

set of samples show iron 52 per cent. A careful sampling of 18 claims gives a return of 58 per cent. iron.

The ore body is of large proportions and lies on the surface. It is a case of steam shovel development. One group of claims covers 2,743 acres and 18 million tons of ore are blocked out on one claim. Rising from the banks of the Whitewater is practically a mountain of ore hematite, with great deposits of bog ore, limonite, of the most simple character on the flats. The sulphur content is nil and there is but a trace of phosphorous.

Big developments are foreshadowed in the near future. It is stated to be a practical certainty that a branch railroad will be run from the P. G. E. to the property, a distance of approximately 80 miles.

The value of the ore at the smelter is given at between \$6.50 and \$7 per ton and Vancouver mining men look upon the deposit as the key to the future commercial development of the province. There are already rumors of blast furnaces at Squamish and Vancouver.

A sample of antimonial silver ore brought to Nelson by P. Sheran from the E. & M., one of his claims on Cascade Creek, in the Lardeau, shows on assay 21.6 per cent. of antimony, 21.5 per cent. of lead, and 7.4 ozs. of silver. Previous samples from the same paystreak have gone phenomenally rich in silver, Mr. Sheran states, running over 15,000 ounces to the ton.

The E. & M., is a re-location, made by Mr. Sheran on August 10, and it is situated nine miles from the mouth of Cascade Creek.

The outcrop is on a boar's-back, and a tunnel to get the original vein of the outcrop, at 450 feet depth, was started two years ago, but from the wrong side of the ridge from the point of view of distance, as the pitch of 45 degrees took the vein further in. A shaft was also sunk on the outcrop, went through the original vein, and picked up another vein, from which the assays have been made. This is four to eight feet wide, with a paystreak of 16 inches. At 40 feet depth the shaft was still in this ore, but water trouble interfered with the work, and it was not carried any deeper.

A line for a new trail has been located, on a wagon road grade, which would reduce the distance of the mine to Bosworth, at the creek mouth, to six and a half miles, and a government grant has been asked for.

The E. & M. adjoins the Volunteer and Six Friends claims, and the Whitewater group.

Indicative of the extreme richness of the ore bodies of the Premier mine, located on the Salmon River in the Portland Canal section, is the result of an assay Hon. William Sloan, Minister of Mines, has just had made by the Provincial Mineralogist of samples the Minister brought back with him from his recent trip to that rapidly developing mining district.

The assay shows that the samples went no less than \$962.41 in value per ton. Gold values were \$512.60 per ton; silver, 393.2 ounces or \$432.52 per ton, and copper 3.6 per cent. or \$17.28 per ton.

This showing is a remarkable one. While the samples brought down by the Minister were part of high-grade ore exposed in the mining operations, yet the average value of the ore, while undoubtedly less than the above is very high, proving the Premier to be one of the richest gold and silver mining propositions in the Province.

The University of British Columbia is strengthening the mining department by the addition of two professors. Prof. H. H. Thomson, who is a bachelor of science from McGill has been appointed to the chair in metallurgy. Mr. Thomson has had some experience in teaching, but the larger part of his time since leaving university has been employed in professional work in Canada and the United States. He has been chief metallurgist or superintendent in several large mineral establishments in Arizona and Utah. Mr. Thomson is a Canadian and his desire to return to this country and educate his family here induces him to accept a professorship, which gives him much less income than he now enjoys.

The other appointment in the mining department is that of George A. Gillies, M.Sc., as assistant professor of mining. Mr. Gillies is also a McGill man and has a good deal of experience in the mechanical side of mining.

The first carload shipment of manganese from the Hill 60 deposits has been shipped to Tacoma.

# BRITISH COLUMBIA

## The Mineral Province of Western Canada

TO END OF DECEMBER, 1917

Has produced Minerals valued as follows: Placer Gold, \$75,116,103; Lode Gold, \$93,717,974; Silver, \$43,623,761; Lead, \$39,366,144; Copper, \$130,597,620; Other Metals (Zinc, Iron, etc.), \$10,933,466; Coal and Coke, \$174,313,658; Building Stone, Brick, Cement, etc., \$27,902,381; making its Mineral Production to the end of 1917 show an

**Aggregate Value of \$595,571,107**

**Production for Year Ending December, 1917, \$37,010,392**

The Mining Laws of this Province are more liberal and the fees lower than those of any other Province in the Dominion, or any colony in the British Empire.

Mineral locations are granted to discoverers for nominal fees.

Absolute Titles are obtained by developing such properties, the security of which is guaranteed by Crown Grants.

Full information, together with mining Reports and Maps, may be obtained gratis by addressing—

**THE HON. THE MINISTER OF MINES**  
VICTORIA, British Columbia.