

BETHEL GARNET MINE

The History of an Important Mineral Industry

THE DISCOVERY OF THE MINE

Sixteen Years Ago the Ground Now Including the Mine, Was Farm Land, and No Suspicion of the Rich Mineral Deposit Existed.

Early this week a gang of men at the Bethel garnet mine were set to the task of pumping from the big excavation the thousands of gallons of water that had accumulated during and since the last winter. There was nothing unusual in the pump or in the manner of the pumping. It was not this that the visitors came to see. The fact is that the water had entirely hidden from view the scene of operations at the bottom of the hole, from where, for many years past, thousands of tons of the "bloody stone" have been dislodged, taken to the surface and converted to the uses of man. Work, however, has not been abandoned at the mine. The men have been cutting great quantities of garnet from the side of the deposit. Progress has been made so far at this particular point, that it was unhandy, and even dangerous to follow the vein from the top without removing the water from the mine proper.

The Bethel garnet mine is located in Bethel Township, a quarter mile west from the village of Chelsea. It may be reached by a direct road leading to it from Boothwyn station, on the B. & O. Railroad, after a two and a half mile walk or drive. Its location is obscure, being surrounded by hills and valleys, and very few houses are in its immediate vicinity

DISCOVERY OF THE MINE.

Sixteen years ago the excavation, now nearly 150 feet deep from the highest point, and about a quarter of a mile in circumference, was farm land, as hilly as that peculiar to Delaware County. It was then considered of no more value commercially, than that in proximity to it.

It was not until 1879 that the faintest suspicion that a large deposit of garnet lay hidden beneath the surface, and the idea was not verified until John Smedley, the well known geologist of this county was called upon to decide the matter. He took a walk one day over the farm and picked up specimens similar to that which has since been mined. Further investigation and continued efforts at digging soon revealed the fact that first impressions were correct.

At once, there was a rush of projectors eager to purchase the property. The farm was then owned by Beaumont Brothers, of Wayne, who in view of the fact that crops on the farm were not paying largely, finally submitted to a proposition from Herman Baer & Co., of Brooklyn, N.Y. who leased the land, covering a tract of about 74 acres, for one year, with the privilege of buying it. The company soon erected a plant and began to mine the material for the manufacture of emery wheels and emery paper.

The first year the output was meagre, less than 75 tons being the result of the entire season's work. The place was eventually purchased by the above firm and for sixteen years the demand has grown annually until 100 tons per month is now the rate.

HOW IT IS PREPARED

During the past year, the latest improved machinery has been introduced and with the changes a new building has been erected. The method of preparing the garnet for shipment to New York is very

interesting. At this time of the year, people from various points who are summering in the vicinity, and particularly those geologically inclined pay daily visits to the mine, examine the various strata and take away specimens of the stone.

The crude material, which is very nearly pure, is taken from the mine and put through the crusher which reduces it to a uniform size. It is then lifted from the floor to a hopper through which it finds its way into a cylinder which revolves inside a larger cylinder. Here it is crushed still finer and partly washed. It then passes through a trough of water in which there is a revolving screw which deposits it on the ground from one end. Here it is gathered and put into a monster sheet iron tank where all the exhaust steam and heat from the boiler concentrate and dries it more thoroughly than the old wearisome way of spreading it on boards exposed to the sun.

THE PROCESS CONTINUED

The process of sieving is then gone through with. The matter prepared as above is delivered from the dryer, and the whole is passed over a series of sieves each finer than the other. These are kept in motion so that the various sizes drop through the respective sieves into a bin below from which it is bagged and shipped.

The lifting of the garnet from various parts of the mine is done automatically by means of cups, attached to gum belts, which, revolving over pulleys, pick up the ground material from one side and empty it on the other.

The machinery was all designed by the superintendent, Geo. W. Sharp, who directed a Times man through the works. Mr. Sharp is a mineralogist, having made the properties and characteristics of metals a study for years. At his home near Boothwyn station, he has a cabinet embracing specimens from all parts of the world.