times attains a large size; being from twelve to fourteen inches in length, and spreading into numerous branches, which terminate in porous papillæ. In some instances this sponge is permeated throughout with silex, and the structure can then only be detected by fracture; but occasionally branches, which appear to have been saturated with liquid chalk before their immersion in the flint, may be detached; as in the beautiful specimen figured Foss. South D. Tab. XV. fig. 11. A small branched species is very abundant in flints, particularly in those from the Wiltshire Downs. Several examples are figured in the elegant Memoir on Wiltshire Fossils, by Miss Etheldred Benett, of Norton House. These sponges are generally of a chalky texture, and lie loose in the flints; probably from the decomposition of their gelatinous investment, after they were enclosed in the siliceous mass. A specimen of this kind, discovered by breaking a flint, is figured Lign. 54, fig. 2: the surface of the Sponge is beset with loose acicular spines (see Lign. 58, fig. 5.).

Flints of a sub-hemispherical and inversely conical form, are exceedingly common in the Lewes chalk, having the upper surface almost flat, and marked with flexuous anastomosing depressions, surrounded by a circular or elliptical groove, that forms the outer margin. These markings are produced by the sponge enveloped in the flint (Lign. 60, fig. 5. Foss. South D. Tab. XV. fig. 7.). Upon breaking them, the structure of the Zoophyte is dis-