be noticed even in the purest marble (*Cipolino*). Some crystalline limestones associated with gneiss and schist are peculiarly rich in minerals—mica, garnet, tremolite, actinolite, anthophyllite, zoisite, vesuvianite, pyroxenes, and many other species occurring there often in great abundance. These inclusions can be isolated by dissolving the surrounding rock in acid (*ante*, p. 157).

Marble is regarded by most geologists as a metamorphic rock, that is, one in which the calcium-carbonate, whether derived from an organic or inorganic source, has been entirely recrystallized *in situ*. In the course of this change the original clay, sand or other impurities of the rock have been also crystallized, and now appear as the crystalline silicates just referred to. Marble occurs in beds and large lenticular masses associated with crystalline schists on many different geological horizons. In Canada it occurs of Laurentian; in Scotland of Cambrian; in Utah of Upper Carboniferous; in Southern Europe of Triassic, Jurassic and Cretaceous age.

Dolomite (Magnesian Limestone) consists typically of a yellow or white, crystalline, massive aggregate of the mineral dolomite; but the relative proportions of the calcium and magnesium-carbonates vary indefinitely, so that every gradation can be found, from pure limestone without magnesium-carbonate up to pure dolomite containing 45·65 per cent of that carbonate. Ferrous carbonate is also of common occurrence in this rock. The texture of dolomite is usually distinctly crystalline, the individual crystals being occasionally so loosely held together that the rock readily crumbles into a crystalline sand. A fissured cavernous structure apparently due to a process of contraction during the process of "*dolomitization*," is of common occurrence: even in compact varieties, cellular spaces occur, lined with crystallized dolomite (Rauchwacke), the crystals of which are often hollow and sometimes inclose a kernel of calcite. Other varieties are built up of spherical, botryoidal and irregularly-shaped concretionary masses. Dolomite, in its more typical forms, is distinguishable from limestone by its greater hardness (3·5–4·5), higher specific gravity (2·8–2·95), and much less easy solubility in acid. It occurs sometimes in beds of original deposit, associated with gypsum, rock-salt and other results of the evaporation of saturated saline waters; it is also found replacing what was once ordinary limestone. The process by which carbonate of lime is replaced by carbonate of magnesia, is referred to