on their lateral sides a row of minute, sharp papillæ; the rest are long, triangular, with the outer edge curved, and a sharp angle inward, which on the second and third plate is truncated. Disk flat and delicate, covered with very thin, small, closely overlapping scales; in the centre is a circular primary plate, surrounded by fine irregular scales, then a circle of five primary plates, one in each brachial space, and separating the inner ends of the radial shields, which are long, pear-seed shape, and separated the rest of their length by small scales; in the interbrachial space there is a row of larger rounded plates, of which the outer one is marginal. Interbrachial spaces below covered with thin overlapping scales. Genital scales long and very narrow where next the mouth shield, but gradually growing wider above the arm, where they make a long arm comb carrying delicate spine-like papillæ; on the free edge of the genital scale below there is a row of very short, minute, rounded papillæ. Four or five minute, blunt arm spines, equally spaced along the edge of the side arm plate. The pores of the mouth tentacles and the two pairs beyond are long and large, and have from four to six small tentacle scales on each side. Those a little beyond the disk have only one scale on the inner side and none on the outer. Colour in alcohol, white.

It is very near Ophioglypha lepida except as to arm spines, and basal upper arm plates. Station 218.—March 1, 1875; lat. 2° 33′ S., long. 144° 4′ E.; 1070 fathoms; globigerina ooze.

Ophioglypha imbecillis, Lym. (Pl. IV. figs. 11-13).

Ophioglypha imbecillis, Lym., Bull. Mus. Comp. Zool., vol. v. part 7, p. 73, pl. iii. figs. 63, 64.

Three slender, equally spaced arm spines. Mouth shield trefoil, with a long lobe inward. Disk thin, with rather delicate, but rough and angular scales. Arms slender.

(Type specimen from Station 232.) Diameter of disk 6.5 mm. Length of arm 20 mm. Width of arm near disk 1 mm. Mouth papillæ four or five on each side, square, short, and closely set, with a pointed one at apex of jaw. Mouth shields trefoil shaped, with a lobe inward; length to breadth 1.5:1.5. Side mouth shields curved, long, and narrow, of nearly even width, and meeting within. First arm plate triangular, with angle inward, and outer side curved; second plate, which is largest of all, axe-shaped, with lateral sides re-enteringly curved; the rest are triangular, with outer side curved, and diminish constantly in size. Side arm plates straight and rather delicate, meeting broadly above and below, beyond the second upper arm plate. Upper arm plates triangular, with acute angle inward, and outer edge curved. Upper surface of disk covered with irregular rather thin plates. Radial shields longer than broad; outer edges curved, meeting broadly without, diverging inward, where they are separated by a larger and smaller plate. On the interbrachial margin of the disk is a large oval plate, broader than long, connecting the radial shields; in the centre a circular primary plate, surrounded by numerous others, irregularly shaped. Genital scales long and broad, bearing three or four papillæ near their outer