The company's plant for the production of ground barite has but recently been completed. It consists of a substantial frame building, 115 feet by 52 feet, with power house attached, and is fitted with the necessary machinery for crushing, washing, and grinding the ore.

Milling.

The crude barite is first put through a small Blake crusher, set to one inch. It then passes by gravity through a rotary grinder which reduces it to about 4-mesh. Next it is elevated to a 16-foot log washer. The washed ore is delivered to one or four lead-lined tanks, each 12 feet in diameter and 3 feet deep, where it is subjected to treatment with dilute sulphuric acid. Such impurities as lime, iron, and managanese, which are present in various forms to the extent of 3 to 4 per cent., are thus removed. The quantity of acid used is about 5 to 6 per cent. by weight of the ore treated.

After three or four hours the acid solution is run off and the ore is thoroughly washed in the tank. It is then transferred to steam-heated drying floors. When thoroughly dried it is elevated and passed through four sets of buhr-stones. The stones are 48-inch diameter, top-runners, set in heavy wood husks, and are arranged in batteries of four, driven by gears from a single shaft. The ore is conveyed from set to set through the whole battery by a system of elevators and screw conveyors. The finished product is put up in barrels of from 700 to 800 pounds each. The capacity of the plant is one ton of ground barite per hour.

General.

The quality of the product is higher than that of any such material yet produced in Canada. It is white and free from grit. Analyses show it to contain more than 99 per cent. barium sulphate. Recent tests made in the United States have proved it to be quite equal to the highest grade German barite which for years has been the standard of the world.

The greater part of the output is being disposed of to manufacturers of paints and is being used by large concerns both in Canada and in the United States.

It is the intention of the company to add to the plant until the present capacity is doubled. Moreover, a subsidiary plant will be erected for the production of such commodities is precpitated barium' blance fixe, barium carbonate, barium oxide, lithophone, etc.

It is probable that work will be resumed on the McMillan property. Shipments made from the vein uncovered gave encouraging results.

The Nova Scotian barite industry is undoubtedly susceptible of expansion. But it is one of the branches of mining that needs considerable preliminary expenditure, both to erect plant and to secure market.

DOMINION MINING COMPANY AT TANGIER. N.S.

The gold district of Tangier in Nova Scotia is one of the three first localities where gold was first discovered in the province about 1860. There has been a good deal of work done in Tangier since its discovery, in the way of small mining companies, tributers and prospectors. The geological structure of this section of the gold-bearing area of Nova Scotia is one of the most symmetrical anticlinal domes in the Province. The axis of the anticline is nearly vertical, the dip of the legs is nearly equal, and the pitch of the nose on one end is almost the same as on the other end of the dome.

There are a number of quartz gold-bearing leads on the areas held by the Dominion Mining Company. Some of these have been worked before by a number of small operators. The leads that are being exploited by the present company are known as the Kent, Murphy Twin and Nigger Leads. The first named lead is the one on which the main shaft has been sunk and in which the principal driving and stoping has been carried on. This lead occurs in a bed of slate and shows a thickness of quartz from 8 to 15 inches. The lead contains a little arsenopyrite, pyrite and galena, but is only sparsely mineralized. The strike of the lead is nearly east and west (magnetic) and the dip about 70 degrees. The plan and elevation of the workings show the general extent and pitch of the ore shoot and also the amount of ore which has been removed.

The Murphy Twin lead consists of two small veins of gold-bearing quartz; one one-half inch thick and the other two inches in thickness. This lead lies about 30 feet south of the Kent lead. The Nigger lead averages 12 inches in thickness.

In order to cut down working costs in the direction of cheaper power, the company developed a nearby water power during the year 1909 and changed from steam to a hydro-electric plant for power. A dam was built across the Tangier River about one mile above the bridge on the Main Post Road. From this dam, the water is conveyed in a flume, 10 by 14 feet, for a distance of 925 feet to the power house. The total head