

when the felspar and quartz predominate, it becomes again massive or common granite.

What has been said respecting the alternation of gneiss and granite, will apply to the alternation of granite and mica-slate. In the latter, the felspar is wanting; but if it re-appear, it becomes either granite or gneiss. Mica-slate also passes, by such insensible gradations, into slate, that the occasional occurrence of granite in some ancient slate-rocks, may admit of a similar explanation. We shall thus sweep away the secondary granites, which have so much bewildered the systems of many geologists: indeed nothing can appear more puerile and trifling than the labour of making distinctions, where nature has made none. Of this we have an instance in the distinctive characters which have been given of primary and secondary granite.

Primary Granite.

1. Sometimes red.
2. Contains garnets.
3. Is, sometimes, porphyritic.

Secondary Granite.

1. Felspar, commonly a deep red.
2. Contains garnets.
3. Not porphyritic; but, according to Professor Jameson, is sometimes porphyritic.

Again, M. D'Aubuisson tells us, that the colour of primary granite is almost always white.

What has been advanced may be sufficient to prove, that the attempts to distinguish primary from secondary granite by their mineral characters, are worse than useless; as they waste the time of the learner, and tend to disgust him with a science already too heavily burdened with unmeaning terms and frivolous distinctions.

There is a particular form of granite, in which the constituent parts are so minute and so intimately mixed, that it appears very minutely granular or even compact: to this variety the French geologists have given the name of *Eurite*; it has generally been described by English geologists as *Compact felspar*, into which it passes by insensible gradations. This rock frequently, contains imbedded crystals of felspar, and forms what has been denominated felspar-porphry. In Cornwall, it occurs in beds in common granite; but, instead of being regarded as a different rock, it may be more properly classed by the geologist with granite, being only a variety, in which felspar greatly predominates. This rock occurs, also, in an unconformable position, and is, generally, described as porphyry, and appears to form a connecting link between common granite and the compact varieties of volcanic porphyry, with a base of felspar called by the French *Trachyte*.

Sienitic granite, in which the mica is, partly or entirely, replaced by hornblende, occurs in some situations in the same bed with common granite, and, therefore, must be regarded as a variety of granite. I have frequently observed instances of this change from gran-