

one or two rows of smaller ones, and in the interbrachial spaces are two larger plates, one marginal and the other inside it. Radial shields very nearly round, separated usually by three plates in a line; length to breadth 3:3; along their inner margin is a row of small irregular-shaped scales. Genital plates formed of two or more pieces, wider without, tapering inward; along the outer portion of their free edge is a row of small shapeless pieces, which become more numerous above, and there form a sort of arm comb. One minute papilla-like arm spine situated near the junction with the upper arm plate. Pores of mouth tentacles enclosed on one side by the two outer mouth papillæ, with some other minute pieces; and on the other side by four or five similar parts, which correspond to tentacle scales: the rest of the pores stand near the lateral corners of the under arm plates, and have three small peg-like tentacle scales. Colour in alcohol, yellowish-brown or grey.

This species clearly exhibits the homology between side mouth shields and side arm plates.

Station 150.—February 2, 1874; lat. 52° 4' S., long. 71° 22' E.; 150 fathoms; rock. Station 151.—February 7, 1874; off Heard Island; 75 fathoms; mud. Christmas Harbour, Kerguelen Islands, 120 fathoms. Royal Sound, Kerguelen Islands, 28 fathoms.

*Ophioglypha inornata*, Lym. (Pl. III. figs. 10–12).

*Ophioglypha inornata*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 97, pl. ii. figs. 26, 27.

Side mouth shields small. Mouth shield broader than long, with a peak inward. Disk and arm plates thick, swollen, and closely soldered. Mouth papillæ and scales of mouth tentacles thick, squarish, irregular, and crowded.

(Type specimen from Station 106.) Diameter of disk 10 mm. Length of arm about 23 mm. Width of arm close to disk, without spines, 2 mm. Five or six short, bead-like, closely soldered mouth papillæ on each side, with one much longer at apex of jaw. Mouth shields broader than long, small, rounded triangular, with angle inward, and outer edge curved. Side mouth shields short, pointed oval, occupying inner sides of the mouth shield and meeting broadly within. First under arm plate rounded, with a long curve within and an obtuse angle without; second pentagonal, with an angle inward, outer side wide, and laterals re-enteringly curved; beyond these the plates become broader than long, with an angle within and a curve without. Side arm plates thick, slightly swollen, meeting broadly below; separated above by upper arm plates, which are thick, rather small, of a rounded diamond shape, and as long as broad. Disk rather thick, swollen, covered with thick,