

mouth papillæ (as in *Ophiomyces*), and with a single row of slender, sharp teeth. On outer joints of arms, near margin of each side arm plate, is a tuft of minute, translucent, supplementary spines or pedicellariæ, which have the form of a long-handled parasol. They stand a little inside the true arm spines, which are continuous to the end of the arm.

*Ophiotholia supplicans*, Lym. (Pl. XXVIII. figs. 1-4).

*Ophiotholia supplicans*, Lym., Anniv. Mem. Bost. Soc. Nat. Hist., pl. i. figs. 1-9, 1880.

Three arm spines. Pedicellariæ beginning about the ninth joint and arranged in clusters of three or four.

Diameter of disk (when the arms are raised vertically) 2 mm. Height of same 3.5 mm. Width of arm without spines 0.8 mm. Length of arm about 13 mm. The mouth angles are high and narrow, so that the mouth slits between them are wide: with their curved sides and sharp tooth at the apex the angles bear a resemblance to a bird's head with a pointed bill. Three acute spine-like teeth, outside which, and partly encircling the large three-sided jaw plate, as with a frill, is a transverse, curved, erect, close row of eight or ten long, narrow, flat papillæ. Again outside these, and on the jaws and mouth frames are three parallel transverse rows of erect foliate papillæ. The first row has six papillæ, which are smaller than some of those beyond, but, like them, flattened and widest at the free end; the second row is similar; while the third usually consists only of two papillæ, much larger and wider than the others. These rows quite obscure the base of the mouth angle and mouth shields. In general, the arrangement is that of *Ophiomyces frutescens*. The above numbers are the maximum; some angles have fewer papillæ; not more than four in a transverse row. In the fresh specimen, under arm plates are not visible, but, on partial drying, their outlines may be seen. They are narrow, much longer than wide, wider without than within, with a small angle within, lateral sides re-enteringly curved, and outer side in a broken curve. In like manner the side arm plates are seen to meet broadly below, and to form a slight spine crest at their outer edge. Figure 3 shows the arm joint from below, so covered by the natural skin that the junction of the side arm plates on the central ridge cannot be seen. Disk sugar-loaf shaped and sparsely set with minute spines, each of which, in the partly dried specimen, is seen to stand on a small, delicate scale. No radial shields visible, and there probably are none; which, as in *Ophiomyces*, may account for the fact that the arms are raised vertically, encircling the high disk like a fence. Three sharp, slightly flattened, microscopically rough arm spines nearly as long as a joint, standing near the outer edge of side arm plate, and on a low spine ridge. At the ninth joint there appears, on inner side of spine ridge, and close to base of spines, a cluster of three or four minute pedicellariæ, scarcely 0.5 mm. long. They are shaped like long-handled parasols, or slender-stalked agarics (fig. 4), with a long shaft,