

peas, the rock is called a pisolite (pea-grit). The granules sometimes consist of aragonite. Oolitic structure is found in limestones of all ages from Palæozoic down to recent times.¹⁵⁴ Mr. E. Wethered has recently pointed out that many oolitic grains show curious vermiform twistings in their outer concentric coats, which he regards as of organic origin, either plant or animal (*Girvanella*).¹⁵⁵ In some instances oolites have had their calcareous matter replaced by carbonate or oxide of iron, so as to become oolitic ironstones.

Marble (granular limestone)—a crystalline-granular aggregate composed of crystalline calcite-granules of remarkably uniform size, each of which has its own independent



Fig. 27.—Microscopic Structure of Oolitic Limestone, after Sorby. (Magnified 30 Diameters.)



Fig. 28.—Microscopic Structure of white Statuary Marble. (Magnified 50 Diameters.)

twin lamellæ (often giving interference colors) and cleavage lines. This characteristic structure is well displayed when a thin slice of ordinary statuary marble is placed under the microscope (Fig. 28). Typical marble is white, but the rock is also yellow, gray, blue, green, red, black, or streaked and mottled, as may be seen in the numerous kinds used for ornamental purposes. Its granular structure gives it a resemblance to loaf-sugar, whence the term "saccharoid" applied to it. Fine silvery scales of mica or talc may often

¹⁵⁴ Oolitic structure is found even among the limestones of the Dalradian metamorphic series of Scotland (Islay) which may possibly be pre-Palæozoic.

¹⁵⁵ Geol. Mag. 1889, p. 196; Quart. Journ. Geol. Soc. xlv. (1890), p. 270. Mr. C. Reid has suggested that these tubular bodies may be due to the deposit of lime round organic filaments (Algæ) like the calcareous incrustation formed round fibres of hemp in kettles and boilers.