

Species of *Ophiocreas* not herein described.

*Ophiocreas lumbricus*, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, p. 347, 1869; Ill. Cat. Mus. Comp. Zool., No. vi., pl. i., figs. 19–21; Bull. Mus. Comp. Zool., vol. v., part 9, p. 236.

West Indies; 75 to 480 fathoms.

*Astroceras*.

*Astroceras*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, 1879.

Disk and arms covered with smooth, soft skin. Disk small; its interbrachial outlines re-enteringly curved; radial shields narrow and rather high, running nearly to centre. Arms somewhat knotted by a contraction between each pair of joints. Upper arm plates divided in halves like high ribs, bearing a jointed spine at their upper ends. Side arm plates, towards middle of arm, having a long process, to which are articulated the two spine-like tentacle scales. Teeth in a single vertical row. No tooth papillæ. A clump of grains on sides of mouth angles, answering to mouth papillæ. Two vertical genital openings.

*Astroceras* stands next *Ophiocreas* and *Astroschema*. By its peculiar elongated side arm plates bearing spine-like, rough tentacle scales, and the large spines on the upper surface of the arm, it resembles the branching *Euryale aspera*.

*Astroceras pergamena*, Lym. (Pl. XXXIV. figs. 1–5).

*Astroceras pergamena*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 62, pl. xviii. figs. 478–480, 1879.

The smooth skin is translucent, allowing the underlying parts to be seen. The upper ends of the halves of the upper arm plates project, and bear a stout spine. Tentacle scales thick, rough ended, and nearly equal in size. On the sides of the mouth angle are elongated grains answering to mouth papillæ.

(Type specimen from Station 235.) Diameter of disk 19 mm. Length of arm about 100 mm. Width of arm at base 2 mm.; height of same 2.5 mm. High up on the sides of the mouth angles are elongated grains, irregularly arranged and answering to mouth papillæ, while at the apex is the lowest tooth, flat and shaped like a wide spearhead. Mouth shields very small, triangular, with a rounded angle inward and outer edge straight. Side mouth shields very large and swollen, narrower without, meeting broadly within; both they and the mouth shields are obscured by skin. Under arm plates small, and squarish, and occupying only a part of the length of a joint. Side arm plates nearly or quite meeting below, swollen and rounded, with a small projection to carry the two spine-like tentacle scales; further out, on the arm, this projection is much elongated, forming an articulating process. Upper arm plates represented by two rib-like ridges, which do