

## Canadian Mining Institute—Western Branch.

The tenth general meeting of the Western Branch of the Canadian Mining Institute was held at Trail, British Columbia, on May 18. Mr. Wm. Fleet Robertson, provincial mineralogist, chairman of the branch, presided, and there was an attendance of members and visitors from various parts of the Kootenay and Boundary districts, the neighbouring State of Washington, and the coast cities, Victoria and Vancouver. There were two sessions—afternoon and evening.

The visitors were welcomed by the president of the Trail Board of Trade, after which several papers were read and discussed. These were: "The Burns Anthracite Coal Property, Alberta," by Mr. Alexander Sharp, M.E., Orient, Washington; "Costs of Operation at the Blue Bell Mine, Kootenay Lake, B.C.," by Mr. S. S. Fowler, M.E., Riondell, B.C.; "Notes on Property of the Le Roi No. 2, Limited, at Rossland, B.C.," by Mr. Ernest Levy, M.E.; "The Standard Mine, Silverton, B.C.," by Mr. John Valance; and (by title only) "Notes on the Lucky Jim Zinc Mine, Slocan, B.C.," by Mr. A. J. Becker; "The British Columbia Copper Company's Smelter, Greenwood, B.C.," "The Van-Roi Mining Company's Concentrating Mill, Four-mile Creek, Slocan," and a description of the copper smelting side of the Consolidated Mining and Smelting Company's smelter at Trail.

Mr. H. Mortimer-Lamb, secretary of the Institute, who had journeyed from Montreal, Quebec, to British Columbia to attend the meeting, read a letter of greeting from Dr. F. D. Adams, president of the Institute, and explained the proposal of the council of the Institute to hold a semi-annual meeting in British Columbia in the autumn of each year, this to be as far as practicable similar to the general meeting of members held annually in one of the cities of Quebec or Ontario. It was recommended that the first of these proposed semi-annual meetings shall be held next autumn. The matter was referred to the incoming branch council with a recommendation that it further the efforts of the general council to make such semi-annual meeting a success.

An invitation to hold the next general meeting of the branch (in September) at New Denver, Slocan Lake, in the vicinity of which town several important silver-lead mines and concentrating mills are being operated, was favourably received and referred to the branch council for its decision thereon.

A proposal that the Provincial Government be urged to either add to the staff of the Provincial Bureau of Mines, or employ mining engineers not on the staff, to do exploratory work in new districts in the province giving promise of becoming mining fields, was not adopted, it being considered that the meeting was not in possession of sufficient information to show that there exists a public demand for such action, or other reasons that would warrant its making such a recommendation to the Government.

The result of the ballot for chairman and members of the branch council for the ensuing year was that Mr. Robert R. Hedley, of Vancouver, B.C., was unanimously elected chairman, while all but one of the twelve elective members of the branch council were re-elected, the only new member being M. E. Purcell, superintendent of the Centre Star group of mines, Rossland, B.C. The Branch officers and council for the ensuing year are as follows: Chairman, Robert R. Hedley, Vancouver, B.C.; Secretary, E. Jacobs, Victoria,

B.C.; Council—W. H. Armstrong, Vancouver, B.C.; \*S. G. Blaylock, Moyie, B.C.; S. S. Fowler, Riondell, B.C.; Norman Fraser, Michel, B.C.; Chas. Graham, Middleboro, B.C.; Thos. Graham, Nanaimo, B.C.; J. Cleveland Haas, Spokane, Wash.; John Hopp, Barkerville, B.C.; W. H. Trewartha-James, Victoria, B.C.; \*Frederic Keffler, Greenwood, B.C.; \*Thos. Kiddie, Vancouver, B.C.; F. C. Merry, Ferguson, B.C.; M. E. Purcell, Rossland, B.C.; \*W. F. Robertson, Victoria, B.C.; Lewis Stockett, Hosmer, B.C.; \*O. E. S. Whiteside, Coleman, Alberta; W. E. Zwicky, Kaslo, B.C. Mr. Hedley presided during the latter part of the evening session.

On Friday morning, May 19, some of the visitors were shown through the Consolidated Mining and Smelting Company's copper and lead smelting works and electrolytic lead refinery at Trail, and in the afternoon spent several hours in the company's Centre Star mines, at Rossland.

### The Burns Anthracite Coal Property, Alberta.

Mr. Sharp showed that this property consists of 15,360 acres of Crown-granted land, beside an area leased from the Dominion Government. The nearest railway towns are Calgary and Okotoks, each distant about 45 miles from the property. The coal measures belong to the Lower Cretaceous period (Kootenay series). The formation comprises about 4,000 feet of sandstone, dark shale, conglomerates, and—near the base—some clay and ironstone. At intervals in the strata occur the coal seams and coaly shales, the whole resting on carboniferous lime. The area is 11 miles long and from one mile to three miles broad. The measures lie in a long, narrow, synclinal trough; strike N. 42 deg. W., and dipping to westward at an angle varying from 52 to 80 degrees. The southeastern outcrops are at elevations from 300 to 2,000 feet above the valley of Sheep Creek, but towards the north, at Burns Creek, the coal comes down to the level of the valley and has every indication of going deeper. Ten or twelve seams of coal have been exposed and traced, by drifts and open-cuts, about five miles. These exposures show fully 100 feet of coal in the measures. Fifteen samples, taken from seams ranging from 4 feet 6 inches to 20 feet in thickness, gave analyses varying between the following percentages: Moisture, 1 at 2.10 per cent.; fixed carbon, 70.05 at 82.25 per cent.; ash, 3.5 at 17 per cent.; sulphur, 0 at 1 per cent.; volatile, 9.6 at 13.43 per cent.; B.t.u. (one sample), 14,877. Complete analyses of two samples from a 7-foot seam on Rickert Creek were as under:

Water, 0.98, 1.02; carbon, 84.77, 87.24; ash, 5.42, 5.92; sulphur, 0.18, 0.18; hydrogen, 3.63, 2.92; oxygen and nitrogen, 4.48, 3.24, coke, 90.64, 92.81.

The topography of the country is favourable to economical mining. Some of the seams come down to the level of the valley, so can easily be reached by tunnels at the valley floor. Any of the seams can be drifted on from either side of the several creeks that cut the formation. Thus a chain of collieries can be operated along the valley. Power can be generated from water power of the creeks. The seams are being prospected at different horizons so that the nature of the roof and floor texture may be ascertained before any permanent opening shall be made. The difference in elevation between the coal property and Okotoks is about 2,150 feet, or approximately 48 feet to the mile.

\*Members of Council ex-officio.