

The above short list embraces all the substances considered *essential* to the varied rocks and other formations of our State. There are in addition a very large number of minerals which are associated with or embraced by the different rocks. Some are important for their uses, whilst others, interesting only to science, are not noticed in my reports. They should, however, be described in a full report upon the Geology of the State.

The characteristics of all the rocks of Maryland having been described in pages 21 to 30 of the report of 1860, I propose at this time to refer to them very briefly.

## A.—ROCKS SUPPOSED TO BE OF IGNEOUS ORIGIN.

### 1.—GRANITE

Is an unstratified rock consisting of a confused assemblage of chrystalline grains of quartz, felspar and mica.

### 2.—SYENITE

Is also an aggregate consisting of felspar and hornblende.

### 3.—QUARTZ

Sometimes occurs in sufficiently large masses to constitute a *rock* but never occupies areas so extensive as most other rocks. In some parts of this State it occurs in veins and masses in gneiss, mica slates and other rocks.

### 4.—PORPHYRY

Is not an aggregate, but consists of chrystals of felspar or other mineral imbedded in what was probably a soft paste and subsequently hardened into a solid rock. It presents many varieties.

### 5.—AMYGDALOID

Differs in appearance from porphyry because of the rounded form of the imbedded grains.

### 6.—TRAP, OR AMPHIBOLITE.

These names have been applied to various intrusive rocks, but should be restricted to those consisting of hornblende or pyroxene and felspar, forming a granular aggregate. The grains in some cases are so minute as to give the rock a compact appearance.