

At the Tamarac mine in the same district, it is proposed to erect a 50 stamp mill very shortly, so the managers must feel assured they have something good in front of them.

It is, of course, a matter of opinion as to how long the ore will remain free milling, but there can be no doubt that while at the surface and for a comparatively few feet down it may be amenable to stamps and plates, yet before long it certainly will not be so, but will show up in its true character of "base ore." It certainly seems to me to be a serious question as to the advisability of erecting a very large stamp mill for these properties, which after a year or so may be no longer of any use, unless it be to crush the ore for concentration.

In the Salmon river district not far from Ymir, a report comes that a three foot vein of ore has been struck on the Flossie R which carries \$21 in gold, and this at only five feet from the surface. No doubt the camp is a good one if all reports are not strictly true.

In rather a different direction, on Kootenay Lake, near Goat River, some good galena ore has been discovered at Kuskanook which is said to have yielded at the smelter about 100 ounces of silver and 10 per cent. lead; and also in the same neighborhood petroleum has been found, though what the quality and quantity may be is so far uncertain. This is a district which will be enormously improved by the Crow's Nest Railway, and it is altogether probable that a very extensive and hitherto almost untouched mineral country will be opened up, most likely with very profitable results.

Kuskanook is at present the landing place for supplies to the Crow's Nest line, and may be considered a gateway into East Kootenay generally, which has been kept back very much for lack of transportation facilities; but as an indication of the faith mining men have in the country, it is stated on good authority that there are 100 locations on the north fork of St. Mary's River, and over 200 locations on Wild Horse Creek, (alas for the endless repetitions of the same name for creeks 100 miles and more apart!) which show Galena, Grey Copper, and in some cases free milling gold quartz. No doubt we shall hear a great deal from East Kootenay this summer.

At Boundary Creek—south and west of Nelson—things are very promising, and if, as is expected, D. C. Corbin's railway will pass through that district it will be an immense advantage. It is altogether probable, as it is mainly a copper camp, that a smelter will be erected there—water and timber being abundant, and the railway practically ensuring cheap fuel.

To return now a little nearer home.—The Hall Mines Smelter has been steadily working, and a short but most successful trial run was made with the lead furnace in addition to the copper plant. If only certain alterations could be made in the duty charged in the States upon lead, the smelting of that metal should be a very profitable operation; but as it is it seems really cheaper to ship the ore to smelters on the other side of the line than to smelt it at home.

The well known Athabasca group on Toad Mountain has passed—or is on the point of passing—into the hands of a strong English syndicate who will find working capital in ample quantity, and will erect all necessary hoisting and mining machinery. This group of claims holds its own very well, and appears to be run on common sense principles; it will probably turn out very well for its owners.

The Fern is still alive and very well, a clean up was made towards the end of March which the directors think most satisfactory, though at the time of writing details are not at hand. The Cyanide plant is being actively proceeded with, development work is being steadily carried on, and the whole property is improving. About 30 tons of quartz is crushed daily, and all looks exceedingly healthy.

The Delight group is also being developed, and samples of the ore recently brought down show increasing values. In the same neighborhood, the Summit claim is also being steadily worked, some 100 feet of tunnelling having been driven, and Galena with copper found; but hardly enough has been done yet to say what it will eventually prove to be—it is in a good place near the Silver King, and will very likely be all right.

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Ontario.

The mill of the Canadian Gold Fields at Deloro, was burnt down this month. Fire started from the drying machines. Nothing was saved from the laboratory. The About 30 men are thrown out of work. The loss is estimated at \$75,000.

Owing to the work done by J. Burley Smith in Bald Indian Bay, 1895-6, and the results and information obtained relative to the course, width and value, of the veins running under the waters of the bay, diamond drilling has become an important feature in prospecting on the Lake of the Woods. There are at present five drills in use in the district, not including the Provincial Government plant, which is at the disposal of miners for half the cost of operation, the Government bearing the other half. The machines in use are of the following makes:—Bullock (2), Sullivan (2), American Rock Drill (1). The Government machine is of the Sullivan make. There has been about 7,000 feet of drilling done in the district during the past two years. The drills make from 5 to 15 feet per day of 24 hours, according to the country in which they are working, and the cost averages about \$3 per foot. Much important information has been obtained from the work done, more particularly, the finding of the Sultana vein, by Mr. Smith, under Bald Indian Bay, which led to the sinking of the large coffer dam at a cost of about \$20,000, and the lawsuit still pending between the Burley Gold Mining Company and J. F. Caldwell.

The shaft at the Crystal mine, Lake Waahnapitac, is now down to depth of over 160 feet, and the value of the vein is reported to be improving.

At the Mikado, on Shoal Lake, about 100 men have been employed steadily throughout the winter, and the 20-stamp mill has been kept constantly busy, making a monthly return of from \$15,000 to \$20,000. At present the returns are about \$1,000 per day, the mill running on rich ore taken from No. 1 shaft. The diamond drill has been at work through the ice and the main vein is reported to have been located under the lake, where its value and width are the same as in the shafts.

The old 10-stamp battery at the Regina, erected in 1895, is being replaced by 20 new stamps installed by the Gates Iron Works of Chicago. The main shaft is down about 400 feet and six levels of about 150 feet each have been run at various depths. At present the ore, of which there is about 30,000 tons in sight, is running 10 dwts. in gold per ton. The mine has gone steadily ahead since Mr. Pringle took charge about a year ago.

At the Sultana, the 30-stamp mill has been running steadily all winter, although no public reports are given regarding the returns. The main shaft is down about 500 feet and the mine employs about 100 men.

The Cordova Exploration Company, Limited, a wealthy English syndicate, is pushing forward the development of the Belmont gold mine, under the management of Mr. D. K. Kerr.

In the Rainy River district, work has continued on the Randolph, Foley, Olive and other properties, and the Ferguson mine is being re-opened. Gold has been shipped in small quantities from these properties during the winter and arrangements are being made to erect mills and mining machinery at a number of points.

The outlook for the whole district is promising, although there is not the demand for property that existed last year. Now that the idea that a free gold specimen constitutes a mine is being dissipated it is probable that much less money will be wasted than in the past. It has been well established that gold exists in paying quantities in the district, but considerable working capital is required to place the property on a paying basis.

The first part of the seventh volume of the Reports of the Bureau of Mines, covering the calendar year 1897, shows a total mineral production in Ontario of a value of \$3,899,821, an increase of \$105,818 over the previous year. The following table is given to show the number of mining locations sold during the year by districts with their area and the amount paid into the Treasury as purchase money:

DISTRICT.	No. of Sales.	Acres.	\$
Rainy River	440	26,739	53,985
Thunder Bay	9	917	2,160
Algoma	5	448½	747
Elsewhere	16	1,690	2,586
	472	29,794½	59,478

In addition to the above 86,014½ acres were leased, yielding \$84,821.

The business of the Bureau will be best appreciated when it is compared with the total transactions for the five preceding years as shown by the following table:

	1892-6.	1897.
No of sales	407	472
Acres	32,294½	29,794½
Price paid	\$72,360	\$59,477.71
No of leases	619	783
Acres	61,527¼	86,014½
Rent paid	\$59,158.68	\$84,821.35
Rent of land previously leased	15,440.30	6,241.11

Quebec.

The Coleraine Mining Company is negotiating for the construction of a concentrating plant to be erected on its chromite property, near Black Lake.

The demand for mica continues good, and steadily increasing sales of Canadian are reported to Great Britain and Germany. The bulk of the product, however, still goes to the United States.

The silver lead deposits, near Bryson, are being vigorously opened up by the Grand Calumet Island Mining Company. The main shaft is now down 125 feet. An important shipment was made this month to Antwerp.

The Bell's Asbestos Company reports a dividend for 1897 of four per cent., and carries forward to reserve account £2,339 13s. 5d. In 1896 a dividend of five per cent. was paid. The result of the year's operations was a net profit of £5,171 13s. 2d., to which was added the amount brought forward £1,968 03s., leaving for appropriation £7,139 13s. 5d.

Mr. R. Chalmers (Summary Report Geological Survey, 1897) says: "Gold mining operations in the Chaudiere Valley, and in the 'Eastern Townships' generally, have been somewhat restricted during the past season, owing to causes unrec-