

Tentacle pores very large ; those of the second mouth tentacles set in a socket, much like the rest.

This genus is of rather doubtful position. While its general structure seems to place it here, the situation of the arm spines would almost bring it in the first great group.

Ophiocymbium cavernosum, Lym. (Pl. XXVII. figs. 1-3).

Ophiocymbium cavernosum, Lym., Anniv. Mem. Bost. Soc. Nat. Hist., p. 7, 1880.

Four arm spines. Two or three disk scales in the length of 1 mm. Side mouth shields small and not meeting within.

(Type specimen from Station 157.) Diameter of disk 7.5 mm. Arms broken, but apparently about three times the diameter of the disk. Width of arm, without spines, 1.2 mm. At apex of mouth angle is a boss-like jaw plate bearing a cluster of four or five short, blunt, irregularly placed spines, which correspond to teeth and tooth papillæ ; inside these, and along the margin of the wide jaws, on either side, is a close line of three or four flat, squarish mouth papillæ, whereof the outermost stands on the margin of the socket of the second mouth tentacle, while the opposite margin, formed by a portion of the side mouth shield, bears two flattened, spine-like tentacle scales. Mouth shields small and of a rounded heart shape ; length to breadth, 1 : 1. Side mouth shields small, wide without, but narrow and not meeting within. First under arm plate pretty large and wide, three sided, with an angle inward. Those beyond are shaped like an axe, with a wide, curved cutting edge, and a narrow body pointing inward. The narrowness of the inner portion comes from the encroachment of the large tentacle pores. Side arm plates long but not prominent ; meeting above and below. Upper arm plates small and triangular, with an angle inward. Disk thin and flattened, with a tender skin covered by very thin, delicate, overlapping scales ; two or three in the length of 1 mm. No radial shields can be seen from the outside. There are apparently large genital openings, but these are merely the creases on either side of the arm ; for, in reality, the under disk surface, with a very delicate scaling, is continuous over the arm, and there are no genital openings in their usual position. Four delicate, sharp, somewhat flattened, arm spines which, though placed on the outer edge of side arm-plates, have a considerable lateral motion. No tentacle scales except to the mouth tentacles.

Colour in alcohol : disk, pale greenish-grey ; arms, straw.

Station 157.—March 3, 1874 ; east of Kerguelen Islands ; lat. 53° 55' S., long. 108° 35' E. ; 1950 fathoms ; diatom ooze.

Ophioplax.

Ophioplax, Lym., Ill. Cat. Mus. Comp. Zool., No. viii. part 2, 1875.

Teeth ; no tooth papillæ. Mouth angle small and short, bearing numerous (eleven)