

7. Limestone (granular).
8. Dolomite.

#### A.—ROCKS OF IGNEOUS ORIGIN.

The rocks of this class give no evidence of stratification.

##### 1.—GRANITE.

This was considered by the older geologists to be the oldest of the whole series of rocks. It is composed of quartz, felspar and mica, forming what is called an aggregate. By this it is understood that each of its constituents exists in separate crystalline grains firmly cemented or aggregated together, forming a solid mass.

We have seen that both felspar and mica, and even quartz, vary considerably in chemical composition and in color. We would expect, therefore, a great variety of appearance in granite.

In some localities the grains are extremely small, so as to be scarcely distinguished by the most practised observer, without the aid of a lens. Again we have granites whose components are several inches in diameter; and there is every grade between these two extremes.

The most common color of granite is some shade of grey given to it by the dark color of the mica, and sometimes also of the quartz. It sometimes contains red felspar. When all the materials are white, or nearly so, as in some localities, the granite is almost white and strongly resembles granular limestone. In one instance, which came to my knowledge, a granite of this kind was actually tried in a limekiln under the supposition that it was limestone! A few drops of acid, or even trying its hardness by scratching it with the point of a knife would have shown the blunder.

Granite abounds in Baltimore county, and also occurs in Cecil, Harford, Carroll, Howard and Montgomery.

The finer grained varieties can be readily dressed with the hammer and chisel, and it can be split off into stones of any required dimensions. It is much used in constructions requiring strength and solidity.

Indestructible as granite seems to be, yet it is disintegrated under certain circumstances, or becomes rotten in common parlance. This is principally owing to the action of water containing carbonic acid, which dissolves out the silicate of potash contained in the felspar, the texture of which is thus destroyed.

This is one means by which the silicates of potash, soda and lime, so necessary to plants, are supplied to the soil.

When, as is sometimes the case, granite is almost wholly composed of felspar, by the removal of its silicate of potash,