

The gold mines of Nova Scotia are good investments when properties are selected with care and managed with ability and economy, and they need, as a rule, large working capital. But British investors are asked (not only with regard to this scheme but all others as well) to look carefully into the alleged merits of the enterprise and also into the character of the management proposed.

EN PASSANT.

In the compilation on the subject of the Industrial uses of mica presented by the editor of this paper before the General Mining Association of the Province of Quebec last month it was stated that the new insulator known to electricians as Micanite was made from pulverized or comminuted mica mixed with liquid cement. In a letter from the Mica Insulator Company of New York, the writer describes this new insulator as follows:—

"We take natural sheet mica, small pieces preferred, from which we manufacture Micanite. We have nothing to do with ground mica, nor do we use it in any form. We are able under our patented process to take small pieces of waste mica, and build it up into sheets 40 inches square, and larger if necessary; and we are also able to make it in any desired form. We are supplying the electrical trade very largely, in fact we have more orders than we can fill. We wish to compliment you, however, on your article, as it is certainly very interesting. We send you by mail a sample slot trough made for the W. P. 50 Armature Thomson-Houston motor. By examining this, you will see at a glance that we do not use ground mica as any one would suppose we do from reading your article." It gives us great pleasure to acknowledge and give space to this correction.

They who are ever looking for the American capitalist whose arrival will develop our iron mines, and who believe he is sure to come because President Cleveland will take the duty off iron ore, may be able to reconcile their hopes with the facts that hundreds of iron miners have been paid off in the Lake Superior districts, several mines have been shut down, and ore has been offered cheaper than ever before known in the history of American iron mines.

The market for Canadian Asbestos, at last advances, is reported more hopeful and several contracts at fair prices, have been made. An English correspondent states that stocks on hand are greatly reduced but that buyers are holding off in the hope of getting a further drop in prices.

With the closing down of the High Rock and Squaw Hill Mines active operations in the production ofapatite in the Ottawa Valley ceases and the industry for the first time in its history is at a complete standstill. Our last quotation for 80 per cent. is 10½ d. Hamburg, a slight advance which we trust will be the precursor of better things.

Another new device for the prevention of cage accidents has been invented. This time the patentee is Mr. F. Settle, manager of the New Mill Gas Works, Huddersfield, England. According to the description supplied by Mr. Settle, a chain or rope is attached to the cage in the ordinary way, but on the top of the cage, on either side of the chain, is a hinged vertical link, on the upper end of which is a horizontal lever, the opposite end being hinged to a block capable of sliding up and down vertical rods placed at each side of the cage for that purpose. The vertical links and horizontal levers are so arranged that when the cage is suspended by the chain the blocks move more freely up and down the vertical rods; but if the chain or rope break and cease to suspend the cage then the ends of the horizontal levers come into contact with a stud and bind against the vertical rods, whereby the descent of the cage is at once arrested. This takes place whether the rope or chain is lowering or lifting the cage. Guide rods of 1½ inches in diameter, it is stated, will bear a breaking strain of 78 tons considerably in excess of the weight and load of an ordinary cage, which usually ranges from five to fifteen tons.

Accounts come from Germany that Herr Krupp is now constructing a number of experimental engines to test a novel idea. A German inventor has taken out letters patent covering the utilization of the general principal that finely divided carbonaceous matter floating in the air readily explodes. He proposes to grind coal to an impalpable powder, and, after introducing the dust floating in the air into the cylinder of an engine, explode it, the idea being to follow very much the same lines which are being so thoroughly developed in the use of gas in engine practice. Naturally, the first question which has arisen has been how to get rid of the ash. Herr Krupp is reported to have stated that his experience in gun manufacture convinces him that this is not a serious obstacle. The advantages which would grow out of a direct utilization of mineral fuel as mined are very obvious. While modern practice converts only 10 to 15 per cent. of the heat energy stored in coal into power at the crank shaft of a steam engine, it is believed that no less than 75 to 80 per cent. could be made available by the direct combustion of the fuel through explosion of coal dust.

Professor A. B. W. Kennedy, F.R.S., delivered a lecture in the Royal Institution, London, Eng., recently on "Possible and Impossible Economies in Energy Utilization," a subject which he described as of national interest, as economy in energy might mean wealth and prosperity to a nation, while waste in energy might mean diminished commerce and general depression. As an engineer, he stood on the firm basis of the fact that nothing was impossible except perpetual motion and the transmutation of metals. In essence, all the impossibilities he would have to mention were perpetual motions—attempts to get more

out of something than was in it. He gave as instances the attempts to utilize the steam in an engine over and over again, and to make out of coal a fuel which had twice the value of the coal itself. More than half the possibilities of economy were possibilities of improving up to the best work already done. If, for instance, the average working of steam boilers all over this country were brought up to the standard of the best working, about 30 per cent. of our coal would be saved. He analysed the working of electric light plant, compressed air plant, and electric tramway plant, as well as steam and gas engines, and said there was no very large possibility in saving in the generation of electricity, but there was an enormous possibility of economy in utilizing the current for light in the lamp itself. He also emphasised the importance of superheating steam. To sum up, there seemed to be no very startling possibilities before us, except in increasing the efficiency of electric lamps and bringing up gas engines to their theoretical maximum. In other respects matters would develop more or less rapidly, but always less and less rapidly as they approach the limit of efficiency.

The Council of the Mining Society of Nova Scotia is arranging an excellent programme for the Quarterly General Meeting to be held on 27th and 28th of June, at New Glasgow. The works of the Pictou Charcoal Iron Co., the New Glasgow Coal, Iron and Rail Co., and the Nova Scotia Steel Works, together with an inspection of the collieries in the neighborhood are features which in themselves should stimulate a large attendance.

The General Mining Association of Quebec will hold its next meeting at Sherbrooke on Wednesday, 5th July. An excursion on Lake Memphremagog to the charming watering place at Newport, together with other items of unusual attractiveness are on the cards. Mr. F. P. Buck, a prominent citizen of Sherbrooke, and a member of Council, has the programme in hand which is a sufficient guarantee of the excellence of the bill of fare to be provided. At the sessions several papers on subjects of interest will be submitted.

In a discussion on the subject of mis-shots before the Manchester Geological Society a Mr. Dobbs said that at his colliery they had fired some 16,000 shots during the year, and 23 had missed. These detonators were recovered by boring a hole 9 in. to 12 in. from the old hole and charging it, then connecting the wires of the mis-shot to the cable, so that when the mis-shot was fired there was no difficulty in finding the mis-detonator. His instructions were strict on this point; the mis-detonator must be found. When recovered they were brought to his office and the cause of the mis-shot ascertained. In eight cases out of 23 he had found it to be the fault of the detonator wires being broken, and in the 15 he could not fire them with the battery. Another speaker claimed that the occurrence of missed shots can be