8. *Vesicular.* — Having small cavities in the rock (igneous), made usually by steam, as in many lavas.

9. *Scoriaceous.* — Having vesicles in so great abundance that they make the chief part of the mass like much furnace slag, as a scoriaceous lava.

10. *Amygdaloidal* (from *amygdalum, an almond*). — Having the vesicles (which are often almond-shaped) filled with minerals foreign to the rock, such as quartz, calcite, and the zeolites. Trap, or doleryte, and related basic eruptive rocks are often *amygdaloidal.*

The following are other terms used in describing either fragmental or crystalline rocks: —

Quartzose. — Consisting of quartz; containing much quartz.
Calcareous. — Consisting of limestone (calcite); containing much calcite.
Ferruginous. — Containing much iron oxide.
Argillaceous (from *argilla, clay*). — Made of more or less hardened clay or fine mud; containing clayey material.
Pyritiferous. — Containing pyrite.
Granitic. — Made of granite sand, or gravel.

(2) **Descriptions of rocks.** — The kinds of rocks are described under the heads of —

LIMESTONES, or CALCAREOUS ROCKS.

FRAGMENTAL ROCKS, NOT CALCAREOUS.

CRYSTALLINE ROCKS, EXCLUSIVE OF LIMESTONES.

In the names of rocks, the termination *ite* is here changed to *yte*, as done in the author's *System of Mineralogy* (1868), in order to distinguish them from the names of minerals. Granite is excepted.

LIMESTONES, NOT CRYSTALLINE.

MASSIVE LIMESTONE. — Compact uncrystalline; color whitish, dull gray, bluish gray, brownish, and black. Texture compact to earthy, sometimes semi-crystalline. Consists essentially of calcite or *calcium carbonate* (page 68), but is often impure with clay or sand.

Most limestones are of organic origin. A dark or black color is usually owing to some carbonaceous material present, derived from the decomposition of the plants or animals of the waters in which they were formed. When burnt, limestone (CaO_3C) becomes *quicklime* (CaO), through loss of carbonic acid (CO_2); and, at the same time, all carbonaceous materials are burnt out, and the color, when it is owing solely to these, becomes white. A limestone made of pebbles of limestone is called a *limestone conglomerate*, as that of the Potomac.

MAGNESIAN LIMESTONE, DOLOMYTE (page 68). — Calcium-magnesium carbonate. Not distinguishable in color or texture from ordinary limestone. Much of the common limestone of the United States is magnesian. While some of the magnesian limestone is true dolomite (or has the calcium and magnesium in the atomic proportion 1 : 1), much is a *mixture* of calcite and dolomite.

In some limestones the fossils are magnesian, while the rock is common limestone. Thus, an *orthoceras* in the Trenton limestone of Bytown, Canada (which is not magnesian), afforded T. S. Hunt calcium carbonate 56·00, magnesium carbonate 37·80, iron