

Width of arm close to disk 2 mm. Four or five small, conical, widely separated mouth papillæ on each side, and three larger at apex of jaw. Mouth shield very large, long pentagonal, with an obtuse angle inward much wider without than within; outer lateral corners rounded; length to breadth 2.7:2.3. Side mouth shields pointed oval, small, meeting widely within. First under arm plate triangular, with sharp angle inward and outer edge curved; the rest within the disk four sided, with inner edge slightly wider than outer, and lateral side a little re-enteringly curved; beyond they gradually become wide hexagonal. Side arm plates swollen, not meeting below till half a dozen joints beyond the disk; separated above by upper arm plates, which are much swollen, forming a high ridge; the first two or three nearly square with rounded corners; those just beyond rounded hexagonal; and only near the middle of the arm do they become triangular, with an angle within and outer edge curved. Disk thick and arched; in centre of upper surface a cluster of six large, round primary plates, separated by an irregular row of smaller; between inner ends of radial shields and in each interbrachial space a conspicuous round plate; on the margin are two plates connecting outer ends of genital scales, and within these a large plate connecting outer ends of radial shields; rest of upper surface covered with small, swollen, rounded scales. Radial shields longer than broad, rounded pear-seed shape, forming a well-marked notch over arm; separated their entire length by a single or double row of rounded scales; length to breadth 2.7:2. The under interbrachial space is occupied by the large mouth shield, the lower edges of the two small marginal plates, and the large genital scales, which are very narrow within, widening without, as they extend upward over the arm, and bearing on their free edge a close row of square, flat papillæ, which begin at the third arm plate and maintain the same shape in the arm comb. Three minute pointed arm spines, evenly spaced; the lowest next the tentacle scales. Tentacle pores oval and very large; four short rounded scales on each side of mouth tentacles; the rest, within and well beyond the disk, have four or more on the inner side, and one or two on the outer side. The entire surface is microscopically tuberculous. Colour in alcohol, straw.

Station 45.—May 3, 1873; lat. 38° 34' N., long. 72° 10' W.; 1240 fathoms; (young); mud. Station 54.—May 27, 1873; lat. 34° 51' N., long. 63° 59' W.; 2650 fathoms; grey ooze. Station 61.—June 17, 1873; lat. 34° 54' N., long. 56° 38' W.; 2850 fathoms; grey ooze. Station 133.—October 11, 1873; lat. 35° 41' S., long. 20° 55' W.; 1900 fathoms; globigerina ooze.

*Ophioglypha convexa*, Lym. (Pl. VI. figs. 13–15).

*Ophioglypha convexa*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 84, pl. iii. figs. 83, 84, 1878.

Three small tapering arm spines. Disk covered above by a rosette of large, angular, primary plates, radial shields, and a few large interbrachial plates,