

1·2 : 2·6. Side mouth shields long and narrow, extending along the inner angle of the mouth shield, and just meeting within, where they broaden slightly, becoming narrower at the outer end where attached to the side arm plate. First under arm plate much larger than the others, four sided, with outer edge straight, lateral sides re-enteringly curved, and a short side, like a truncated angle within; the rest of the under arm plates are very small, with a curved outer side, and are nearly semicircular in form, but have a slight peak inward at the junction of the side arm plates, which are thin and wide, flaring slightly outward, meeting broadly below, and separated above by the upper arm plates, which are four sided, with outer edge nearly straight and wider than inner. Disk round, smooth, and flat, covered with minute, very thin, overlapping scales, four or five in the length of a millimetre on upper surface, and more below; among them may be distinguished small, round, widely separated primary plates. Radial shields longer than broad, three sided, with all three angles much rounded, widely separated their entire length by the disk scaling; length to breadth 2·6 : 1·5. Genital scales hidden, except the outer tip, which shows outside the radial shield, and bears no papillæ, or only one or two rudimentary. Three sharp, slender, tapering arm spines, situated close to each other on the middle edge of the side arm plate. Only one very minute, rounded tentacle scale on the outer edge of some of the tentacle pores; a little way out on the arm there is usually a minute scale on the inside of the pore, and none on the outer side. Colour in alcohol, pale straw.

Beyond the disk there is almost always a tentacle scale, which is often lacking in the basal joints. The little papilla outside the pore is also frequently wanting. Some specimens have a small arm comb, and even a feeble one on the basal upper arm plate.

Station 156.—February 26, 1874; lat. 62° 26' S., long. 95° 44' E.; 1975 fathoms; diatom ooze. Station 160.—March 13, 1874; lat. 42° 42' S., long. 134° 10' E.; 2600 fathoms; red clay.

*Ophiocten umbraticum*, Lym. (Pl. IX. figs. 1–3).

*Ophiocten umbraticum*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 101, pl. v. figs. 131, 132, 1878.

Primary and marginal disk plates small, and the former widely separated. Arm comb feeble. Tentacle scales single and minute, or quite wanting.

(Type specimen from Station 325.) Diameter of disk 9·5 mm. Width of arm close to disk, without spines, 1·3 mm. Four rather wide, closely-joined mouth papillæ, with one larger, diamond-shaped, at apex of the jaw. Mouth shield, very thin, triangular, broader than long, with blunt angle inward and corners rounded; length to breadth 1 : 1·5. Side mouth shields long and narrow, tapering inward, where they nearly or quite meet. First under arm plate large, four sided, the inner side being very short like a