ferous genera are not less numerous. In the white chalk the large calcareous polyparia are rare, while the fibrous zoophytes occur in profusion, both in the chalk and in the flints. Sponges of several kinds, and many species of allied genera, abound in every chalk-quarry in the south-east of England. One of the most common of the poriferous zoophytes, is a species which occurs either in an expanded state like a broad flat disk, or contracted into a cyathiform shape; the latter, when silicified, gives rise to flints, which from their forms have acquired the name of petrified mushrooms, or goblets, according as the cavity is either full or empty. I have, in the "Fossils of the South Downs,"* so fully explained the structure of the original, under the name of *ventriculite*, that it will here be sufficient to observe that the living zoophyte was of a cyathiform figure, and probably composed of a tough, jelly-like substance, capable of expansion and contraction. The smaller extremity was attached to the rock by root-like processes; the outer tissue consisted of a net-work of cylindrical, perhaps tubular, fibres, and the inner surface of the funnel-like cavity was studded with polypiferous cells or openings. Silicious specimens occur in every variety of shape which such a structure could assume; some are conical and hollow, others resemble fungi, many are turbinated, and not a few appear like a flat disk or plate; in all the margins

* Illustrations of the Geology of Sussex, p. 167.