(Type specimen from Station 235.) Diameter of disk 3.5 mm. Width of arm next disk 1.2 mm. Three short, narrow, slightly flattened, peg-like teeth, carried on a thick, lumpy jaw plate, which also bears two long flat narrow, spatula-like tooth papillæ. On either side of the mouth angle are two radiating rows, each of about six long, flattened papillæ, which are imbricated and point downward and outward, so that the entire mouth angle is hidden by them; the inner ones are narrow and spatula-like, but outwards they grow rapidly larger, so that the outermost are wide paddle-shaped, or even fan shaped, their length to extreme breadth being '7: '5. Mouth shields shaped like a long, sharp, narrow lance head. Side mouth shields three sided, delicate, separated as by a wedge by the mouth shield, which extends inward considerably beyond them. Within, and indistinctly separated from the side mouth shields project the long jaws. These parts are all hidden, and can be seen only by cutting away the mouth papillæ. Under arm plates small, with re-enteringly curved lateral sides, wider without, where they are a little swollen, than within, separated by the side arm plates, which meet narrowly both above and below, and are highest and most flaring at their outer edge. Upper arm plates minute (sometimes apparently wanting), twice as long as broad, and appearing like little swellings just outside the juncture of the side arm plates. larger part of upper surface of arm is thus left uncovered, so that the arm bones and their muscular bundles may be seen. Disk (as usual in the genus) distorted and pushed upward, covered uniformly with minute, thin, translucent, flat scales, without spines; there are about 13 in the length of 1 mm. Ten arm spines, of which the three highest are equal, slender, narrow and tapering, and as long as any; the next two are of about the same length, but broad and flat, with rounded ends; the next three similar, but shorter; the two lowest spatula like, with ends cut square off, and carried, not on the side arm plate, but widely spaced on the outer part of the under arm plate; lengths to that of an arm joint, 5, 5, 5, 5, 5, 4, 4, 3, 3, 3:5. One flat, short, wide tentacle scale, broader without than within, and, like many of the arm spines and mouth papillæ microscopically striated. Colour in alcohol, disk, grey; arms, straw.

Station 235.—June 4, 1875; lat. 34° 7' N., long. 138° 0' E.; 565 fathoms; mud.

Ophiomyces grandis (Pl. XIX. figs. 13-15).

Ophiomyces grandis, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 46, pl. xiv. figs. 383-385, 1879.

Eleven sharp, flat arm spines, set along the whole upper and side edge of the plate, and growing longer from above down to the ninth. Basal under arm plates, large and squarish, and bearing three long spatula-like tentacle scales.

(Type specimen from off Tristan d'Acunha.) Diameter of disk 6.5 mm. Length of arm about 25 mm. Width of arm near disk 2.2 mm. Four or five broad, flat teeth with a curved, cutting edge; the lowest one being much the narrowest. Below these,