Side arm plates swollen, and not meeting below for some distance beyond Upper arm plates broader than long, thick and swollen, with outer side curved and longer than the inner, which is nearly straight; lateral sides re-enteringly curved. Beyond, they are bounded by a long curve within and a peak without. Disk smooth, arched, and very thick, covered above with small thin plates, having a minutely tuberculous or crystalline appearance; in the centre are six circular primary plates, separated by others irregularly shaped and angular, which also fill the interbrachial spaces. shields small, short, and thick, rounded triangular, with an angle outward, separated their entire length by a round plate without and several smaller plates within. Interbrachial space below chiefly covered by the great mouth shields, outside which are three or four rows of small scales, and on either side a genital scale, bearing on the free edge broad, square, close-set papillæ, which become narrower where they form the arm comb, on the broadened outer end of the genital scale. Three small sharp arm spines, one situated in a notch well up on the outer edge of the side arm plate, the other two lower, near junction of side with under arm plate. Tentacle pores very large, transverse oval in shape; on those of the mouth tentacles four rounded scales on the under arm plate, and three on the other side; the other pores within disk have usually four on the inner side, and one wide scale on the outer. Colour in alcohol, body grey, arms straw-colour.

Station 157.—March 3, 1874; lat. 53° 55′ S., long. 108° 35′ E.; 1950 fathoms; diatom ooze.

Ophioglypha radiata, Lym. (Pl. VII. figs. 1-3).

Ophioglypha radiata, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 89, pl. iii. figs. 65, 66, 1878.

Two minute arm spines. Mouth shield trefoil. Under arm plates axe shape. Radial shields small and rounded. Disk high. Basal under arm plates about as long as broad. Arms high and rounded.

(Type specimen from Station 205.) Diameter of disk 8.5 mm. Length of arm 35.5 mm. Width of arm close to disk 3 mm. Four or five wide, rectangular, closely-set mouth papillæ on either side, with three long and pointed at apex of jaw. Mouth shields large, trefoil shape, with a pointed lobe inward. Side mouth shields very narrow, of even width and meeting within. First under arm plate largest of all, triangular, with an angle within and outer edge much curved; the other plates are axe-shaped, with re-entering lateral sides and curved outer side; the first three touch each other. Side arm plates thick, swollen, and minutely tuberculous, meeting on the under surface beyond the third plate. Upper arm plates much swollen, the first two rounded hexagonal, those beyond rounded triangular. Disk high and rounded, covered with fine overlapping scales, of which the marginal are the largest. Radial shields small, broader than long, four-sided, with rounded