spines, extending in a close continuous row along outer edge of side arm plate. Tentacle scales short, square, large, and thin. The pores of the mouth tentacles carry five or six on each side; the pores immediately beyond are very large, and have about four on each side; beyond the disk they have three or four on the inner side, and one spiniform on the under arm plate. Colour in alcohol, light grey.

Station 235.—June 4, 1875; lat. 34° 7' N., long. 138° 0' E.; 565 fathoms; mud.

Ophioglypha solida, Lym. (Pl. III. figs. 7-9).

Ophioglypha solida, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 91, pl. v. figs. 120-122, 1878.

Basal under arm plates, beyond the second, about as long as broad, squarish, and with water pores between them. Arms high, with swollen upper arm plates and very small spines. Upper disk covered in great part by rosette of primary plates and by radial shields.

(Type specimen from Station 192.) Diameter of disk 10.5 mm. Width of arm close to disk, without spines, 3 mm. Eight minute, widely separated, pointed mouth papillæ on each side of angle, with a cluster of three bluntly pointed at apex of jaw. Mouth shields narrow, pear-seed shaped, with sharp angle inward, and outer edge much rounded; length to breadth 2:1.5. Side mouth shields longer than broad, much wider without than within, where they meet, extending nearly two-thirds of the distance on sides of mouth shield. First under arm plate three-sided, longer than wide, with rounded angle inward, and a slight re-entering curve on all three sides; the next six or seven plates are broader than long, octagonal, and separated by wide pores or depressions; the remainder of the under arm plates are quadrangular, with an angle within and without. Side arm plates broad and somewhat swollen, meeting below only towards the tip of the arm; separated above by the upper arm plates, which are broader than long, and four sided, with lateral sides straight, and outer edge much wider than inner, and curved; towards the tip of the arm they are diamond shape, with truncated angles without and within. Disk round and high, covered with large, much swollen plates, the central primary being pentagonal, surrounded by five others, large and more or less rounded; in the upper interbrachial space are two plates, the inner one rounded, the outer marginal one much broader than Radial shields joined, small, and irregular in shape, long, and somewhat swollen. curved without. Lower interbrachial space covered by two much swollen plates, longer than wide, extending from the outer edge of the mouth shield to the marginal plate. Genital scales much longer than wide, wider without, tapering inward, carrying along their free edge, from the outer edge of the mouth shield to the edge of the disk,