170), with disks from 12 mm. to 9 mm. in diameter, had smooth disk spines, like Station 205, and six arm spines, and upper and under arm plates, like Station 214. The number of mouth papillæ to each angle varied from seven to ten, without reference to size of specimen.

Station 170.—July 14, 1874; lat. 29° 45′ S., long. 178° 11′ W.; 630 fathoms. Station 205.—1050 fathoms. Station 214.—February 10, 1875; lat. 4° 33′ N., long. 127° 6′ E.; 500 fathoms; globigerina ooze.

Ophiomitra sarsii, Lym. (Pl. X. figs. 10-12).

Ophiomitra sarsii, Lym., Bull. Mus. Comp. Zool., vol. vii. p. 151, pl. viii. figs. 216, 217, 1878.

Eight stout cylindrical arm spines. Tentacle scales flat, tapering, jagged. Scaling of disk finer than in *Ophiomitra plicata*.

(Type specimen from Station 146.) Diameter of disk 15 mm. Length of arm about 100 mm. Width of arm without spines 4.5 mm. Seven or eight thick-pointed mouth papillæ to each angle. Seven teeth of similar form, but more blunt and flat. Mouth shields small, as long as broad, with an irregular outline; outer margin more or less thickened and turned downward; length to breadth, 2:2. Side mouth shields broad and thick, and closely joined to surrounding parts. Under arm plates broader than long, broader without than within, separated by slight transverse depressions; outer edge thickened, especially at its middle point. Midway on the arm, they are wide pentagonal, with an obtuse angle inward, and the outer edge not thickened. Side arm plates slightly projecting, meeting near base of arm narrowly below and scarcely or not at all above. Upper arm plates separated by transverse creases, thick, wider than long; widest without, where they are bounded by a gentle curve; inner side making a deep irregular curve. Disk (in alcohol) thick, rising well above the arms, with a deep constriction and furrow in each interbrachial space. On margin of disk and along outer interbrachial edge of radial shields lie three or four wide plates larger than the rest, which are coarse, irregular, overlapping scales, beset with short, stout, smooth, often club-ended spines, which are found also on edge of disk over the arms. Radial shields pearseed-shaped, with point inward, sunken, outer end rounded, separated widely by a broad wedge of scales; length to breadth, 4:1.8. Near base of arm eight stout, glassy, blunt, cylindrical, very thorny spines, of which the under are nearly as long as the upper; lengths to that of an arm joint, 2, 3.8, 3, 2.8, 2.8, 2.8, 2.5, 2.5:1.7. Two-thirds out on the arm there are only four spines, of which the second is much the longest, 5.5 mm. scales on the first pore, one on the others; stout, pointed, flattened, cloven or jagged on the edges; farther out they take on the form of stout, very thorny spines. in alcohol, dull grey.