

be seen, from the rule adopted by foreign purchasers, that there is great profit in a careful selection and dressing of the mineral for market. The basis being 1s 2d the unit for 75 per cent., with a rise of one-fifth of a penny for each unit, it follows that while a ton of 75 per cent. apatite will bring only 87s 6d, a ton of 80 per cent. will command 100s. and one of 85 per cent. 113s. 4d."

"In the present state of the industry it is not easy to say what would be the cost of production. At the outcrop of the large masses of apatite, and in the open cuts and quarries already described, the cost of extraction and dressing is, of course, very variable, estimates in different deposits giving from \$2 to \$8 the ton. In Ottawa county, where within the last four years, deposits have been opened and mined on a better system than heretofore, the figures of production and cost are instructive. According to the report of the manager in July, 1882, the High-Rock mine, in Buckingham (*sic*) yielded, in 1880, 2,400 tons, and in 1881, 2,000 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 5,000 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 always 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."

Statistics of
shipment.

Dr. Hunt follows this with a paragraph upon the statistics of shipments. When he speaks of 1883 and 1884, he evidently means the fiscal year ending upon the 30th June. He says:—"The amount of apatite shipped from Montreal has gradually increased, and, according to the published figures, attained in 1883, 17,840 tons, of which, it is to be remarked, that 1,576 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, &c."

Dr. Hunt's concluding remarks should obtain as wide a circulation as possible:—"The methods of mining hitherto generally pursued in the apatite deposits of Canada, allow of many improvements which would