

*Gibbsite* or *Hydrargillite* is comparatively rare. Occurs mostly in white or pale greenish-yellow mamillary and stalactitic examples, and in small hexagonal prisms with basal cleavage. H 2·5 to 3; sp. gr. 2·35. BB infusible, but commonly exfoliates. Water percentage, 34·5.

*Calamine*, *Allophane*, *Kollyrite*, and *Halloysite*, are decomposed with *gelatinization* by hydrochloric acid. The first scratches calcite very strongly, and some examples scratch glass slightly. The others are softer than calcite.

*Calamine* or *Zinc Silicate* occurs chiefly in aggregations of small, vitreous crystals, and in botryoidal and cavernous masses, either colourless, or brownish, yellowish, &c., and sometimes light-blue from presence of a small amount of copper oxide. But it is chiefly distinguished by yielding a sublimate of ZnO, when fused with a mixture of carb. soda and borax in a good reducing flame on charcoal. The sublimate is lemon-yellow whilst hot, and white when cold; and it becomes light-green when moistened with a drop of cobalt nitrate and again ignited. Another distinctive character (as regards the minerals associated with it in this group) is its property of forming BB with borax a glass which on saturation becomes opaque-white by flaming or when cold. H 5; sp. gr. 3·3 to 3·5. The powder ignited with cobalt solution, becomes partly green and partly blue on cooling. In the bulb-tube yields 7·5 per cent. water.

*Allophane* occurs in amorphous, botryoidal and similar examples. H 3; sp. gr. about 2. Sometimes mixed with copper silicate and then light-blue or green in colour, otherwise red, brownish, &c. *Halloysite* and *Kollyrite* are