

rhomboidal, broad without and with a blunt angle inward, separated their entire length by a wedge of larger and smaller disk scales; length to breadth 2:1. Interbrachial surface on the under side covered with the same fine overlapping scales as above. Genital scales small, narrow within, widening a little without as they appear above the disk. Along their free edge, which extends from outer edge of mouth shield to margin of disk, there is a close row of minute, squarish, tooth-like papillæ, which become short and rounded on the arm comb. Three small pointed arm spines, situated low on the edge of the side arm plate close to the tentacle scales. On the pores of the mouth tentacles five large rounded scales similar to the mouth papillæ, on either side; on the second set six on the interbrachial side and four on the brachial; immediately beyond the disk there are only one or two on the inner and none on the outer side. Colour in alcohol, white.

Station 143.—December 19, 1873; lat. 36° 48' S., long. 19° 24' E.; 1900 fathoms; globigerina ooze. Station 164a.—June 13, 1874; lat. 34° 13' S., long. 151° 38' E.; (young of this species?); 410 fathoms; grey ooze.

*Ophioglypha orbiculata*, Lym. (Pl. VIII. figs. 10–12).

*Ophioglypha orbiculata*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 74, pl. iv. figs. 103–105, 1878.

Three very short, small, sharp arm spines, low down. Mouth shield as broad as long. Radial shields short, rounded, and separated by the fine scaling of the disk. Papillæ of arm comb close set, flat, and with rounded ends.

(Type specimen from Station 237.) Diameter of disk 15.5 mm. Width of arm close to disk 2.7 mm. Six or seven mouth papillæ on each side, small, irregular, and tooth-like, with three longer and more pointed at apex of jaw. Mouth shield broader than long, five sided, having a broad angle within, with outer lateral corners rounded; length to breadth 2.5 : 2.3. Side mouth shields, following inner angle of mouth shield, narrow, pointed without, and broader within, where they meet. First under arm plate transverse oval, broader than long, often with lateral ends pointed; second arm plate four sided, with corners much rounded; the next three are pentagonal, with an angle inward, and outer edge curved; beyond these the lateral sides become shorter, so that soon the form changes to very wide triangular, with a broad curved outer edge, and an obtuse angle inward. Side arm plates broad, little swollen, meeting below beyond the disk, separated above by upper arm plates, of which the first is oval, with pointed lateral ends; those beyond four sided, broader without than within, outer side curved, lateral sides nearly straight. Disk flat, smooth, and very thin; upper surface covered with small, irregular, closely overlapping scales, with a row of larger scales along the margin. Radial shields broad triangular, with edges rounded, separated widely by a group of disk scales; length to breadth 2.3 : 2. On the under surface the scales are more uniform, and are arranged in irregular transverse rows, four to six in each row. The genital plate, except at its outer end, appears only as a