more than one, the prominent distinctions are usually based on the two most characteristic; and the others are considered as accessory minerals, and are made to distinguish varieties.

The following are distinctions among crystalline rocks, based on texture and structure : —

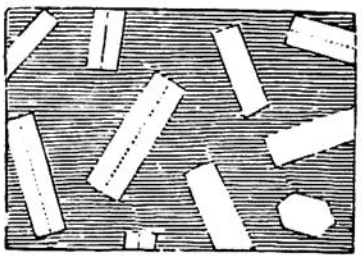
1. *Granitoid.* — Granular-crystalline, like ordinary granite.

2. *Micro-granitic.* — Like granite, but very fine in grain.

3. *Micro-crystalline.* — Compact, and so fine in texture as barely to glisten over a surface of fracture.

4. *Porphyritic.* — Having one of the minerals of the rock in distinct crystals (Fig. 58). The original porphyry of geology included a red porphyry (from Egypt), a compact red rock, finely spotted with pale feldspar (orthoclase) crystals; and a green porphyry — the Oriental verd-antique — with rather large crystals of whitish labradorite, from western Greece. The rocks, although alike in being porphyritic, are not of the same species, but are porphyritic *varieties* of different species, as described beyond.

58.



The mineral in crystals in a porphyritic rock may be any feldspar, or it may be augite, leucite, quartz, or some other species; and whatever the mineral, the crystals are called *phenocrysts*, from the Greek for "visible crystals," a term proposed by J. P. Iddings. The kind of mineral is indicated by the terms *orthophyric*, if orthoclase; *labradophyric*, if labradorite; *augitophyric*, if augite; *leucitophyric*, if leucite; *quartzophyric*, if quartz; *spherophyric*, if containing spherical concretions, etc.

5. *Foliated.* — Having the cleavage-structure of slate, as in extreme cases of foliation; or having an arrangement of the minerals, especially of any foliated mineral like mica, approximately in planes, so that the rock has the appearance of being stratified, and often breaks easily into slates or sheets. The slaty, and all *schistose*, structure, to the faintest, is here included. The planes of foliation are either pressure-made planes, or correspond to planes of bedding or stratification.

6. *Fluidal.* — In igneous rocks, having the material of the rock or of portions of it in parallel lines or bands and looking as if due to the flow of the rock while melted.

7. *Glassy, glass-bearing.* — Melted rocks, when cooled rapidly, often become glass at surface instead of rock; and in some cases all gradations occur in the mass of an igneous rock between glass with microscopic stony points, or *microlites*, and stone with microscopic glassy particles. Lavas have usually particles in a glassy state among the stony particles, which a microscopic study of the rock will detect.