

dollars, while from the mines of Quebec the output for the same time was 269,771 tons with a value of 4,749,888 dollars, so that the total product of the phosphate mines of the lower Ottawa district, for this period, was not far from 5,000,000 dollars, which, it must be allowed, is a very creditable sum and only one and a-half million dollars less than the total gold output from all the mines in Nova Scotia in the same time. The placing on the English market, about 1890, of the cheaply mined phosphates of the Southern States, which could be put on ship-board at a cost of about two dollars per ton, caused a speedy decline in the market for the high-priced Canadian apatite, so much so that within the last three years the last of these mines has been obliged to discontinue working entirely, and this great source of mineral wealth is now at an end, and will probably not be again utilized until the exhaustion of the southern deposits has been reached. In mineral development, therefore, we see that progress and profit are simply a matter of supply and demand. In both Ontario and Quebec there are yet great stores of apatite which may some day again find a market, and then we can look to a return of prosperous conditions in this part of our valley and the utilization of some of the large amounts of capital invested in this direction.

MICA.

Closely allied to apatite in its associations, and to some extent also in its mode of occurrence, are the deposits of mica. The demand for this mineral has, however, never been so great as in the case of the other, while the industry has not been prosecuted for so long a time. yet from the mica mines of the Ottawa district there was marketed in the nine years from 1886 to 1894, a total value of half a million dollars. The occurrence of mica forms an interesting subject of study, and some facts have been obtained, from a close inspection of many localities, that may be of general interest. Merchantable micas are of two or three varieties, principally muscovite and phlogopite, with the variety biotite. The first is known as a potash mica, the