mouth shields long and large, nearly or quite meeting within, where they taper; broad without where they join the side arm plates and curve somewhat round the mouth shield. Under arm plates of a wide axe-shape, with a curve without, re-entering curves on the lateral sides, and an obtuse angle within. At the innermost point on the median line, is a small raised figure in form of a transverse diamond. Side arm plates wide and thick, meeting fully below, just touching above. Upper arm plates broad diamond shape, with outer and inner angles somewhat rounded, and with a central longitudinal ridge; length to breadth, 1.5: 2. Disk flat and thick, closely set above with short, thick rounded, thorny stumps, four or five in 1 mm. long, those in the centre being smaller; near the margin they are shorter; and below they take the form of scattered grains. Radial shields small, of a short ovoid shape, widely separated and diverging inward. Six long cylindrical, scarcely rough, slightly tapering arm spines; those above and below shorter than the two middle ones, which are as long as two arm joints. One large, flat, wide, smooth, tooth-like tentacle scale on the outer edge of the side arm plate.

Colour in alcohol, very pale brown.

Station 175, near Fiji Islands.—August 12, 1874; lat. 19° 2′ S., long. 177° 10′ E.; 1350 fathoms; red clay.

Ophiacantha vepratica, Lym. (Pl. XIII. figs. 7-9).

Ophiacantha vepratica, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 137, pl. x. figs. 245-247; Bull. Mus. Comp. Zool., vol. v., part 9, p. 230, 1878.

Disk closely beset with grains, among which are a few short spines. Seven not thorny, translucent, slender arm spines.

(Type specimen from Station 171.) Diameter of disk 6.5 mm. Length of arm about 30 mm. Width of arm without spines 1.8 mm. Mouth papillæ stout, conical, blunt, three on each side of an angle, and a larger odd one at the apex within, which is similar to the five teeth standing immediately above it. Mouth shields small, about as long as broad, bounded within by an obtuse angle, and without by a deep curve or truncated angle; length to breadth, '8:1. Side mouth shields short and rather wide, meeting within. Under arm plates pentagonal, wider than long, with a very obtuse angle inward, sometimes modified as a curve; lateral sides a little re-enteringly curved, and outer side gently curved. Upper arm plates wide fan-shaped, with an angle inward. Side arm plates stout, rather prominent, narrowly meeting above and below, near base of arm. Disk slightly puffed and wrinkled, closely set with small, round, smooth grains, among which, on upper surface, appear a few short stout spines; radial shields and disk scales hidden by skin and by granulation. Seven regular, slender, cylindrical, tapering, not thorny arm spines; lengths to that of an arm joint, 2.8, 2.5, 2, 2, 1.5, 1.3, 1:8. One pointed, rather large tentacle scale. Colour in alcohol, white.

A smaller specimen had a disk 6 mm. in diameter, with grains, but scarcely any spines