

on it. A young one had a disk 4 mm. in diameter, and arms 16 mm. long. The disk grains were rough under the microscope; the arm spines were proportionately longer, and the side arm plates more prominent, than in the adult; the outer mouth papilla was larger than its neighbours.

Station 171.—July 15, 1874; lat. 28° 33' S., long 177° 50' W.; 600 fathoms; rock.

*Ophiacantha granulosa*, Lym. (Pl. XIV. figs. 7–9).

*Ophiacantha granulosa*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 137, pl. viii. figs. 206–208, 1878.

Disk evenly set with smooth grains; outer ends of radial shields naked; ten smooth slender arm spines.

(Type specimen from Station 201.) Diameter of disk 9 mm. Length of arm 42 mm. Width of arm without spines 3 mm. Seven pointed, rather stout, nearly cylindrical mouth papillæ. Seven teeth, flat, with a rounded cutting edge. Mouth shields small, broader than long, with an obtuse angle within, and a curve without; length to breadth, .8 : 1. Side mouth shields large and wide, broader without than within, where they are slightly separated. Under arm plates much wider than long, of a wide axe-shape, with a curved edge outward, a lobe or a narrow obtuse angle within, and the lateral sides re-enteringly curved. Upper arm-plates rather small, of a wide fan-shape, with an angle inward, and lateral sides re-enteringly curved. Side arm plates large and moderately projecting, meeting broadly above, near base of arm, but scarcely touching below. Disk slightly puffed, closely and evenly set with smooth grains, about four in the length of a millimetre, which hide the fine disk scales, except in the lower interbrachial spaces. Radial shields covered, except their outer ends, which are naked and sunken below the surrounding surface. Ten slender, tapering, cylindrical translucent arm spines, which are not thorny; lengths to that of an arm joint, 3.2, 3.2, 2.2, 2, 2, 2, 1.8, 1.3, 1.3, 1 : 1. One rather small, blunt tentacle scale. Colour in alcohol, pale reddish-brown.

A younger specimen, with a disk 4 mm. in diameter and an arm of 18 mm., presented no special variations, except that there were only eight arm spines, and the under arm plates were proportionately smaller.

Station 201.—October 26, 1874; lat. 7° 3' N., long. 121° 48' E.; 82 to 102 fathoms; stones and gravel.

*Ophiacantha valenciennesi*, Lym. (Pl. XXVI. figs. 7, 8).

*Ophiacantha valenciennesi*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 57, pl. xv. figs. 408–410, 1878.

Disk evenly granulated above. Seven long, slender, much flattened arm spines. Outer mouth papilla spatula-like and covering the pore of the mouth tentacle.