

largely prevented by the action of managers in insisting that the shot-lighters should test the exploders and cables at least once a week, the exploders to be tested on a volt-meter to see if the proper number of volts are registered (at least 65 volts.) and the cables tested to see that the wires are not damaged by being broken or short circuited in any way. It is advisable in choosing exploders that those having a large reserve of power should be selected. Instruments are now made registering 120 volts, and only weigh a few pounds.

It would seem that the miners of the Province of Quebec are not alone in their grievance on subject of explosives for we find on reading Lord Randolph Churchill's interesting book "Men Mines and Animals in South Africa," that at Johannesburg, dynamite, an article of prime necessity in a mining country has been made the subject of a monopoly, and granted by the Government of the Transvaal to an individual who, for considerations unknown, is entitled to exclude all other dynamite from the country but his own, and receives a royalty of 12s. 6d. a ton on all his own dynamite which is consumed.

Mr. Isaiah Johnson (Manchester Geological Society) claimed for the steel or iron girder as a substitute for timber in mines the following advantages:—First, That its life is at least six times that of timber. Second, That there is a proportionately less risk. Third, No stoppages through falls. Fourth, That when a roof is done with, the materials can be used again, or, even if they had to be sold, they would at least take scrap price, whereas timber when broken would be worthless. Therefore taking into consideration the use of labor, and the danger of taking out old timber and refixing new, which is very costly apart from risk, he was convinced that the use of steel and iron for the securing of main roads is preferable to timber.

The revenue derived by the Department of Interior from the sales of coal lands in the North-West Territory during the year ended 31st October, 1892, was \$3,374.70, being an increase of \$1,093.70 over the preceding year. The total area of coal lands sold up to date is 13,649.86 acres, and the total amount received therefor is \$1,083.27.

In our issue of March we published an interesting contribution to the Transactions of the American Institute of Mining Engineers from the pen of Mr. E. E. Russell Tratman, New York on the subject of unfreezable dynamite. In a recent note to the Institute Mr. Tratman called attention to a new high explosive called Maximite, which has been brought out in the United States and is claimed to be both unfreezable and smokeless. It is a nitro-compound, with gun-cotton for its base, and is the invention of Mr. Hudson Maxim, who has had considerable success with the manufacture of smokeless rifle-powders from nitro-compounds. He is now

erecting a plant for the manufacture of the new explosive on a commercial scale. Maximite is said to be equal in power (weight for weight) to pure nitro-glycerine and nitro-gelatine, while 10 ounces of it are equal to 1 pound of 90 per cent. dynamite. The cartridges are fired by ordinary exploders, and cannot be exploded by striking. The products of combustion are mainly carbonic acid gas and water.

As to Liebert's unfreezable dynamite, Mr. Tratman has not yet been able to obtain from the owner of the American patent any particulars of the extent of its manufacture and use abroad, but it is said that arrangements are being made for its manufacture on a large scale in England. A company was organized in London for this purpose in 1890, but apparently nothing practical has yet been done. Col. Majendie, R.E., Chief Inspector of Explosives for the British Government, writes that no explosive of that name, and none claiming to possess its non-freezing property, has been placed on the official list of authorized explosives. A dynamite (Von Dahmen's) which was claimed to possess this property was submitted to the Department of Explosives in 1889. Upon due examination it was approved, but no examinations were made as to its alleged non-freezing property. No license to manufacture or import this dynamite was ever secured, and it is therefore not on the official list.

In a recent number of the Transactions of the Manchester Geological Society, Mr. Jas. Grundy, one of H. M. Inspectors of Mines in Great Britain has something of interest to say on the subject of barometric observations in connection with colliery working. He suggests that one of the practical steps to find out the real value of the barometer as an indicator of dangers to be avoided would be for a number of persons intimately connected with collieries to keep records of a self-recording barometer of a good make, and at the same time arrange for the many and varied changes that take place in mines being as far as possible noted and compared with barometric readings. The observations and records would include falls of roof and sides, unusual appearance of fire-damp or black damp. They would also be of great service in the solution of the problem as to what extent the weighting and unexpected falls of roof, sides, or coal, as well as the issue of gas from them, and from the coal, are affected by the atmospheric pressure. Another matter worth investigation, is the changes, if any in the generality of air circulating in the mine; or the relative value of the air for ventilating, during the varying atmospheric pressures.

Notwithstanding the dullness that is prevalent in certain branches of our mining industries it is gratifying to find that our manufacturers of mining machinery have their hands more than full. The Ingersoll Rock Drill Co., is working night and day shifts, and the same activity is

noticeable at the works of the Canadian Rand Drill Co. and the Jenckes Machine Co. at Sherbrooke. The Ingersoll people have orders in hand for two 20 x 24 piston inlet compressors, and 22 Sergeant coal mining machines, eight boilers and other plant for the new Dominion Coal Company, besides compressors and mining plant for the Lake Gerard Mica Mining System and other mines. The Jenckes Machine Co's large and well equipped establishment at Sherbrooke is also busy on plant for the Dominion Coal Co., among which we noticed the other day two large hoisting engines. Other manufacturers in Ontario and Nova Scotia, we are glad to see, are also doing good business with our mines and quarries.

At a meeting of sub-committee of the General Mining Association of the province of Quebec, held at Sherbrooke, Que., on 12th instant, it was resolved to recommend that the Association memorialise the Government to extend the working of the present law respecting the free admission of mining machinery to read "That all machinery and appliances for mining, quarrying, smelting, concentrating, refining and treating ores or minerals not manufactured in Canada be admitted free of duty." As our readers are aware the law at present is restricted to *mining* machinery only. Needless to say such a change in the application of the tariff is a consummation most devoutly to be wished by every mineral operator in the country. At the same meeting a statement of the various classes and kinds of mining machinery manufactured in Canada was drawn up. This has been forwarded to the Mining Society of Nova Scotia for extension and revision and will be finally submitted for adoption at the meeting of the Association at Sherbrooke on 5th July. It will then be filed with the Department of Customs for reference.

Under date of 15th instant the North Sydney *Herald* contains the following:—

"Can you give an anxious public any information as to what has become of the threatened legal proceedings against the Ottawa Mining Journal by Mr. Kennelly? It will be remembered that this periodical over six months ago gave some enlightening information of certain management of the property of the Sydney & Louisburg Coal & Railway Company's property in Cape Breton. The uninitiated and unsuspecting stood aghast at the fearlessness, certainly begotten of an honesty of purpose, that characterized the utterances of the Mining Journal in its criticisms of the management of that unfortunate company's property. After the appearance of those articles Mr. Kennelly threatened the Mining Journal with legal annihilation unless it would withdraw its statements. The Journal refused to move one iota from its position or withdraw one word of its published statement and dared Mr. Kennelly to legal combat. Has the ex-manager of the Sydney & Louisburg company considered discretion the better part of valor and withdrawn the libel suit against the Mining Journal? Possibly dreams of that famous 'impact of running ice' has cooled down his wrath. It would be funny to hear his narrative under cross-examination in a court of law, of the origin, growth, capital, disposition of profits, management and personnel of a mercantile firm in this town called 'J. Webb & Co.' The Journal, in its scathing review, referred to this concern. Does the ex-manager remember this? Although his career in Cape Breton is ended, and although everyone laughs at him and at the many, in a certain sense, amusing tales told of a management, the success of which I will allow sore-hearted stockholders to tell, yet I, like the rest of a curious and amused public, would like to know what has become of Kennelly's famous libel suit against the Ottawa Mining Journal?"

So would we!