2. *Potash-feldspar and Hornblende or Pyroxene Series.*

SYENYTE (*Syenite* of Werner). — Eruptive, metamorphic ; granite-like, coarse to fine. Gray to flesh-red and dark gray. Consists of orthoclase, with often microcline and hornblende and little or no quartz ; biotite and oligoclase often present. G = 2·7–2·9. From Plauen-Grund, Saxony, etc. Nearly all American syenyte is quartz-syenyte.

QUARTZ-SYENYTE (syenite of most early geologists, hornblende-granite, syenite-granite). — Eruptive and metamorphic. Like syenyte, but containing quartz. Silica 70 to 80 per cent. The name *syenite* is from Syene in Egypt, where a red granite graduating into quartz-syenyte occurs, and is the material used by the ancient Egyptians for the exterior lining of obelisks, etc.

SYENYTE-GNEISS. — Metamorphic, eruptive. Like gneiss in aspect and schistose structure, and also in constitution, except that hornblende replaces mica. Common in Archæan regions, as the New Jersey Highlands, the Adirondacks, etc. Graduates into *Hornblende-schist*, a schistose rock consisting chiefly of hornblende.

AUGITE-SYENYTE. — Eruptive. Like syenyte, but containing, with the orthoclase, pyroxene in place of hornblende. A kind free from quartz occurs at Jackson, N.H. ; in southern Norway. *Monzonyte* is stated to be a variety of augite-syenyte.

AUGITE-QUARTZ-SYENYTE (*Augite-granite*). — Metamorphic ; igneous. Like the preceding, but containing quartz ; the augite in part altered to hornblende, and thence in all stages of gradation down to a hornblende-syenyte. The gneissic variety is common in Wisconsin, much more so than the granitoid.

UNAKYTE. — A flesh-colored, granitoid rock consisting of orthoclase, quartz, and epidote. From the Unaka Mountains, Madison County, N.C., and Cooke County, E. Tenn.

3. *Potash-feldspar and Nephelite Rocks, Hornblendic or not.*

ZIRCON-SYENYTE. — Like syenyte. A crystalline granular rock consisting of orthoclase, microcline, elæolite, little hornblende, crystals of zircon ; often also sodalite, ægyrite, eudialyte, etc. From Norway ; Marblehead Peninsula, Mass., containing sodalite.

FOYAYTE. — Eruptive. Coarse, crystalline granular to aphanitic. Consists of orthoclase, nephelite, hornblende, or ægyrite, with often sodalite, etc. From Mounts Foya and Picota in Portugal, making a dike ; on eastern slope of Blue Mountain, New Jersey, between Beemersville and Libertyville.

MIASCYTE. — Granitoid to schistose. Consists of microcline, elæolite, biotite, with some quartz ; often also zircon, monazite, sodalite, cancrinite, etc. From Miask, Ilmen Mountains ; Pic Island, Lake Superior ; Litchfield, Maine.

DITROYTE. — Coarse to fine-grained. Consists of microcline, nephelite (elæolite), and sodalite. From Ditro, Transylvania.

PHONOLYTE (*Clinkstone*). — Eruptive. Compact, more or less slaty in structure. Gray, grayish blue, brownish. Usually clinking under the hammer like metal when struck (and thence the name). G = 2·4–2·7. Consists of glassy orthoclase, with nephelite and some hornblende. In Colorado, Auvergne, Breisgau, Bohemia.

4. *Leucite Rocks, with or without Augite.*

Usually some sanidin (orthoclase) is present, and often also nephelite and labradorite.

AMPHIGENYTE (*Leucitophyre*). — Eruptive. Contains augite, like doleryte, but leucite (called sometimes amphigene) replaces the feldspar. Often contains chrysolite, nephelite, sanidin, labradorite, brown mica, with sodalite, etc. Dark gray, fine-grained, and more or less cellular to scoriaceous. G 2·5–2·9. The leucite is disseminated in grains or in 24-faced crystals. Constitutes the lavas of Vesuvius and some other regions.

LEUCOTEPHRYTE. — Eruptive. Like the above, and occurring in the same regions, but containing much labradorite.