

whether this species belongs to the Porodiscida (*Amphymenium*) or to the Spongodiscida (*Spongo-brachium*) or perhaps to the Spongurida (*Spongocore*).

*Dimensions*.—Radius of each arm 0.1, greatest breadth 0.03; transverse breadth of the patagium 0.05.

*Habitat*.—North Pacific, Californian Sea, depth 2600 fathoms, Ehrenberg.

3. *Amphymenium zygartus*, n. sp. (Pl. 44, fig. 7).

Both arms equal, four times as long as broad, with seven to eight joints, slowly decreasing in size towards the blunt end. Patagium incomplete, protecting only the middle part of the shell on both sides; on each side two parallel lattice-plates, connected by transverse radial beams, perpendicular to the surface. Perimeter nearly rectilinear. (Resembles much certain forms of *Zygartus*, Pl. 40, but is a true Discoid, no Prunoid.) Compare also Pl. 45, fig. 8.

*Dimensions*.—Radius of each arm 0.2, greatest breadth 0.05; transverse breadth of the patagium 0.11.

*Habitat*.—Pacific, central area, Station 271, surface.

4. *Amphymenium monstrosum*, n. sp. (Pl. 44, fig. 11).

Both arms equal, little longer than broad, with six to seven convex joints. The axis of both arms is not common and straight, as in all other species of this genus, but broken, therefore the incomplete patagium, which envelops only two to three joints of the arms, is on one side convex, on the other side concave; it is formed by a simple lattice-plate, connected with the arms by numerous radial beams. This anomalous form, seen only once, may perhaps be a monstrosity of *Euchitonia*.

*Dimensions*.—Radius of each arm 0.12, greatest breadth 0.06; transverse breadth of the patagium 0.13.

*Habitat*.—South Pacific, Station 290, surface.

Subgenus 2. *Ommathymenium*, Haeckel.

*Definition*.—Both opposite arms of the same size and form, armed at the distal end with terminal spines.

5. *Amphymenium amphistylum*, n. sp. (Pl. 44, fig. 9).

Both arms equal, three times as long as broad, thickened towards the truncated distal end, and armed with a strong pyramidal terminal spine. Each arm with seven joints, separated by convex, transverse septa, and halved by a radial beam lying in the longitudinal axis. Patagium incomplete, cylindrical, enveloping only the middle part of the shell.

*Dimensions*.—Radius of each arm 0.18, greatest breadth 0.06; transverse breadth of the patagium 0.08.

*Habitat*.—North Atlantic, Station 354, surface.