

materials offers a mechanical agent to sustain the acid in its attack on the hard and crystalline apatite. Up to the close of June, 1881, the total export of Canada phosphate was 15,600 tons, the average value of which was about \$16 a ton. In 1882, these figures were increased by 12,000 tons, which commanded a higher average of value. Last year, the amount produced was 23,000 tons, and a slightly increased value over the year previous. Being a more concentrated phosphate than any other in the world, it has very naturally been sought for to bring up the acid phosphate fertilizer to high percentages of phosphoric acid. A statement of the analytical composition of a few of the leading phosphates of commerce will indicate the high value of Canadian apatite:

Raw Phosphates.	Content of tri- basic phosphate of lime. Per cent.
Russian:	
Government of Orsk.....	29.14
Government of Podolia.....	66.78
English:	
Cambridge coprolite.....	57.78
French:	
Ardennes coprolite.....	45.21
Bordeaux phosphate.....	77.41
Spanish:	
From two mines, from.....	74 to 85
West Indian:	
Navassa Island.....	72.43
Old Curacao Island.....	70.99
New Curacao Island.....	82.60
Sombrero.....	81.88
Redonda.....	87.73
Elroque.....	69.86
Rio Grande:	
Bone Ash.....	70 to 80
South Carolina:	
Coprolite.....	48 to 60
Phosphate.....	51 to 60
Canada:	
Apatite.....	72 to 94

Those who have secured properties in the Ottawa District have worked them most energetically for all they are worth, and their returns have been very encouraging so far. The expenses vary of course with the conditions; but as a rule range from four to five dollars per ton, often less, sometimes a little more. These figures are, however, the result of the experience of a number of workings, embracing, at least, seven large mines in the great Ottawa District. The cost of the mineral laid down in Montreal may be estimated at from \$7 to \$9 per ton. Freights to New York may be had at from \$3 up by boat, and for long contracts easy railroad rates may be secured directly from the mine to destination. Prices this season in Montreal have ranged from \$18 to \$22 for choice shipments.

The quantity of this material which our market can deal with will depend mainly on the cost of sulphuric acid. Already a