

which the miner of ore raised and smelted in the Province is entitled to a bounty of \$1.00 per ton on the metallic product of his ore. This fund will lapse with the close of 1900, unless provision is made for its extension by the Legislature during the current session.

Enterprises now under way for the opening up of iron mines will, if carried to completion, greatly change the aspect of affairs before the close of the present year. The deposits of hematite found in the Michipicoten mining division have now been proven by the diamond drill to be of large, even enormous extent, and as the railway from Little Gros Cap, on Lake Superior, has been completed, heavy shipments from these mines seem inevitable during the coming season. On the iron ranges of the Mattawin and Atik-oka rivers, the Mattawin Iron Company, in which Folger Brothers of Kingston and Mackenzie, Mann & Co. are interested, is proceeding steadily with exploration work by the diamond drill. In Peterborough County, the Belmont mine which yields a high grade magnetic ore will be worked on a much larger scale than in the past. A contract has just been made to deliver 3,000 tons of ore.

The profits to be made in making pig iron during the present great demand are causing a heavy flow of capital into the smelting business. A blast furnace is in process of erection at Midland, while at Sault Ste. Marie the manufacture of pig iron and nickel steel is part of Mr. F. H. Clergue's extensive programme, and a bonus of \$50,000 has been granted by Fort William for a furnace to be built at that town. Other places are following suit. Ottawa, Collingwood and Welland are all said to be desirous of entering upon the production of pig iron, and are not likely to experience much difficulty in finding capitalists willing to be paid for embarking upon a business which is likely to yield large returns for some time to come.

The reported production of copper in Ontario during 1899 is 5,668,000 lbs., valued at \$176,237, and that of nickel 5,744,000 lbs., worth \$526,104. Both of these metals, with the exception of a small amount of the copper which came from Parry Sound, were contained in the matte produced by the Canadian Copper Company at Sudbury. The copper contents of the matte are valued at about 3 cents per lb., and the nickel contents at about 9 cents. In the statement put out a few days ago by the Geological Survey of the mineral production of Canada for 1899, the practice is continued of valuing the copper and nickel contents of ore and matte at the market value of the fine metals. This is a palpable error, as a moment's reflection will show. If the matte were refined in Canada, and metallic copper and nickel produced here, it would be quite correct to use the fine metal prices as a basis for computing the value of our output; but when both the copper and the nickel product of Ontario mines are exported in the form of matte to be refined in the States, common sense dictates that the metals should be valued in the shape in which they leave the country. It would be as reasonable to value all the wheat exported as flour, all the pulpwood as paper, or all the wool as cloth. It is the processes to which the matte is subjected after leaving Ontario that give the value to and govern the selling price of the copper and the nickel; and statements compiled without recognition of this self evident fact are misleading, and are likely to be received with incredulity. There is no excuse for "padding" statistics.

Accidents continue to be frequent from the careless handling of explosives, both in mining and other operations in which resort is had to blasting. Recklessness and ignorance pay a heavy death toll, and it is time to inquire whether something cannot be done to stop this

waste of useful lives. The commonest source of accident in winter time is lack of care or the use of improper methods when thawing frozen dynamite. Safety is often separated from danger by a very narrow range of temperature, lack of skill, hurry, or the contempt bred of familiarity, trespasses upon this margin, and the result is often death or maiming for life. It is said that the Ontario Government is considering the expediency of revising its rules governing the employment of dynamite in mining. It is proper to adopt all possible safeguards which legislation can provide, but after all is done, the matter is one for the miners themselves, and nothing can take the place of knowledge, intelligence and care, in dealing with so dangerous and withal so treacherous a substance as dynamite. Over stringent regulations would probably fail of effect, for they would be evaded or ignored, but if a short treatise could be prepared and circulated generally amongst miners, explaining the nature and behaviour of high explosives, and the proper methods of using and handling them, probably as much good would be accomplished as could be attained in any other way.

A further extension of the gold fields of western Ontario has been reported. Messrs. Upham & Shores, formerly operating at Steep Rock Lake, on the Seine River, are now at work with about 50 men developing a find situated on Sturgeon Lake, east of Lake Minnetakie, about 60 miles north of Bonheur station, on the C.P.R. The discovery is said to be a most promising one, and is believed to be connected with the deposits at Lake Minnetakie, though the connection has not been traced.

"Golden Whale" is the euphonious name given to a property in the New Klondike region, owned by Messrs. Watson & Munro. A small 2 stamp mill has been installed, and is showing the ore to be of paying quality. The new Crown Point mine, of which Mr. R. H. Ahn is manager, is situated about a mile north of the Mikado. It has a large body of low grade ore, on which a shaft has been sunk to a depth of 90 feet. A 5 stamp mill is turning out bullion. The Gold Panner and Combine are two properties which show unusually rich ore. A 10 stamp mill is being erected on the former. Considerable difficulty is being experienced by many of the western Ontario gold mines in procuring an adequate supply of miners. Here is a chance for some of the British Columbia men who are having trouble with the eight hour day law.

The assay office established by the Bureau of Mines at Belleville, is now in its second year, and is doing useful work in assaying at reduced rates mineral samples from all parts of the Province, and in directing attention to the mineral resources especially of the eastern part of Ontario. Mr. J. W. Wells who is in charge of the office, has at present in hand the analysis of a large number of samples of salt, &c., from the salt wells of the Province, as well as of peat from a number of deposits, reports on both salt and peat being in course of preparation by Prof. De Kalb, Inspector of Mines for Eastern Ontario.

Active operations are in progress at the Zenith Zinc mine near Rosport, on the C. P. R. The ore has to be teamed about 12 miles to the railway, and can be got out much more cheaply in winter than in the summer time. A considerable tract of land in the neighborhood of the mine has been taken up for zinc ore. The zinc refinery at Hamilton, of which Mr. John Patterson is manager, is nearing completion.

Projects for the establishment of additional blast furnaces are in the air, as is natural in these days when pig iron is almost qualifying