by side arm plates, and are pentagonal, with an angle inward, and outer side curved. Side arm plates broad, somewhat swollen, meeting below beyond the fourth under arm plate, and above beyond the fourth upper arm plate, where they form almost the entire covering of the arm; their surface presents a minute crystalline appearance. Upper arm plates triangular, with an angle inward and a curve without; the first three are broader and have the inner angle truncated. Disk thick, rather flat, covered above with thin, closely overlapping scales; a cluster in the centre of one large rounded primary plate and one smaller to each brachial space, separated by two or three rows of much smaller scales; in the interbrachial spaces are three large plates,—an oval marginal, connecting the outer ends of the genital scales; a second inside, joining the radial shields by a line of small scales; and a third, smaller and more rounded, which lies between the inner ends of the radial shields. These last are three sided, with corners much rounded and a blunt angle inward, touching without, diverging inward, where they are separated by a small rounded scale; length to breadth 2.5:2. The under surface is occupied by the large mouth shield; three to five small plates, just outside, and the broad genital scales, which, starting very narrow from the lateral side of the mouth shield, increase in width as they curve upward over the arm; along their free edge, on the under surface, is a close row of large square papillæ, which become spiniform on the arm comb. Four or five minute, round, pointed arm spines, evenly spaced along edge of side arm plate. Tentacle pores very large, the basal ones oval, the rest round; those of the mouth tentacles have three or four scales on each side; the next two sets, three on either side, those next the arm plate being larger than the others; just beyond the disk they have two small scales on the inner edge, and one larger one next the arm plate, and further out there are no Colour in alcohol, grey.

One specimen had a double vertical row of large scales on the interbrachial edge, instead of a single large plate.

Station 195.—October 3, 1874; lat. 4° 21′ S., long. 129° 7′ E.; 1425 fathoms; grey ooze. Station 24.—March 25, 1873; off Culebra Island; (same species?); 390 fathoms; (young); mud.

Ophioglypha ornata, Lym. (Pl. VI. figs. 1-3).

Ophioglypha ornata, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 86, pl. iv. figs. 113, 114, 1878.

Three or four minute, widely spaced arm spines. Mouth shield trefoil, with a pointed lobe inward. Disk high. Basal under arm plates about as long as broad. Arms high and rounded.

(Type specimen from Station 216.) Diameter of disk 10 mm. Width of arm close to disk 3 mm. Five or six short, square, close-set mouth papillæ on each side, the outer ones