there is a group of similar papillæ on the free outer end of the side mouth shield. The arm spines are so short, thin, square, and closely soldered together as to look like a continuous narrow border to the side arm plate; in shape they resemble the arm comb, and are about eight in number. The pores of the mouth tentacles have four or five scales on each side, similar to the mouth papillæ; the second has seven similar scales on the interbrachial side, and four on the other; the third five and four; the fourth four and three; beyond this three only on the inner or interbrachial side. Colour in alcohol, brownish-yellow.

Station 232.—May 12, 1875, off Enosima, Japan; lat. 35° 11′ N., long. 139° 28′ E.; 345 fathoms; sandy mud.

Ophioglypha minuta, Lym. (Pl. VII. figs. 10-12).

Ophioglypha minuta, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 94, pl. v. figs. 117-119, 1878.

Interbrachial space below covered by only one or two plates besides the genital scales. Upper arm plates rudimentary or wanting. Tentacle pores of arm with only one rounded scale.

(Type specimen from Station 158.) Diameter of disk 5.5 mm. Length of arm about 12 mm. Width of arm close to disk, without spines, 1 mm. Six short, squarish, closely set, longer than wide mouth papillæ on sides of angle, and three short and bluntly pointed at apex of jaw. Mouth shield as long as broad, having a slight constriction towards the inner end, which is an obtuse angle, outer side widely curved; length to breadth 1:1. Side mouth shields longer than wide, meeting within, and there forming a long angle inward; outer edges narrower than inner. First under arm plate triangular, with rounded angle inward, lateral sides having a slight re-entering curve, and outer edge gently curved. Second under arm plate pentagonal, length and breadth about equal, having deep re-entering curves on the lateral sides, a narrow obtuse angle within, and outer side curved; beyond the second the plates are triangular in shape, having an angle inward and outer side curved; they become rapidly less in size, and disappear beyond the fifth, though the tentacle pores continue. Side arm plates long and thick, beyond the second under arm plate forming almost the entire covering of the arm, as there are no upper arm plates. Disk flat and round, with a central group of six primary plates, whereof the middle one is pentagonal, while the five surrounding it are transverse oval; connecting these plates are minute triangular scales; the interbrachial spaces above are filled by two large plates, the inner one broader than long, with outer edge straight, and inner edge broader than outer; the marginal plate has the inner edge straight, and the outer