Mr. Watson gave a good example of an assay plan, and Mr. G. G. S. Lindsey led a lively discussion, mainly on the relations of the prospector and the purchaser of mining prospects.

## PORCUPINE AND KIRKLAND LAKE

Tough-Oakes.—The construction of the mill for the Tough-Oakes mine at Kirkland Lake has been completed, and most of the heavy machinery is in place. There are various adjustments to make and the mill will not be running much before the beginning of March, which is its contract time. The mill has been designed by Mr. Johnston of the Nipissing, and extraction will be made by the continuous decantation process, which has proved so successful at the Porcupine Crown mine and other properties in the gold country, where it has been installed. Contrary to expectations, no metallurgical difficulties have been encountered.

Underground operations recommenced this week. Two drills were operating on January 18th, and more will be put on as they are required. The small mill has been treating dump ore consistently all winter.

Alexo nickel.—Shipments of nickel ore from the Alexo mine continue to be sent out with great regularity. In the month of December 875 tons of ore left the siding near Porquis Junction for the Mond Nickel smelter at Coniston.

The McIntyre is now sinking the shaft below the 500 ft. level. Two drills are now working in the No. 4 shaft, which will be carried to the 600 ft. level without delay. From the lowest levels crosscuts will be run to cut the various veins worked on the upper levels.

The Trethewey Mining Company has taken an option on two claims adjoining the Huronian mine, which is situated midway between Larder Lake and the Tough-Oakes mines. A prospecting equipment will be placed upon this property and development commenced. The Huronian mine is now working, both mine and mill power having been obtained from the plant of the Goldfields, Limited, at Raven Falls.

Rutherglen.—At Cobalt and Porcupine results obtained from the assay of samples of the Rutherglen ore have not been very encouraging. It was mainly for gold that the assay was made, and values were uniformly low. The orebody on the Clark property is stated by an engineer who has examined it to be of good width, however, and quite a number of prospec-

tors are looking over the country.

Hollinger.—The increase in the Hollinger dividend was fully justified by the condition of the property. The rate is now 4 per cent. every 28 days, or 1 per cent. more than previously. It will mean a disbursement of \$120,000 as against \$90,000 every four weeks, which the statements issued by the company show can easily be attained. The greater part of the expenditure on the new power plant has been made and the reduced costs from the larger tonnage should gradually pull down costs.

## BRITISH COLUMBIA

Mining Bulletins.—During the field season of 1914 several mining engineers were employed by the British Columbia Department of Mines to investigate mining conditions and obtain information relative to development of mining properties in the districts to have On November 1, The their attention, respectively. Canadian Mining Journal published (p.

some notes concerning observations by Mr. Wm. Brewer, of Victoria, outlining his impressions of parts of Skeena and Atlin mining divisions. A bulletin, giving a detailed account of Mr. Brewer's trip through those divisions and much information descriptive of numerous mines and mineral claims he visited will shortly be issued by the Provincial Bureau of Mines.

A bulletin entitled "The Mineral Resources of the Lardeau and Trout Lake Mining Divisions," this being a report of those divisions prepared for the department by Mr. Newton W. Emmens, is already available for gratuitous dis-This bulletin comprises some 65 pages tribution. of text, diagrams, etc., and its illustrations also include a number of excellent half-tone reproductions of photographs of mines and the country in which they are situated, together with sketch maps of the two divisions covered by the report. These illustrations serve to give a good idea of the topography and general physical conditions of the regions under review, and are helpful to those seeking information about mines and mining in that part of the big district of West Kootenay from which was derived approximately 40 per cent. of the \$17,700,000 on official record as representing the value of the metalliferous mineral production, of the province in 1913. In the case of each division, general information is given under the various subheads of accessibility, topography and geology, and then the numerous mining properties are dealt with as being in certain mineral zones. In many instances sketches of mine workings are given, and in the text are frequently included notes of assay value of the ore opened in the workings described. Altogether the bulletin should prove useful to many having more or less interest in the mineral resources of a district of which comparatively little has been printed in official publi-In 1903 Mr. R. W. Brock did some field work for the Geological Survey in this part of British Columbia but, so far as has come under the notice of the writer his detailed report, if he prepared one, was not published. There are known to be included in the mineral resources of these divisions gold, silver, and lead, and a few mines have been productive commercially, but between lack of adequate transportation facilities and of capital for development, the latter especially, nearly the whole of the Lardeau country has been in large measure neglected so that its production has been small. It is hoped, though, that the particulars of this promising region now placed before the public will attract the attention of men who will spend money in mining development and turn to profitable account the ores occurring in variety and, it is believed, in commercial quantity as well.

## East Kootenay.

Approximate figures of the production in 1914 of lead-silver ore from mines in Fort Steele mining division of East Kootenay are as follows: St. Eugene, 950 tons; Sullivan Group, 35,500 tons. Both mines are owned by the Consolidated Mining and Smelting Co., which ships the ore to its smelting works at Trail. The approximate metal contents of the 36,450 tons of ore produced last year were 24,863,000 pounds of lead and 492,000 oz. of silver. While exact figures are not yet received for 1914, those given above will afford a basis for comparison with the published returns for 1913, contained in the following excerpt from the "Report of the Minister of Mines" for that year: "In 1913 the Sullivan mine was worked steadily with