

Neither in England nor Wales, have any rocks of limestone been found, which possess the crystalline translucent qualities of statuary marble, though very beautiful marbles occur which will receive a high polish; these belong to the limestone which will be described in the following chapter. White marble is procured from Italy, Switzerland and the Grecian Archipelago.

Imperfectly white crystalline limestone occurs in different parts of Scotland, intermixed with serpentine and mica slate. Crystalline limestone is found also in the Hebrides, particularly, in the Isle of Sky; but, it well deserves attention that this limestone, in the latter island, evidently appears to be secondary limestone (lias,) changed in its character, by its contiguity to trap rocks, which were, in all probability, in a state of igneous fusion. In other alpine districts, the limestones called primary, appear, also, to have derived their crystalline character from the action of igneous rocks in their vicinity, and hence, ought not to be classed with primary formations. I have seen in the Alps, many beds of extremely hard white limestone, which have all the characters of primary limestone, with the exception of being somewhat less granular. These beds occur over other beds, containing the fossils found in green sand, and may, therefore, be classed with chalk. That the highly crystalline limestone which occurs near primary mountains has been in a state of fusion, is rendered probable by the crystals of garnet and siliceous minerals which are often imbedded in it. These minerals could not have been deposited from an aqueous solution.

It was once supposed, that all calcareous rocks and strata were composed of the shells of marine animals, and it cannot be doubted, that many of them are entirely formed of these organic remains: but, in the beds of primary limestone, and even in some of the secondary limestones, no vestiges of such remains occur. It may be said, that the process by which primary limestone was crystallized, destroyed all traces of organization; and though it would be impossible to disprove this, yet there is no reason to believe that lime may not exist as an elementary earth, like silex or alumine, independent of the operations of animal life. It does so exist, as a component part of many minerals, and it may have existed in sufficient quantity to form the mountains of primary limestone.

It is, however, a curious but undoubted fact, that no inconsiderable portion of the earth's surface has been formed by organic secretion; and the process is still going on, extensively, in the Pacific and Indian seas, where multitudes of coral islands emerge above the waves, and coral shoals and reefs occur, at small depths beneath the water, in which, according to the observations of MM. Quoi and Gaimard, the animals may be seen. "Some spread out into fans, or ramify into trees; some are round like balls; their varied and elegant forms mingle and blend together, and reflect the varied hues of red, blue and yellow." As one generation dies and leaves its