

THE DUFFERIN GOLD MINE, NOVA SCOTIA.

This mine is situated in the Salmon River district, Halifax County, and is well-known to mining experts. Work has been carried on from 1880 to 1894, during which period about \$800,000 worth of gold was extracted, of which \$300,000 was divided among the shareholders in profits. Through incompetent management and disagreements among the owners, debts were incurred and actions taken, which resulted in closing down the mine. The litigation has only recently been settled and arrangements made to dispose of the property. At the last session of the Legislature power was obtained to issue debentures and arrangements have been made to sell sufficient of these to pay off the debts of the company and purchase new and improved machinery. The mine is at present equipped with a 20 stamp mill, but with incomplete appliances. Forty stamps more will be added, which will give a capacity of from 260 to 300 tons per day and vanners for concentrates and tailings will also be put in. It is estimated that hitherto the gold lost in tailings would have been more sufficient to have paid all the expenses for mining and milling the ore. The average yield for the 100,000 tons taken out of the mine was fully \$8. per ton. The cost of mining and milling will not exceed \$1.50, including general expenses.

The Richardson mine, operated by steam power, is mining and milling for \$1.60 to \$1.65 per ton. The Alaska Tradewell is working on a cost of \$1.35 per ton. As the Dufferin mine has a very fine water power, it can easily be seen that the estimate of \$1.50 is a liberal one.

Exhaustive reports have been made by a number of experts, among whom are R. J. Edwards Leckie, C.E., B.Sc., member of the American Institute of Mining Engineers; George Maynard, Esq., G. W. Stuart, E. Gilpin, jr., Commissioner of Mines for Nova Scotia, and Prof. John E. Hardman, of McGill University, Montreal, who has had an intimate knowledge of the property since 1883, and who stated in his report that he has always considered it to be one of the leading properties in the Dominion, and under skilful and economical management, it will be highly remunerative to its owners. He also stated that from the plans submitted, it was readily calculated that there are over 100,000 tons of ore available for milling without sinking to greater depth in the north and south lodes now open. The geological formation is similar to the great Bendigo mines in Victoria, Australia, which since 1851 has yielded over 15,000,000 ounces of gold, valued at about \$200,000,000.

Mr. Leckie, in his report says:—"Bearing in mind that only 2,000 feet in length out of 8,550 feet owned by the company has been worked upon the two veins already known, there can exist no doubt

as to the quantity available for milling, and an output upwards of 200 to 300 tons per day from this property, when properly opened and developed, can be maintained for many years."

Dr. George M. Dawson, of the Geological Survey of Canada, in an article in the National Review for October, 1896, speaking of the gold bearing quartz veins of Nova Scotia, says:—"These veins have been carefully studied by officers of the Geological Survey, and are found to follow the lines of the anticlinal folds in precisely the same manner as the well-known reefs of the Bendigo; but the fissures are broader and further apart in Nova Scotia, and the veins themselves appear to be more permanent in depth.

We publish in this issue a map of the Dufferin and also the engineer's plans of the workings in the mine up to date and the anticlinal folds, which are referred to in the reports.

A strong syndicate is being formed to secure the control of this mine, which will certainly rank among the leading producers in Canada. The brokers are Clarence J. McCuaig & Co., Montreal.

MONTREAL ENDORSES THE RAILWAY.

The necessity of the construction of a railway through the Crow's Nest Pass has been brought forward in the Montreal City Council this week. It seems a matter which concerns the aldermen of Montreal, in only a slight degree, but it is right that the commercial metropolis of the Dominion should urge anything that is in the interests of the commercial prosperity of the country. The Kootenay district seems certain to become a great and permanent addition to the productive resources of Canada. The city of Spokane in Washington Territory, has been thriving on the supplies sent into the Canadian mining camps. The ore produced from Canadian mines is being sent into the States for reduction and refining. The construction of the proposed railway would give a chance for Canadian merchants to supply the mining centres with all requirements, besides developing the natural resources of the district. Therefore it is quite proper that Montreal should take part in urging the necessity of immediately constructing this line.

NEW MINING AGENCY.

As will be seen from our advertising columns, Col. J. D. Crawford is again in active business in Montreal, after being out of it for over a dozen years, and has been warmly welcomed back by his many friends. He, along with Mr. Thomas Porteous, are representing the Scramble and Black Sturgeon Mining Companies, Col. Crawford being one of the directors of the latter, which is a practical proof of his faith in it. A letter has just reached these gentlemen which states that Mr. Westerfield, the company's mineralogist, had just arrived in Winnipeg and reported development work progressing rapidly on the "Sturgeon" and "Golden Rod," the latter being in Darlington Bay, and the quality of the ore showing steady improvement.

WAR EAGLE NEWS.

The War Eagle has now only 10 men stopping out and sorting ore, and these men are averaging 250 tons a week. In two months' time, however, when a portion of the development work undertaken is completed, it is believed the shipments will be as large as those of the Le Roi. On this development work there are now 45 miners employed, with 25 engineers, blacksmiths, and others, and the progress is very rapid. Since they started on the lower cross-cut from the No. 3 tunnel, about a month ago, they have driven 125 feet. It is 825 feet from the face of the cross-cut to the shaft, which is now down 115 feet. It will be carried down to the 250-foot level, and the present hoisting machinery is capable of working to the 500-foot level. To complete the whole of the development work blocked out will probably take four months, but meanwhile an increase of the force working on ore will be made from time to time, and the shipments increased. There need, therefore, be no uneasiness as to the probabilities of regular dividends. The mine has now paid \$187,000 in dividends, beside the cost of the extensive development of the mine. In comparing the Rosslund ores with those of the Slocan it is always pointed out against the former that it is a very hard rock to deal with. It is a question, however, if the cost of mining per ton is not quite as low on the War Eagle as in any Slocan mine. In the War Eagle machine instead of hand drills are used, and here there is no timbering to be done, while in the Slocan this is a very heavy item. The output of the eight miners and two ore pickers on the War Eagle is interesting as a basis for comparison.

THE CINNEBAR MINING CO. Only Quick Silver Mine under the British Flag.

F. C. Innes, Managing Director,
Vancouver, B.C.

The Cinnabar Mining Company of British Columbia is the only quicksilver mine under the British flag, and judging from the reports lately received from the superintendent, the shareholders are to be congratulated on the great success of the enterprise. The mine is situated on Kamloops Lake, about three miles from Savonas, on the C. P. R., and about \$60,000 have been expended on it in development work. A small experimental plant was put in about a year ago, and with this the company produced more than enough quicksilver to supply the demand of British Columbia and exported nearly two tons in addition. A furnace capable of treating 30 tons of ore per day is now under construction, and will be completed before April. This furnace, it is estimated, will pay a net profit of from \$150 to \$200 per day. An inexhaustible supply of ore has been developed and it is the intention of the company to construct other and larger furnaces so soon as the present one is in successful operation, and the present outlook of the mine would indicate that its production will only be limited by the number and capacity of the furnaces the company may decide to operate.

A number of prominent Montreal capitalists are connected with this enterprise.

We have a few only of the shares of this company under offer for a short while, and will be pleased to furnish intending purchasers with full particulars on application.

GEORGE W. HAMILTON & SON,
24 St. Sacramento Street,

MONTREAL.