

surmounted by a disk divided into symmetrical radiating flutings, and with a slight bulb at the base articulated to a little mamelon. They are glassy and translucent, and naturally are enveloped in a skin bag which, however, is easily stripped off, leaving them free, as shown in the figures. They are found on all the outer joints, to the tip of arm. The tentacles are long, smooth, and translucent. The second mouth tentacle has four flat scales similar to mouth papillæ. The next two pairs have each two smaller scales, one on the side arm plate, the other on the under arm plate. Each pore beyond has one long, spine-like scale on its inner edge.

Station 296.—November 9, 1875; south-west of Juan Fernandez; lat. $38^{\circ} 6' S.$, long. $88^{\circ} 2' W.$; 1825 fathoms; red clay.

Ophiomyces.

Ophiomyces, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, 1869.

Teeth; no tooth papillæ; numerous wide, flat mouth papillæ, which are turned downwards and outwards, and arranged in two or more imbricated rows, covering the whole mouth angle. Side arm plates large, and meeting above. Disk finely scaled, without radial shields. Arm spines short and numerous (6–12), within the disk shorter, stouter, and of a different character from those of the joints further out.

This singular genus stands quite by itself, unless we compare its curious mouth papillæ with the spatula-like tentacle scales of *Ophiopsila*. All the specimens I have seen had a tendency to raise the arms above the disk, vertically; which shows that the muscular tension must have some peculiar proportion.

In the absence of radial shields, it differs from all others, and its general structure, without and within, shows additional peculiarities. The genital plate, thin, wide, and long (Pl. XLIV. fig. 7, *o*), curves over the top of the arm, and has a thin genital scale of similar character (fig. 6, *no*). The arm bones, within the disk, have large thin wings without marginal grooves. Their outer face is peculiar in having no articulating peg (fig. 8), though the inner face is furnished with a large umbo (fig. 9, 1). The jaws and mouth frames (fig. 7 *c, f*) are of an elegant shape, and curiously twisted. I did not observe any peristomial plate.

The Plate XLIV. figs. 6–9.

Ophiomyces spathifer, Lym. (Pl. XIX. figs. 10–12).

Ophiomyces spathifer, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 47, pl. xiv. figs. 386–388^a, 1879.

Outer mouth papillæ large and paddle shaped. One flat, rounded tentacle scale. Ten flattened arm spines of various shapes, whereof the two lowest are borne on the under arm plate.