

plates. The mouth frames are low and depressed with great sockets for the first mouth tentacles. There is nothing but a thin lime crust to represent the peristomial piece. The slender, cylindrical genital plate is so long as to reach the mouth shields, and is broken in several pieces; for a quarter of its outer length there is united to it the genital scale, which then spreads out like a thin wing. The arm bones within the disk are long and cylindrical, instead of short and discoidal. Just outside the disk they are still more elongated with a median contraction; and they present a complex arrangement of processes and hollows. (See Pl. XXXVIII. figs. 1-5.)

*Ophioplinthus medusa*, Lym. (Pl. XXIV. figs. 7-9; Pl. XXXVIII. figs. 1-5).

*Ophioplinthus medusa*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 105, pl. ii. figs. 30, 31, 40, 1878.

Scaling of lower interbrachial space coarse (four or five scales in a transverse row). No scales on arm tentacles. Usually three very minute, peg-like arm spines, equally spaced.

(Type specimen from Station 156.) Diameter of disk 16 mm. Width of arm 2 mm. Mouth papillæ short, square, closely soldered, four or five on each side, with one, diamond shaped, at apex of the jaw. Mouth shields rounded triangular, with an angle inward, sides curved, and often a re-entering curve without; they are frequently furrowed or cracked. Side mouth shields irregularly rhomboidal, sometimes broader within, where they touch. First under arm plate rounded triangular, with a blunt angle inward, and a long curved outer edge; second plate five-sided, with an obtuse angle within, and a curved outer edge; beyond this they are broader than long, with a blunt angle within and a wavy curve without. Side arm plates thick and smooth, meeting broadly below and touching above beyond the sixth plate. Upper arm plates rounded diamond shaped, with a longer angle within; they often are cracked or grooved. Disk high, covered with thin, irregular, overlapping plates; the central primary one about 2 mm. in diameter and conspicuously the largest, and in each brachial space is a primary plate larger than the rest. Radial shields irregular, four sided, with rounded corners, broader on the outer edge, separated their entire length by a broad wedge of small scales. On the under surface of the disk are numerous irregular plates between the genital scales, which are thick, with a wavy outline. The genital opening runs less than half-way to the margin. Three very short, blunt arm spines, situated low on the outer edge of the side arm plate. A pair of small tentacle pores, each surrounded by a raised burr, situated near the inner angle of the second under arm plate, on its edge; and a similar but minute pair on the third plate. Beyond this the pores are difficult to see and lie near the base of the under arm spine. The second pair of mouth tentacles protrude from an oval rim, having on each side a couple of ill-defined tentacle scales. Colour in alcohol, grey.