

ing ores from B. C. The specimens are those of ordinary workable ore and not picked samples purely interesting from a mineralogical point of view. To classify a great many of them which come from B. C. was no easy matter, many specimens representing undeveloped or only partially developed deposits, so that often the ore had practically to be judged by its appearance, no data being at hand by which it could be grouped with certainty.

Milling Ore.—The milling ores from B. C. are represented by 73 specimens in all. The number is not surprising, but the interest in this exhibit lies in the fact that the samples come from so many different districts, viz.: Alberni, Victoria, Clayoquot, Phillips Arm, New Westminster, Cariboo, Lillooet, Yale, Kamloops, Fairview, McKinney, Boundary, Carnes Creek, Ground Hog Basin, Revelstoke, Trout Lake, Blue Grouse Mountain, Nelson, Ymir and both N. E. and S. E. Kootenay. Every property of any prominence as a milling, concentrating or cyaniding proposition is represented by a sample—one comes across such familiar names as Doratha Morton, Bend d'Or, Minnehaha, Fontenoy, Waterloo, Cariboo-Amelia Jewel, C. O. D., Athabasca, Fern, Tamarac, Dundee, Porto Rico, Ymir, R. E. Burns, etc. This collection though not very attractive to the general public (few of the samples show free gold) is interesting on account of the variety in appearance of the exhibits—"free milling ore" evidently being a very elastic term.

The Ontario and Nova Scotia milling ores comprise practically the whole gold exhibits from those provinces. That from Ontario comes principally from the Lake of the Woods, Shoal Lake, Rainy Lake, Seine River, Shebandowan, Thunder Bay, Jackfish Bay, Michipicoten Districts and Wahnapiat north of Sudbury. The specimens are very similar in appearance. A few samples, however, from Hastings County of auriferous mispickel lend a little variety to the collection. The exhibit is made up of 86 samples, comprising specimens from, *inter alia*, the following well known mines: Mikado, Sidar, Britannia (Gold Hill), Sultana, Regina, Foley, Olive, Golden Star, Sawbill, Hammond Reef, Independence and Deloro. A large number of these show plenty of free gold. In the Nova Scotia exhibit the quartz has also a great uniformity of appearance, even as to the width of the vein (about 13 inches) plainly shown by the specimens. Practically every exhibit shows a great deal of free gold—some so much in fact that a special steel case (similar to those used for the placer exhibit) was made to hold the finest specimens. The Nova Scotia collection is very interesting to the crowds visiting the exhibition on account of the richness of the samples sent—just suited to an exhibition such as this where crowds visit our mining section simply to see the rich free gold samples and nothing else. It is a pity that a larger quantity of this class of ore was not sent, as though it is of little interest to mining people, still it helps immensely to advertise our mineral resources among the general public. (The West Australia mining exhibit, to which I will refer later on, consists practically of nothing but rich free gold samples. West Australia can give us several pointers on advertising.) In connection with the Nova Scotia gold ores, and explanatory of the formation in which the ore is found, is a very interesting model sent by the Geological Survey Department. This was made by Mr. E. R.

Faribault, B.A., Sc., and the information it conveys is the result of many years work and study. Briefly described, this sectional model of the gold district of Goldenville, N.S., shows that the formation there is similar to that of Bendigo, Australia, and that deep mining can be carried on there with every certainty of success, provided that the zones of special enrichment are followed.

The Nova Scotia gold exhibits come from the following districts: Goldenville, Isaacs Harbor, Wine Harbor, Laurancetown, Caribou, Waverley, Montague, Salmon River, Cow Bay, South Uniacke, Mount Uniacke, Renfrew, West Gore, Leipsigate, Cranberry Head, North Brookfield and Molega Barrens.

British Columbia Gold Smelting Ores—British Columbia is the only province sending an exhibit of various kinds of this class of ore, which is really the most interesting portion of the Canadian exhibit of gold ores. Though so familiar to all Western mining men, it is really wonderful how little they are understood or known of here—even by people who have a fairly thorough knowledge of the gold mining industry in general—and write articles for the continental mining press. A great many technical people of all kinds and from all the European countries have visited the exhibit and made a careful study of it. They were very much interested therefore in an exhibit sent by the Canadian Smelting Works, Trail, illustrating the process followed in the treatment of the Rossland ores, and consisting as follows:

Pyrrhotite and chalcopryrite (War Eagle mine.)

Pyrrhotite and chalcopryrite (Centre Star mine.)

Pyrrhotite and chalcopryrite (Iron Mask mine.)

Flux limestone, Kootenay Lake.

Coke fuel, Crow's Nest Pass.

Coal, Crow's Nest Pass.

Roasted ores from roast heaps, 1st class.

Roasted ores from roast heaps, 2nd class.

Granulated matte.

Granulated matte calcined and briquetted.

Flue dust from flues.

Flue dust briquetted.

Slag brick used in flooring the works.

High grade matte.

Waste granulated slag.

According to the catalogue 54 ore samples sent are classed as straight gold smelting ores. Among these are specimens from the following properties: Golden Crown, Gold Drop, Winnipeg, Humming Bird, Pathfinder, Lexington, Lincoln and City of Paris in the Boundary, and the Colorna, Virginia, Homestake, Giant, Deer Park, Evening Star, Iron Mask, Le Roi, Monte Christo, Nickel Plate, Velvet, Victory, Triumph, War Eagle, White Bear and Columbia and Kootenay in the Rossland district. Of the samples of smelting ores classed as gold and copper or gold-silver-copper propositions there are in all 56, among which are included specimens from: The Alberni and Clayoquot Districts, the Van Anda Copper and Gold Co.'s properties (including an exhibit of furnace products), other Texada claims and the following mines: Lenora (Mount Sicker), Big Copper and Mother Lode (Boundary), True Blue (Kaslo), Lily May (Rossland), Paris Exhibition Group (Tracy Creek), etc.

The collection of silver ores may be summed under three heads, (1) Silver Ores Proper, (2) Silver Lead Ores and (3) Silver Copper Ores.