

good miners make poor prospectors. Prospecting is a kind of work for which some men are particularly adapted, and because they lead a nomadic life it is no reason that they are not as good citizens as those living in a town for years. They are the pioneers of the mining camps, and serve a most useful purpose since the result of their searches is the basis of the mining system.—*The Press, Idaho.*

America has long been celebrated among mineralogists as the home of enormous crystals; and the prodigious specimens of apatite, beryl, and other minerals, have been the subject of wonderment. But for size the crystals of spodumene exposed in the excavations upon the Etta tin mine, in Pennington county, Dakota, carry off the palm. Professor Blake, reporting on the subject, is authority for the statement that one of these crystals is *thirty-six feet in length* in a straight line, and from *one to three feet in thickness*. The cleavage is smooth and straight, but the lateral and terminal planes are obscure. Crystals from five to twenty feet long are numerous, and recline in all directions.

Notice has appeared in the *Canada Gazette* that application will be made for Letters Patent of incorporation, under "The Canada Joint Stock Companies Act, 1877," for the "North America Mica Company," with \$1,000,000 capital stock, divided into ten thousand shares of one hundred dollars each. The names and residences of the applicants are:—D. L. McArthur, Winnipeg; W. S. McLennan, Winnipeg; W. L. Boyle, Winnipeg; James Fisher, Winnipeg; Alex. Matheson, Rat Portage; Geo. McPherson, sr., Anabaskasing Bay; J. C. Hunter, Duluth, Minn.; A. R. Macfarlane, Duluth, and A. M. Morrison, Duluth. The head office of the company is to be Winnipeg, and its object is to develop the mica, asbestos and other mineral resources of the land it holds or may acquire in Ontario, Manitoba and the North-West Territories.

THE PHOSPHATE TRADE.

This has been a season of unusual activity at the phosphate mines of the du Lievre River district, and miners have met with much encouragement. The large increase in the output of the more important mines is evidence that Canadian phosphate is coming more and more into demand as the mineral becomes better known and that mine owners are not dissatisfied with the present market price. True it is that some years ago the price paid in England for our phosphate was a good deal higher than it is now, but the margin of profit to producers was then little, if any, greater. The cost of transportation in former days added quite two dollars per ton for delivery at points of shipment, and ocean freights ruled much higher than they do to-day. Now the increased railway accommodation and summer transportation on the du Lievre river have reduced the cost of delivery from the mines to Montreal to a minimum.

Ocean freight, a few years ago, could not be relied on at less than fifteen shillings a ton while for the past two years eight shillings has been the highest paid, and five shillings may be said to have been the average rate; so that by the reduction in transportation charges the output of our mines can now be laid down in London, Liverpool and other British ports at about \$4.50 per ton less than formerly. This in itself will compensate for a considerable falling off in values. But it is not at all likely that the phosphate market will remain sluggish, if it can be styled so at the present time; it is only in sympathy with general trade which is characterized, the world over, as being greatly depressed; and it has this advantage, there is a demand for every pound of mineral that can be produced, at a price that shows a margin of profit of from 75 to 100 per cent. on the cost of production. That an increased demand for Canadian phosphate is imminent there exists not the slightest doubt; the high grade of the mineral has brought it much into favour in Germany and France, in which countries there is an increasing consumption, and in England our phosphate is now better known than it was when shipments did not exceed four or five thousand tons annually. A letter recently received from one of our mine owners, dated London, gives a most encouraging report of the probable future for the product of our mines in that market. He says: "I am much encouraged as to the future demand for Canadian phosphate. The objections which were to be encountered on all sides a few years ago have now subsided, and the difficulties that had been met with in its use have for ever been overcome. A low grade Belgian phosphate, soft and of a dull shade, is coming largely into use here in England, which is found to combine well with Canadian, and a large supply of the latter is wanted for this purpose. Demand is not limited, but prices, though steady, are in sympathy with the depressed state of all agricultural markets. There is some question as to the continuance of the supply of Spanish phosphate, and this together with the high cost of Norwegian, favours an increased demand and higher prices for Canadian in the future.

THE MINES.

To describe the mines now would be but to repeat what we published in our last number. They are all turning out ore in large quantity and doing excellent work towards further development. The deep workings are all showing immense bodies of mineral which in every instance is found to be purer and more free from admixture with foreign matter than are the deposits near the surface, and hence there is a great saving of labor in cobbing and dressing the output. The production of the more important mines in the district for July and August has been most satisfactory.

The Emerald, with an average force of 80 men, all told, has produced an aggregate of 1,460 tons during the past two months.

The North Star, with a force of 65 men, including all classes of workmen, has produced 1,210 tons.

Star Hill Mine, during the past two months has given employment to an average force of 102 men and has turned out 1,211 tons.

High Rock Mine, with 130 men employed for the last two months has mined and dressed 1,380 tons, making a total output, for the months of July and August, for the four mines of 5,264 gross tons with a force aggregating 377 men.

The *Little Rapids* mine, of which we gave a full description last month, continues to improve with development, and although but a small force is employed the monthly output is more than sufficient to cover all expenditure for the large amount of dead work that is being done in opening up new veins. It may be said that there is no mining being actually done here, the object being to thoroughly prospect the deposits before attacking the bodies of mineral of which there are several thousands of tons in sight in the shafts and open workings. Buildings are being erected for the accommodation of a large number of miners and other improvements are being made for the advantageous handling of the output of the mine.

The *Gold Hill* mine has been quite recently opened in the Gore of Templeton and promises to develop well. Work was begun on this property on August 5th with a force of 15 men and already upwards of 50 tons have been forwarded to point of shipment.

The mines of the Du Lievre district have been visited during the summer by a large number of strangers from the United States, England and Europe, all of whom have expressed much surprise at their condition and the large quantity of phosphate they are producing. The quality of the mineral also has been very highly spoken of by these visitors and a great future for the industry predicted by them.

PHOSPHATE QUOTATIONS.

The foreign market remains steady and prices have not varied since last report. The market continues firm at 1s. 3d. for 75 per cent., a fifth of a penny rise, ex-ship London and Liverpool.

OCEAN FREIGHT.

Little variation has been reported during the summer months; S.S. rates from Montreal to Liverpool and London varying from 6 to 8 shillings per ton.

PHOSPHATE SHIPMENTS from MONTREAL for JULY and AUGUST.

Date.	Vessel.	Destinat'n.	Shippers or Agents.	Tons.
July 3	Ontario	Liverpool	Lomer, Rohr & Co	370
" 6	Benbrach	London	Wilson & Green	253
" 6	Benbrach	"	"	100
" 9	Ocean King	"	Lomer, Rohr & Co	368
" 9	Bristol	Bristol	Wilson & Green	498
" 11	S. Elkonshire	London	Lomer, Rohr & Co	262
" 11	Hafsfjord	Cardiff	Millar & Co	65
" 11	Carmona	London	Lomer, Rohr & Co	502
" 11	Montreal	Liverpool	"	250
" 11	Texas	"	"	135
" 11	Oxenholme	"	"	427
" 15	Escalona	London	Millar & Co	270
" 15	Escalona	London	Lomer, Rohr & Co	255
" 15	Scot and	"	Irwin, Hoppe & Co	100
" 15	Barq. Merritt	Sharpness	Wilson & Green	45
" 15	Mississippi	Liverpool	Lomer, Rohr & Co	135
" 15	Somerset	Bristol	Wilson & Green	386
" 15	Storm Queen	London	A. D. Cameron	276
" 15	S. L. Neigon	Liverpool	Wilson & Green	250
" 15	Barq. Johanna	Hull	Lomer, Rohr & Co	40
" 15	Aslona	London	"	174
" 15	Kehrweider	Hamburg	"	548
" 15	"	"	Lievre Riv. Phos	256
" 15	S. Brooklyn	Liverpool	W. M. Knowles	91
" 15	"	"	Millar & Co	27
" 15	"	"	Lomer, Rohr & Co	280
Aug. 1	Barq. Scotia	"	"	100
" 3	Eel King	London	"	180
" 5	S. Dominion	Liverpool	"	277
" 5	Barq. Achille F	Ponarth Rs	"	103
" 5	Oregon	Liverpool	"	241
" 5	Quebec	"	"	184
" 13	L. Winnipeg	"	Wilson & Green	303
" 13	Dracena	London	Lomer, Rohr & Co	310
" 13	Sarnia	Liverpool	"	428
" 15	L. Champ'n	"	Millar & Co	325
" 21	Montreal	"	Lomer, Rohr & Co	210
" 21	Ocean King	London	"	200
" 27	S. Carmona	"	Wilson & Green	195

Total for July and August..... 9,243
May and June..... 5,317

Total to date .. 14,560