

along the free edge is a close row of fine, even, tooth-like papillæ, which become somewhat longer and wider as they pass upward to form the arm comb. Three arm spines short, blunt, and equally distant from each other. On first two sets of pores four tentacle scales on each side; the third has three on each side; the fourth, one on the outside and three on the inside; a little beyond the disk there is only one on the inside. Colour in alcohol, white.

Station 169.—July 10, 1874; lat. 37° 34' S., long. 179° 22' E.; 700 fathoms; grey ooze.

*Ophioglypha ponderosa*, Lym. (Pl. VII. figs. 7–9).

*Ophioglypha ponderosa*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 93, pl. ii. figs. 52–54, 1878.

Disk plates high and excessively swollen. Upper arm plates rising in a high sharp ridge. Arm spines minute, close set, and like little blocks.

(Type specimen from Station 232.) Diameter of disk 32 mm. Width of arm at disk 6 mm. Mouth papillæ square, flat, crowded, forming a continuous row with the scales of the mouth tentacles, four or five on each side, with three or four longer and pointed papillæ at angle of jaw. Mouth shield long and narrow, with outer end much rounded, lateral sides having a slightly re-entering curve, and a short blunt angle within; length to breadth 5·7 : 3. Side mouth shields long triangular, outer edges broader; inner ends tapering, where they meet. Under arm plates broad hexagonal, with outer and inner ends straight, and short angles on the sides; the first plate is similar, but not so large as the others; farther out on the arm they become diamond-shaped. Side arm plates swollen, with outer edge curved, not meeting either above or below. Upper arm plates narrow, very highly arched, forming a sharp ridge; length to breadth about equal, wider without than within, four sided, with sides nearly straight. The upper surface of disk is covered by angular plates, excessively swollen and lumpy, and compactly soldered; the plates in centre being smallest. Radial shields longer than wide, with edges irregularly curved, meeting without, diverging inward, where they are separated by a large plate of about the same size and shape; in the interbrachial space, besides numerous smaller plates, is one roughly triangular, with one angle inward; on the lower interbrachial space the scales are not so much swollen; there are about half a dozen, besides the genital plates, which are composed of three pieces, the outer one being the largest and thickest; along their entire edge from the mouth shield to the outer edges of the radial shields is a row of fine, square, short papillæ, those nearest the mouth shield being broader than long, while towards the radial shields they become very fine, and much narrower than long;