

fig. 72, p. 339, marked *w*, *h*, proving that they are intermediate in date to the Oolites and Cretaceous rocks, for in the Isle of Purbeck, near Swanage, they are seen lying between the two (fig. 75, p. 348).

This episode at last came to an end, by the complete submergence of the Wealden area, and of the greater part of England besides; and upon these fresh-water strata, and the Oolitic and other formations that partly formed their margins, a set of marine sands and clays were deposited in the south of England, consisting of the Atherfield Clay and the Lower Greensand *s*, *d* (fig. 72, p. 339) is now often classed with the Upper Neocomian beds of the Continent, but in England they have till lately generally been known as the Lower Cretaceous strata. The distinction is not important to my present purpose. Then comes the clay of the Gault, above which lies the Upper Greensand. Resting upon the Upper Greensand comes the Chalk (No. 11, fig. 57, and *c*. fig. 72), the upper portion of which contains numerous bands of interstratified flints, which originally were partly marine sponges, since silicified. The Chalk, where thickest, is from one thousand to twelve hundred feet in thickness. The Liassic and Oolitic formations were sediments spread in warm seas surrounding an archipelago of which Dartmoor, Wales, Cumberland, and the Highlands of Scotland formed some of the islands. But the Chalk was a deep sea deposit, formed to a great extent of microscopic foraminiferæ, and while it was forming in the wide ocean, it seems probable that the old islands of the Oolitic seas subsided so completely, that it is doubtful whether or not even Wales and the other older mountains of Britain were almost entirely submerged.

During the period that the Oolitic formations formed