

3. *Protogine.*

Protogine, called also talcose granite, is a mixture of quartz, feldspar, and talc. In Europe it abounds among the Alps, and in Cornwall, in England. In this country it occurs among the Laurentian rocks of New York, and in the metamorphic granite of Devonian age in New England.

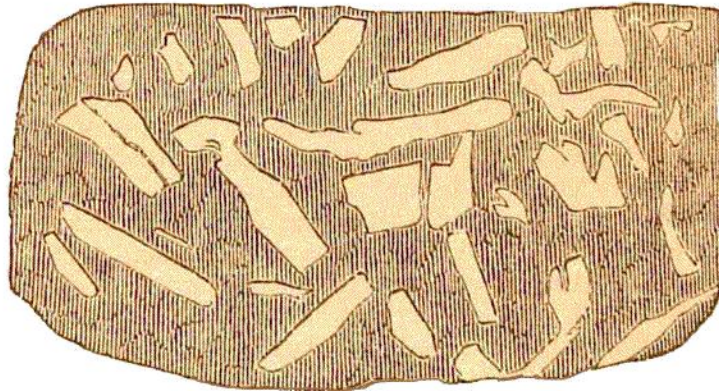
## II. TRAPPEAN ROCKS.

4. *Porphyry.*

Rocks with a homogeneous, compact, or earthy base, through which are disseminated crystalline masses of some other mineral of contemporaneous origin with the base, are denominated *porphyry*. True classical porphyry, such as was most commonly employed by the ancients, has a base of compact feldspar, with imbedded crystals of feldspar.

Fig. 64 was copied from a pebble corresponding to the beautiful green porphyry of the ancients, found on the beach in Scituate, Massachusetts.

Fig. 64.



When the base is greenstone, pitchstone, trachyte, or basalt, the porphyry is said to be greenstone porphyry, pitchstone porphyry, trachytic porphyry, and basaltic porphyry. The base is sometimes clinkstone, and the imbedded crystals may be feldspar, augite, olivine, etc.

Hence the term porphyry designates only a certain form of rock, but does not refer to any particular kind. When porphyry is spoken of in general terms, however, feldspar porphyry is usually meant.

The name porphyry signifies *purple*, *πορφυρα*, such having been the most usual color of the ancient porphyries; but this rock exhibits almost every variety of color. It is the hardest of all the rocks and when polished, is probably the most enduring.

*Compact feldspar*, or *Felstone* sometimes called *petrosilex*, is a hard compact stone of various colors; fusible before the common blowpipe, and often translucent on the edges like hornstone. Its predominant ingredient appears