

BARITE.

Barite is a natural sulphate of barium. It is of high specific gravity—4.5, as compared with quartz, for example, which has a specific gravity of about 2.65. It is usually white or nearly so when pure, but it is often found stained by iron oxide and other impurities. This mineral is also known by the following names; *barytes*, *heavy spar*, *lead bloom*, and *cawk*.

INDUSTRIAL USES.

Paint making. Barite is used for three purposes by paint manufacturers.

1. As a "filler" for white lead and other paints. It was first employed purely as an adulterant both on account of its weight and its cheapness as compared with the white lead with which it was mixed. Later it was recognized that it had properties which gave to the paint certain advantages. For example, the fine angular grains were found to give to the surface of the paint a "tooth" which offered a good bond to subsequent coats. It also adds to the life of the paint, since it is unaffected by weather and chemical fumes.

2. As a vehicle for colour in paint making. In "The Barytes Deposits of Lake Ainslie and North Cheticamp, N.S.,"¹ Henry S. Poole says: "The fitness of barytes as a pigment is due not merely to its weight and absence of colour, but to its aptitude to take colour-stain uniformly and make a small quantity of a decided colour cover much surface, a property not equally borne by other white substances, such as gypsum and marble, which the manufacturers of barytes for the market find it desirable to remove by special treatment. Barytes acts as a base for aniline and certain other pigments."

3. For putty making. Putty is often made by simply mixing whiting and linseed oil to the consistency of dough. By substituting barite for part of the whiting a lesser quantity of oil may be used to produce the same bulk, thus saving on the price of oil.

¹Report No. 953, Geological Survey, Department of Mines, page 34.