

Gneiss and mica-slate, being nearly similar in their constituent parts and geological position, most of the metallic ores and minerals found in one rock, occur also in the other. Crystalline limestone, hornblende, talc, and serpentine, more frequently, form beds in mica slate than in gneiss. The waved structure is very common in mica slate, and the beds are, often, most singularly bent and contorted.

*Talcous Slate* and *Chlorite Slate* appear to be different modifications of the same mineral substances: in the former the structure is laminated, in the latter it is minutely laminated or granular; the prevailing colour of both inclines to green. These rocks are soft and saponaceous to the touch, and sectile. Mica-slate appears to graduate into talcous slate, particularly in the vicinity of Mont Blanc. In Cumberland and Scotland, talcous and chlorite slate pass into common roof slate, and alternate with it: the change appears to be owing to a greater mixture of magnesian earth in talc slate, than in common slate. Some varieties of chlorite slate are harder and darker, and approach nearly to hornblende slate. The passage from talcous slate to serpentine forms potstone. In primary mountains, talcous slate frequently occupies the place of mica-slate, and is, sometimes, confounded with it; the two minerals, talc and mica, nearly resembling each other. See Chap. III. The large plates of mica, which are made to supply the place of glass in some lanterns and in the slides for microscopes, are always miscalled talc. Sometimes, mica-slate, from an intermixture with talc, forms an intermediate rock, which partakes of the characters of both rocks: such mica-slate has, generally, a greenish colour, and is softer than common mica-slate.

*Crystalline* or *Primary Limestone*, of which statuary marble is a variety, occurs, principally, forming beds in primary mountains. Beds of this mineral occur rarely, in granite, more frequently, in gneiss, but are most common in mica-slate, with which rock it is often much intermixed, and often alternates with it. It is observed, that the primary limestone in granite and gneiss, is coarser grained than that in mica-slate or common slate. Primary limestone is, often much intermixed with serpentine. When beds of primary limestone occur of considerable thickness, they sometimes contain veins of metallic ores.

Crystalline or primary limestone, when pure, is composed of calcareous earth, which scarcely exists, as a component part of granite, gneiss or mica-slate. In primary mountains no organic remains are found in the crystalline limestone; the structure is granular; the white variety, known as statuary marble, resembles fine loaf-sugar, and is imperfectly translucent; hence, it has been called by the French *chaux carbonatée saccharoïde*. The color of primary limestone is, sometimes, yellowish, greenish or inclining to red. From a mixture of mica, it has, often, a slaty fracture and divides in plates. It may be further deserving of notice, that primary limestone or statuary marble, frequently, contains a considerable quantity of siliceous earth, to which it owes its hardness and durability.