

general, the arm plates that recall *Ophiomyxa*; nay, one *Astrophyton* character, the adhesion of the digestive cavity to the disk wall, is carried farther than in *Astrophyton* itself.

In conclusion, it is proper to point out a slight resemblance which the branching *Astrophytidæ* have to the order of Starfishes. This is in the pouches of the digestive cavity filled with a clotted matter, which suggest the varied cæcal appendages characteristic of different genera among *Asteroidea*.

Species of *Astrocnida* not herein described.

*Astrocnida isidis*, Lym. (Pl. XLVI. fig. 2).

*Astrocnida isidis*, Lym., Ann. Sci. Nat., 1872, p. 1.

*Trichaster isidis*, Duchassaing, Animaux Radiaires des Antilles, 1850.

West Indies; 56 to 120 fathoms.

*Astroporpa*.

*Astroporpa*, Örst. & Ltk., Vid. Meddel., Jan. 1856.

Disk divided into five radiating wedges by the pairs of radial shields and covered, together with the arms, by a minute pavement of flattened granules, which below are more scattered and rounded. The arms are simple, and their under surface is almost covered by the side arm plates which bear several rough cylindrical, tentacle scales (or arm spines). These plates are continued upward by a narrow, regular double line of close-set nodules, homologous with upper arm-plates, and bearing minute hooks. They thus form very regular raised belts on the arms, and are continued over the back of the disk as irregular concentric circles, of which the outer ones are hook bearing, like those of the arms, and those nearest the centre have often microscopic thorns, the remains of hooks. Two small genital openings in each interbrachial space at the outer corners.

Here is an excellent illustration of the homology between the roof of the disk, and the top and sides of the arms, or of the fact that the skin of the latter is a prolongation and a bending down of the skin of the roof. Seen from above, an *Astroporpa* looks as if composed only of five arms, whose bases were thickened and wedged together to form the disk, an effect heightened by the continuation of the hook-bearing ridges from belts on the arms to concentric circles on the disk. *Astrogomphus* has in place of them rather irregularly disposed spikes, while *Astrocnida* has pretty well-marked circles, some of which bear hooklets, while others are simple spikes.

Species of *Astroporpa* not herein described.

*Astroporpa annulata*, Örst. & Ltk., Vid. Meddel., Jan. 1856, p. 17; Addit. ad Hist., part 2, p. 152.

*Astroporpa dasycladia*, Duj. & Hupé, Hist. Nat. Zooph. Echin., p. 298, 1862.

Barbadoes; 100 fathoms. West Indies; 50 fathoms.