Ophiacantha tuberculosa, Lym. (Pl. X. figs. 1-3).

Ophiacantha tuberculosa, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 137, pl. viii. figs. 204, 205, 1878.

Disk wrinkled and beset with coarse grains; four smooth stout arm spines.

(Type specimen from Station 210.) Diameter of disk 6.5 mm. Length of arm 32 mm. Width of arm without spines 2 mm. Seven stout blunt mouth papillæ, whereof the innermost is spearhead-shaped and stands under the teeth, which are four in number, flat and square, with rounded corners. Mouth shields small, much wider than long, with an obtuse angle within and a little peak without; length to breadth, '8:1. Side mouth shields short, nearly crescent shape, with the curve outward; scarcely meeting within. Under arm plates thick and distinct, four-sided, somewhat broader than long, with outer side curved and the others nearly straight, except second plate, which is nearly pentagonal, with a very obtuse angle within. Side arm plates slightly projecting, meeting narrowly below and not at all above. Upper arm plates thick and well marked, four sided, with outer corners rounded, much wider without than within. Disk contracted in interbrachial spaces, with deep radiating furrows between the narrow radial shields, which are completely hidden, as well as the disk scales, by the skin and by numerous small conical tubercles, which are larger and closer set on the radial shields. Four stout, blunt, cylindrical, smooth arm spines; upper one much largest; lengths to that of an arm joint, 2, 1.4, 1, 1:1. One rather small tentacle scale, longer than wide, pointed, and not encroaching (as is usual in the genus) on the under arm plate. Colour in alcohol, very pale brown.

This species is one of the most aberrant in the genus; the arm spines, smooth, and only four in number, and the minute disk tubercles, instead of thorny grains, remind one rather of *Ophiocoma*. Indeed, *Ophiacantha bidentata* and *Ophiacantha vivipara*, which somewhat resemble this species, have been described under *Ophiocoma*; but the general structure is that of a true *Ophiacantha*.

Station 210.—January 25, 1875; lat. 9° 26' N., long. 123° 45' E.; 375 fathoms; mud.

Ophiacantha placentigera, Lym. (Pl. XXVIII. figs. 15-17).

Ophiacantha placentigera, Lym., Anniv. Mem. Bost. Soc. Nat. Hist., pl. ii. figs. 20-22, 1880.

One very large, flat tentacle scale. Six cylindrical, tapering, nearly smooth arm spines. At inner point of each under arm plate is a diamond-shaped raised figure.

Diameter of disk 9.5 mm. Width of arm, close to disk without spines, 2 mm. Five spaced mouth papillæ on each side of mouth angle, the two outermost, large, squarish and flat, the three inner ones more pointed; and the one at the apex short and blunt. Mouth shields broad triangular, with rounded corners, and a blunt angle inward. Side