

appreciated, seeing that it finds a regular market notwithstanding the high duty of 20 per cent. *ad valorem* and 6 cents per lb. on thumb-trimmed mica and 12 cents on the knife-trimmed article and it may even be remarked that the consumers, while being very hard to please as regards the fashion in which the mica is prepared, are less so with respect to the quality itself; certain dark colored micas, which were formerly difficult of sale, now finding purchasers much more easily. The demand also appears to be better for small mica and less for the large, which results in the first place from the great difference in the price, which may range from 5 cents for one by three inches to \$1 per lb. for mica of large dimensions. These large dimensions were formerly necessary, but they are now replaced by plates of *micanite* (prepared by E. Munsell & Co., of New York) or of *micaheston* (prepared by W. H. Sills, of Chicago) which are nothing but thin sheets small mica glued one upon the other and afterwards pressed to the thickness of $\frac{1}{8}$ of an inch, thus forming plates which are cut any desired size. The United States customs duties are paid by the consumers and weigh more heavily on the small than on the large mica. Thus, mica of 5 cents per lb. or \$100 per ton has to pay 20 p.c. or \$20, besides 6 cents multiplied by 2000 or \$120 thus \$20 + \$120 = \$140 or 140 p.c. while mica of \$1 per lb. or \$2000 per ton has to pay 20 p.c. of \$2000 plus 6 cents multiplied by 2000, namely \$400 + \$120 = \$520 or 26 p.c., freights being the same. The tariff of 12 cents on knife-trimmed mica also explains why thumb-trimmed mica especially is shipped upon which there is only a duty of 6 cents, besides the 20 per cent *ad valorem*. The mica is sold in barrels weighing 350 lbs. nett."

Our illustrations show some of the principal producing mines in Quebec and three unique "snaps" of the work being done by Mr. Smith, of Kamloops, on his Tete Juan Cache property, Canoe River district, British Columbia.

The Blackburn mine was for many years worked at a profit for phosphate, but on the collapse of this industry the owners directed their attention to the production of mica, and at present about 50 persons are regularly employed at the mine. Our engravings are from photos kindly sent us by Mr. Hugh C. Baker, B.A.Sc., for a number of years manager of the mine. Mr. Baker has since gone to British Columbia.

MINING NOTES.

Richardson Gold Mining Co.—The last month's crushing at this successful Nova Scotia mine gave a brick of 386 ounces. A recent letter from Manager Cox says: "In the mining operations we have made a considerable improvement in the handling and working of the ore and also in the working of the plant. In the first place we have done away with the washing of the ore at the deck, because on examining the waste rock we found it to carry more or less gold, and we allowed the whole belt to be hoisted on deck where it is

passed through the ore breaker without any culling and thence it is trollyed into the crusher bins and from there it passes through the automatic feeder into the batteries where the whole mass is crushed and the result gives us fully as good a yield per ton as when it was washed and culled. We have also put a pump in the north shaft (so called) so as to work east from there as well as from the south shaft, which gives us two stopes working east at the same time towards the axis of the semi-cone, and at the same time stopes are carried west of the north shaft. In the winter of '96-'97, finding hand drills too slow on account of the rock becoming more solid and hard, we put in three steam drills of Sergeant Auxiliary pattern which we supply with steam from the boiler that supplies the compound engine that drives the pumps, the hoist and the ore breaker, and these three drills have kept our forty stamps supplied with ore ever since at the rate of 2,100 tons per month on an average. Then, in the autumn of '97, to get a more direct haul from the large body of ore which is formed around the turn of the belt, we sunk another shaft on the axis of the anticline, out of which we run a self-dumping skip of $\frac{1}{2}$ ton capacity, which dumps its load at the same deck head as the skips from the other two shafts. And later, finding it convenient, we have placed a pump also in this shaft and have made this shaft the deep part of the mine. This part of the mine is now down to the depth of about 350 ft. from the surface, the north shaft 260 ft and the south shaft 250 ft. In order to get an intelligent description of the formation and workings of this mine as they appeared in August of last year, I would refer you to a survey made by Professor Porter and Messrs. Campbell and Morgan, of McGill, a copy of which, I understand, is now in the hands of Dr. Dawson at Ottawa. We have also given our compound engine more power by attaching to it a jet condenser and circulating pumps of the Blake pattern, also another large one of the same pattern to the Corliss engine at the crusher which throws upwards of 300 gallons of water per minute up into our tank from which we supply our batteries and boilers, and we use the residue to wash our pulp away down the sluices. We have also placed one of the Wilfley concentrators in the mill which has been saving the concentrates out of the pulp from twenty stamps since last August; these concentrates are being saved for future treatment. We anticipate in the near future to add another of the same pattern alongside of it to take care of the pulp that flows from the other 20 stamps."

LAKE OF THE WOODS.

The Triggs Mine.—During the sleighing season about 200 tons of quartz was hauled out to the shore of Witch Bay, Lake of the Woods, ready for shipment to the reduction works upon the opening of navigation. The length of haul for this rock was about six miles, and the price for hauling \$1.50 per ton. At the mine sinking will shortly be recommenced in the old shaft, which is down about 80 ft. A Denver whim has been put in place, the shaft and whim covered in and a commodious blacksmith shop put contiguous.

Central Office Broad St. House London, Eng.	Codes: Moreing & Neal. Moreing & McCutcheon.
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W. AUSTRALIA: Perth Coolgardie Cue Lawlers Auckland, New Zealand.	Resident Partner in Canada J. D. KENDALL (35 years practical experience in mining.)
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Mining Engineer Wanted.

An experienced Mining Engineer, to report upon mineral claims in the Lake of the Woods District. Address with references to W. A. MARSH, Quebec, Can.

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