

*Dolomite*, so called in honor of the French geologist Dolomieu, is a variety or modification of limestone; it contains 48 parts of magnesian earth, combined with 52 parts of calcareous earth. Dolomite is found in rocks of different classes; that which occurs at St. Gothard, and other parts of the Alps, closely resembles white primary limestone: it is minutely granular, and the grains are easily separated by the finger; but some varieties are harder. Dolomite and the magnesian limestones in the secondary strata, dissolve with more difficulty in acids than common limestone. Dolomite forms vast beds in the western Alps; it occurs also in various parts of the Apennines; in Carinthia there are entire mountains of Dolomite. The beds of Alpine Dolomite are often much broken, apparently by the protrusion of beds and masses of porphyry. The eminent geologist Von Buch maintains, that limestone has been converted into Dolomite by its proximity to porphyry in fusion, and that the magnesia has been transferred from magnesian minerals in the porphyry to the limestone; the magnesia being reduced to vapor or gas. Great difficulties attend this theory; I shall hereafter notice situations in England, where the theory might be subjected to the test of direct experiment. For the present, it may be sufficient to notice, that many strata of magnesian limestone appear far removed from the possible influence of igneous rocks. Magnesia is found in many earthy minerals, and may be regarded as a constituent element of the globe.

*Serpentine* derives its name from its variegated colors and spots, supposed to resemble the serpent's skin: its chemical composition has been before described. The colors are, most generally, various shades of light and dark green, which are intermixed in spots and clouds; some varieties are red. When fresh broken, it has some degree of lustre, and a slightly unctuous feel; when pounded, the powder feels soapy. It is harder than limestone, but yields to the point of a knife, and will receive a very high polish. When serpentine is found intermixed with patches of crystalline white marble, it constitutes a stone, denominated verde-antique, which is highly valued for ornamental sculpture. Some varieties of serpentine are translucent, in others, there is an appearance of crystallization, forming a mineral called diallage or schiller spar. The minerals associated with serpentine are generally those allied to talc. Compound rocks in which talc and hornblende are predominating ingredients, pass into serpentine. Magnesia enters, largely, into the composition of these rocks. A late analysis of one kind of serpentine, gave forty eight per cent. of this earth. Serpentine, commonly occurs in gneiss and mica-slate, in beds, which are sometimes so thick as to compose mountain masses of considerable height. Serpentine, sometimes, becomes magnetic, from an intermixture with minute particles of magnetic ironstone. Many of the alpine districts in Europe contain rocks and beds of serpentine; but, according to Patrin, there is no serpentine in northern Asia, nor was it seen by Humboldt in the An-