

be reversed, and the title to the phosphate lands, referred to in the *Engineering and Mining Journal*, thus ratified; in the meantime there is no cause for alarm. That any action of the Quebec courts could affect the titles to Crown Lands in Ontario is impossible, and the illusion to them in the article published in the *Engineering and Mining Journal* is an error.

THE OUTLOOK FOR PHOSPHATE MINING IN CANADA.

In the September number of the REVIEW, reference was made to the high standard of the summer's shipments of phosphate from Canadian mines, as shown by analyses returned by English buyers. Communications received from London and Liverpool during the month are less satisfactory, as they report the recent receipt of several heavy shipments of ore which, upon being analysed, proved to be of an inferior grade, and had much to do with the falling off in the demand for Canadian phosphate in the English market. This unfortunate circumstance is due in no measure to inferiority of the deposits, but can be attributed exclusively to a desire on the part of miners to increase their output beyond the capacity of the mines. No greater mistake can possibly be made, and it becomes necessary to reiterate the advice already frequently given to owners of mines, to economize neither time nor labour in separating their ore from refractory matter and other objectionable matrix. The complaints that have reached us from abroad are of a very serious nature, and consignees, in criticising recent shipments, describe the mineral as being badly mixed with iron pyrites and mica, and to such an extent that some manufacturers who purchased have been exposed to serious extra expense in its manipulation. This attempt to increase the bulk of shipments is a shortsighted policy, and is having the

effect of prejudicing manufacturers against Canadian phosphate and of lowering its value in foreign markets. That all miners should suffer from the carelessness of the few is unjust, but, unless prompt steps are taken to prevent low grade mineral from going forward as "1st quality," such will be the inevitable result, and this important industry will be permanently injured. Canadian apatite can be shipped as free from refractory matter as can that from any part of the world, and the expense of cleaning up, so as to bring it to a high state of purity, is much more than counter-balanced by the increased value of the output. During last year one of the most valuable mines of Ottawa County produced a large quantity of ore, and the shipments during the summer show by analyses a variation of seven per cent., all taken from the same deposits. The mineral from the mine referred to should run of a uniform grade of not less than 82 per cent., whereas some of the cargoes sent forward returned analyses varying from 72 to 79 per cent., showing plainly that some one had been responsible for gross carelessness at the mine.

The mines are to-day more capable of producing high grade mineral than they have ever been, and they are yielding abundantly. Owners are equipping their properties with machinery suitable for carrying on permanent operations, and many of them are introducing valuable facilities for the more expeditious and economical handling of the output. The market abroad shows signs of improvement; higher figures are already offered for next spring delivery, and there is every reason to believe that prices will range as high during the winter as they did during the same season a year ago. Much, however, will depend on the quality of the ore sent to point of shipment, as it will there undergo close inspection before being forwarded, so as to avoid a repetition of the recent experiences above referred

to. Let miners look carefully to their own interests, and those of others, and not jeopardize future prospects nor depreciate the value of their properties by shipping phosphate of an inferior grade.

THE MINES.

Nothing could be more encouraging than the present appearance of the mines in the Ottawa district, and owners have begun to prepare for work during the approaching winter. During the autumn season much new ground has been prospected and many promising deposits have been discovered which will afford employment for a large number of miners. At

"HIGH ROCK"

nothing of importance has taken place during the month. The output continues much the same as formerly, viz., about 15 tons daily, and it is not improbable that this will be the average yield for some time to come.

THE UNION P. M. AND L. COMPANY'S

property adjoining "High Rock," is developing as well as could be expected, in fact the most sanguine members of the company could not but be highly pleased with what has been accomplished since the company broke ground last spring. The deposits continue to increase in size as work proceeds, and many new openings of a promising character have been made on the property, while the improvements, in the shape of buildings, docks and a trainway, do much credit to Captain Smith, under whose immediate supervision this work has been carried on. Stockholders and others interested in this company's prosperity will do well to visit the property and judge for themselves of the extent of the developments and of the substantial character of the improvements. A large quantity of mineral is being raised daily and is being forwarded in a state of purity that does credit to the manager of the mine, and that will establish a reputation for the property.

"NORTH STAR."

At this mine a shaft is now down 30 feet in phosphate and several new deposits have been met with equal to, if not better than, anything that has yet been discovered on the company's location. To work this property to advantage at least 100 men might be employed as it has been put in good shape to ac-

commodate a large force. We learn that at present not more than 20 miners and other labourers are engaged, which is, to us unaccountable for we look upon the property as next, in yielding capacity, to the "Emerald" and when properly developed will prove to be of great value. We have pronounced the mineral already shipped from the mine of exceptionally high grade, and in this particular there is no falling off in what is being now raised.

THE "EMERALD"

is looking as rich as it ever did and the quantity of mineral raised each day is about twenty tons, or much the same as it has been for months past. The quality of the mineral is above the average, and, as it is being carefully picked, there is little doubt but that shipments will run uniformly 82 per cent. This mine is now well known to phosphate miners, and it is generally conceded by them to be the most valuable property in the district. Certainly no property has yet been developed that is capable of yielding the same amount of high grade mineral at small cost. With proper management there should be nothing to prevent the ore being mined and delivered at the railway depôt at a maximum price of \$4.00 per ton, and taking this as a liberal estimate, it would not be difficult to calculate the net daily profits on the output.

THE "MCLAURIN" MINE

continues to give employment to a fair force of men and yielding freely, there being apparent diminution in the quantity of ore in sight nor in the daily output. The mineral is of the same high grade as that which is cobbled to the uniform standard that has long since marked the output from this mine since after in the English market.

THE "POST" MINE

shows no signs of weakness, and is equally productive as it has been at any past period; the mineral is of almost a similar grade to that of the McLaurin Mine, but that less care is taken by those in charge at the mine to forward it in as high a state of purity is visible to anyone who may have inspected that portion of the summer's output lying at Templeton Station.

THE "HALDANE" MINE

is yielding well, but the output is not as clean as could be wished. Other pits are, however, sending out very good mineral.