

In *Ophiocreas* and *Astroschema* the mouth gives almost no specific indications. It is by the character of the skin, or by the nature of its granulation, the thickness and length of the arms, their comparative height and breadth, and the form of the tentacle scales and of the radial shields that we get good specific marks.

*Ophiocreas carnosus*, Lym. (Pl. XXXI. fig. 1-4).

*Ophiocreas carnosus*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 63, pl. xvi. figs. 435-438, 1879.

Animal covered by a smooth, soft, wrinkled skin. Tentacle scales like rough ended but not clubbed spines, which are short even at middle of the arm.

(Type specimen from Station 308.) Diameter of disk 15 mm. Length of arm 200 mm. Width of arm near disk 7 mm.; height at the same point 6 mm. Mouth angles so fleshy and puffed as to almost entirely fill the slits; at the apex appears a small peg-like tooth; upper teeth wider and spearhead-shaped. On removing the thick, flabby skin, the usual large oblong side mouth shields are seen, joined their entire length, except without, where they diverge somewhat to give place to the little mouth shield. The side arm plates are long, narrow, and curved, and meet fully below, separating the small, irregular, transversely oblong under arm plates; at their upper end they support the tentacle scales, and unite with the belt of thin scales which represents the upper arm plate. Disk thick, rising a little above the level of the arms, covered by a very thick, soft skin, which is especially wrinkled over the side mouth shields. The same skin covers the arms, and is there loose and flabby. Radial shields narrow, rounded, thick and running quite to the centre. No tentacle scale on first arm pore; the next five have one in form of a small blunt, thick spine enveloped in a sort of skin bag; beyond there are two, the lower of which, towards middle of arm, does not exceed 3 mm., and has a rough but scarcely clubbed end. Colour in alcohol, brownish-pink, approaching flesh colour.

Station 308.—January 5, 1876; lat. 50° 10' S., long. 74° 42' W.; 175 fathoms; mud.

*Ophiocreas caudatus*, Lym. (Pl. XXXII. figs. 5-8).

*Ophiocreas caudatus*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 64, pl. xvi. figs. 439-442, 1879.

A large species. Arms to disk as 13 to 1. No tentacle scale on the first arm joint; then for several joints only one, small and peg like; thereafter two, which never grow very long. Skin thick.

(Type specimen from Station 232.) Diameter of disk 22 mm. Length of arm about 300 mm. Width of arm close to disk 5.5 mm. Height of arm near base 5.5 mm. Mouth angles covered with very thick skin giving a swollen look; on their sides and above the second mouth tentacle is a sort of pavement of irregular flattened grains. Twelve large thick teeth, longer than wide, with cutting edge shaped like a rounded