploitation of the rich gold-silver claims in the camps surrounding Greenwood, the ores from which yield values averaging very nearly a hundred dollars to the ton. The profitable operation of the Providence is no doubt responsible for the attention that has been lately paid to developments in this direction. Recent development work on half a dozen or more new mines of this class has proved exceptionally encouraging, in every instance promising results having been obtained.

Industrial developments in East Kootenay have been exceptionally gratifying. In the spring the St. Eugene resumed operations, as a result of the encouragement afforded by the Government bounty, and a special concession by which permission was granted for the exportation of the product. Since operations commenced, valuable new discoveries of ore are reported to have been developed and a production of approximately 15,000 tons, valued at from \$30 to \$36 per ton, has been made. Shipping operations were also continued from the North Star, notwithstanding that the ore bodies were supposed to have become ex-

hausted; while the necessary capital having been provided the work, which is now nearing completion, was resumed of erecting a lead smelter for the Sullivan mine, at Marysville. The general improvement of conditions at and increase of coal and coke output from the Crow's Nest collieries and the opening of, by the withdrawal of the Government reserve on the coal and oil lands of the Falthed Valley are also not the least important features of the year's developments in this section of the province.

Dividends during 1904 were paid by eight public companies, the Crow's Nest Pass Coal Co. having distributed \$172,524; the Tyee Copper Company, \$133,000, the St. Eugene, \$64,000; Le Roi No. 2, \$57,000, and the Slocan Star, \$50,000. In addition, however, a number of smaller properties, both lode and placer, owned by syndicates and individuals were profitably worked.

MOUNT SICKER DISTRICT.

(From Our Special Correspondent.)

TYEE COPPER COMPANY, LIMITED.

THE operations at the Tyee mine have been most successful this year. From the 1st of January to the 31st of December, 1904, the Tyee Copper Company's smelter at Ladysmith has been in blast 267 days of 24 hours each, and has smelted 57,450 tons of Tyee ore and 7,953 tons of Custom ore, making the total ore smelted 65,403 tons. The product from this was 6025.688 tons of copper matte, containing 5,120,870 pounds of copper, 179,769.19 ounces of silver, 11,088.830 ounces of gold, the total value, less refining charges only, being \$831,902.41.

From October, 1902, which was the date that shipping ore to the Ladysmith smelter commenced, to this present month of December, 110,000 tons of ore have been shipped and there is still a large tonnage of ore standing in the mine and several hundred feet of unexplored country from the eastern stopes to the east boundary line of the Tyee Company's property.

Heavy development work has been carried on throughout the year, and the main shaft, which has now attained a depth of 600 feet, is in very favourable formation. Development work at this point has just commenced, and it will give a depth of 800 feet when the drift is carried to the eastern line. The main shaft will soon be carried down to the 1,000 foot level.

The development work of the past year has demonstrated that, instead of the ore being carried in disconnected lenses, it is in one immense ore body. Taking the Lenora and Tyee as geologically one mine, this means an ore body of at least 2,400 feet in length, and which, to the shallow depth already explored, will probably yield a quarter of a million tons of ore.

The great length and size of this ore body strongly favours the presumption of ore being found to great depths and so points to the permanency of the mines.

A hoisting engine, boiler and compressor has been installed on the "X. L." which is part of the Tyee