

manager in July, 1882, the High-Rock mine, in Buckingham, yielded, in 1880, 2400 tons, and in 1881 2000 tons of apatite. An adjoining portion of land having been then acquired, the production of this company's mines in 1882 and 1883 is stated at 5000 tons annually; from eighty to ninety men being employed. The cost of the mineral is here given at \$4 the ton, dressed, at the mine; in addition to which \$3 is paid for carriage to the railroad or the river, and about \$1 additional to Montreal, the port of shipment. The mines in the Ontario district are for the most part in or near to the waters of the Rideau Canal, or some of the many lakes connected therewith, from which the freight to Montreal is \$1.50 the ton. I am informed by a merchant, who is a purchaser and shipper of apatite, and is also engaged in mining it both in Ontario and Quebec, that the average cost for freight from Montreal to England, with selling-charges, is 20s. the ton; which, for apatite of 80 per cent., now worth 100s. the ton, would leave 80s., or \$19.36. Deducting from this the cost of production and of transportation to Montreal, there remains a large profit.

The amount of apatite shipped from Montreal has gradually increased, and, according to published figures, attained, in 1883, 17,840 tons, of which, it is to be remarked that 1576 tons were delivered in Hamburg, and 650 in Stockholm, the remainder going to Liverpool, London, and other British ports. Of this about 15,000 tons were from Quebec, and the remainder from Ontario. It should be noticed that this was, with small exceptions, mined in 1882, and brought to the water-side during the winter season. It is estimated that the shipments of apatite for 1884 will equal 24,000 tons.

The methods of mining hitherto generally pursued in the apatite deposits of Canada, allow of many improvements which would materially reduce the average cost of production, and give a permanency to the industry which the present modes of working can never attain. The regularity and persistence of the bedded deposits, and of some of the veins, warrants the introduction of systematic mining by sinking, driving, and stoping, with the aid of proper machinery for drilling, as well as for hoisting and pumping. The careful dressing and selection of the apatite for the market is also an element of much importance in the exploitation of these deposits. The cost of labor in the apatite-producing districts is comparatively low, and there are great numbers of beds now superficially opened, upon which regular mining operations, conducted with skill and a judicious expenditure