

there are no true mouth papillæ. Arms well rounded, without any flattened surface, strongly swollen and ribbed, for the first two or three joints, but even and tapering beyond; set with pointed conical grains which are regularly spaced, about five in the length of 1 mm., and which rarely touch each other. Disk strongly contracted in inter-brachial spaces, and occupied chiefly by the high, wide radial shields (or ribs) which run quite to the centre; granulation somewhat more sparse than on arms. On first arm pore there is no tentacle; the next has one, cylindrical, tapering and blunt, with sometimes a second rudimentary one; the pores beyond have two, whereof the upper one is, as usual, much the smaller. One-third out on the arm, the larger scale attains a length of 2 mm., and is rough at the end and slightly clubbed. Colour in alcohol, pale yellowish-brown, with interbrachial spaces of disk grey.

Station 192.—September 26, 1874; lat. $5^{\circ} 42' S.$, long. $132^{\circ} 25' E.$; 129 fathoms; mud.

This species presents the same swelled base of the arm found in *Ophiocreas ædipus*, and, doubtless for the same purpose, an egg-pouch. The genera *Astroschema* and *Ophiocreas*, though differing widely in their remote members, are, in their proximate species, only distinguished by surface granulation in the former.

Astroschema brachiatum, Lym. (Pl. XXX. figs. 5–8).

Astroschema brachiatum, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 67, pl. xvii. figs. 462–465, 1879.

Arms twenty-four times the diameter of the disk, higher than wide, with a smooth, even granulation, six to nine grains in the length of 1 mm.

(Type specimen from Station 33.) Diameter of disk 11 mm. Length of arm 270 mm. Width of arm near disk 3 mm. Height of arm at same point 3.8 mm. The granulation of the disk is, as usual, projected over the mouth angles, but there are no conspicuous grains which simulate mouth papillæ. Teeth short, blunt peg-like spines. Arms long, smooth, higher than wide, cleanly arched, and with only faint joint ridges; they are closely and uniformly covered with a smooth granulation, six to nine grains in the length of 1 mm. Disk high and arched, with well marked, somewhat elevated radial shields, running nearly to the centre. The granulation is about as on the arms. Genital openings rather short; their upper ends not reaching the level of the top of the arm. No tentacle scales (spines) on first pair of pores outside mouth slit; the next two pairs have one scale, and those beyond two, of which the lower one attains a maximum length of 2 mm., and has a rough, slightly clubbed end. Colour in alcohol, uniform chocolate-brown.

Station 33.—April 4, 1873; off Bermudas; 435 fathoms; mud.

This species stands between *Astroschema tenue* and *Astroschema læve*; its arms are much thicker than those of the former, and much longer than those of the latter.