breadth 3.5:2.5. Side mouth shields narrow, curved, pointed within, where they broadly meet. The first under arm plate broad triangular, with outer edge curved, and a blunt angle within; the next three long axe shape, with outer edge, which is wider than inner, slightly curved, and lateral sides re-enteringly curved ; beyond the disk they are similar, but present an angle inward. Side arm plates minutely tuberculous, broad, and swollen meeting below at some distance beyond the disk; separated above by upper arm plates, of which the first is much wider than long; the second wide semicircular, with outer edge curved; the third narrower, with outer edge curved, and wider than the inner; the rest rounded diamond shape, with the inner angle longer than the outer. Disk thick, covered with thin flat plates; in the centre is a large round primary plate, surrounded by five smaller, separated by two or three rows of fine scales; in the interbrachial spaces are three large plates in a line, of which the outer is marginal and has usually a round plate on either side. Radial shields irregular blunt pear-seed shape, touching without, diverging inward, where they are separated by a wedge of three or four small rounded scales. Genital scales narrow within, growing much wider without; bearing on their free edge a close row of squarish papillæ, which become spiniform where they pass upward to form the arm comb. Six minute blunt arm spines equally spaced along the side arm plate. Four or five small blunt tentacle scales on each side of pores within the disk ; beyond the disk they soon diminish to two standing inside of pore. Colour in alcohol, light grey.

Station 237.—June 17, 1875; lat. 34° 37' N., long. 140° 32' E.; 1875 fathoms; mud.

## Ophioglypha variabilis, Lym. (Pl. VI. figs. 10–12).

Ophioglypha variabilis, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 85, pl. iii. figs. 70, 78, 79, 1878; Bull. Mus. Comp. Zool., vol. v., part 9, p. 217.

Four or five minute arm spines. Under arm plates longer than broad. Radial shields separated at inner ends by a single scale. Disk high. Basal under arm plates about as long as broad. Arms high and rounded.

(Type specimen from Station 195.) Diameter of disk 11.5 mm. Length of arm about 40 mm. Width of arm close to disk 2.7 mm. Mouth papillæ six on each side, of which three are square and three pointed, and one larger and diamond shaped at apex of jaw; they are all low and somewhat irregular. Mouth shield blunt pear-seed shape with an angle within, or of a much rounded pentagonal form with an angle within and a curve without; length to breadth 3.3:2.7. Side mouth shields narrow, meeting within and there forming a sharp angle. First under arm plate triangular, outer edge curved, inner angle blunt; the next three plates are long axe-shaped, with outer edge, which is wider than inner, curved, and re-entering curves on the lateral sides; those beyond are separated