The property has been continuously operated for the past five or six years, weekly shipments being made to Buffalo and Cleveland, a production last year at the rate of 15 cars per week having been maintained. About three years ago the Madoc Mining Company commenced development operations at a property near Bogart, in North Hastings. The mine was steadily worked until the autumn of 1903, when some dispute arose between the owners of this and the adjoining property, as to the location of the boundried lines between the two. This matter having been at length settled, operations were resumed. In 1904 another property, near Queensboro, North Hastings, was worked by the British American Development Company. The property has since been acquired by a subsidiary concern known as the British American Pyrites Company, and for the past year development work has been in The deposit, although not developed to progress. the same extent as the Bannockburn and Bogart mines, promises exceedingly well. Development,



Pyrites Mine of B. A. Pyrite Co., Queensboro, Ont. General View.

up to the present time, comprises an 8 x 12 ft. shaft, which has been sunk to a depth of 75 feet through solid pyrite, for this distance, only one break having occurred when a wedge of talcose schist was en-This schist carries a proportion of ore, countered. and if a roaster were installed at the property could be utilized to advantage. Surface crosscuts on the ground meanwhile indicate a large occurrence of ore, and this presumption is supported by favourable geological conditions in the vicinity. No ore has yet, however, been marketed, although there is now in the dump some 750 tons taken from the shaft, less than 20 tons of which are unmarketable product. The ore is granular and free from arsenic. a circumstance which is considered an advantageous one. It contains, moreover, about 50 per cent. of The plant comprises steam drills and sulphur. pump. The installation of an air compressor, and possibly a roaster, is however under contemplation.

The ore is worth \$5.00 f.o.b. at Queensboro Station, half a mile distant from the property, and as this ore can be mined at a cost of about \$2.00 per ton, a considerable margin of profit remains. Recently arrangements have been made to build a spare line from the Bry of Quinte Railway to the property, which will save the cost of hauling the orc on waggons. Later advices inform us that the British American Pyrites Company has sold the dump of ore at the mine—equivalent to 600 tons—to the Contract Process Co., of Buffalo, at the rate of \$12.50 per ton, the sulphur contents being estimated at 45 per cent.

AN ELECTROLYTIC METHOD FOR PRODUCING BICALCIC PHOSPHATE.

Mr. Wm. Palmaer, Director of the Electro-chemical Laboratory at the Technical College, Stockholm, Sweden, gives a brief account of an electrolytic method of producing bicalcic phosphate for use as a fertilizer out of unserviceable raw phosphate, this being published as an appendix to the Report of the Dominion Government Superintendent of Mines. In the hope that this new and cheap method may help to revive the now defunct phosphate industry in Canada, we reproduce in the REVIEW some of Mr. Palmaer's observations. After pointing out the fact-which is well known-that large quantities of raw phosphate occur which are not available for the production of superphosphates. either by reason of their low percentage of phosphoric acid, or on account of other drawbacks attaching to them, Mr. Palmaer proceeds to describe the method, which is protected by patent rights, as follows:----

I.—General Features of the Method.

In an apparatus expressly adapted for the method, a solution of chlorate or perchlorate of sodium is electrolyzed. In the anode chamber an acid is thereby generated-chloric or perchloric acid-and in the cathode chamber a solution of The electrolysis is continued until caustic soda. a certain quantity of the dissolved salt has been separated into acid and alkali. The anode and the cathode solutions are led off into separate receivers. The acid anode solution is then allowed to work in a dissolving battery upon raw phosphate, in which process the phosphate is dissolved. Into the solution thus obtained the alkaline cathode solution is introduced, the while being meanwhile kept vigorously stirred, until the liquid bears evidence of a slightly acid reaction; to obtain that result, about half the cathode solution is required. In the process, blcalcic phosphate falls as a finely crystalline precipitate, which is drained off by filtration and The filtrate, which contains one-third of washed.