

2. This seems to be owing to the scales of mica in the gneiss being parallel, or nearly so, to each other, whilst in granite no such parallelism exists. The proportions of the minerals in granite are usually thus:—The felspar in the largest proportion, next is quartz, and last mica, generally in small quantity. Gneiss usually consists of quartz in the largest proportion, next felspar, and last mica, but this is always in larger proportion than in granite.

#### 2.—MICA SLATE

Is composed principally of scales of mica and grains of quartz. When the proportion of mica is small, it forms a hard and durable stone. When the mica constitutes the larger portion of the mass, it is called mica-shiste, because of its readily crumbling down. As we approach the N. W. borders of this formation in Maryland, the proportion of quartz lessens, and as well as the scales of mica, become extremely small. By this means mica slate passes by insensible shades into talcose slate.

#### 3.—HORNBLLENDE SLATE

Is an aggregate of flattened crystals of hornblende and felspar, and sometimes quartz.

#### 4.—TALCOSE SLATE

Seems to have been an argillite more or less altered by heat or other causes, which have produced a glistening appearance. In some localities it seems to approximate in appearance to mica-slate.

#### 5.—CHLORITE SLATE

Appears to consist of chlorite in flattened crystals, and also grains of quartz. We find carbonate of lime disseminated through this rock in at least one locality in Harford county.

#### 6.—GRANULAR LIMESTONE

Is associated with metamorphic and (more rarely in Maryland) with intrusive rocks. It is made up of crystalline grains, sometimes extremely small, as in the statuary marble of Tuscany, whilst in other localities these grains are more than half an inch in diameter, as in Baltimore county, where it is called alum limestone.