4. Cannopilus hemisphæricus (Haeckel).

Dictyocha hemisphærica, Ehrenberg, 1844, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 266.

Each pileated piece of the skeleton is nearly hemispherical, with thirteen meshes; six lower and larger meshes in the sides of the truncated six-sided pyramid, seven others in the convex surface of the upper ring (one central with six surrounding it). From the six corners of the lower ring arise six horizontal perradial spines. From the inside of the same ring (probably on the side of the six ascending interradial beams) spring six centripetal teeth.

Dimensions.—Diameter of the basal ring 0.02, of the apical ring 0.01.

Habitat.—North Atlantic; Bermuda (Bailey).

5. Cannopilus cyrtoides, n. sp. (Pl. 114, figs. 11, 12).

Dictyocha cyrtoides, Haeckel, 1881, Prodromus.

Each pileated piece of the skeleton is an eight-sided truncated pyramid, or nearly hemispherical. From the basal ring arise twenty-four thorns or teeth, eight longer perradial centrifugal teeth placed almost horizontally, and between these sixteen shorter adradial teeth, directed downwards and somewhat centripetally. The network of the small hat is composed of seventeen meshes, arranged in two rows. The eight lower meshes are hexagonal, separated by six interradial ascending beams, and twice as large as the eight upper pentagonal meshes, which are separated by eight perradial beams, and enclose an apical central mesh.

Dimensions.—Diameter of the basal ring 0.04, of the apical ring 0.005. Habitat.—Central area of the Pacific, Station 266, depth 2750 fathoms.

Family LXXIII. AULACANTHIDA, Haeckel (Pls. 102-105).

Aulacanthida, Haeckel, 1862, Monogr. d. Radiol., p. 262.

Definition.—Phæodaria with an incomplete skeleton, composed of numerous hollow radial tubes, which pierce the spherical calymma and touch with their proximal ends the surface of the tripylean central capsule.

The family Aulacanthida represents a large and interesting group of Phæodaria, differing from all other families of this legion in the possession of numerous large radial tubes, which pierce the gelatinous and alveolated calymma in a radial direction, and come in contact with the outer surface of the central capsule by their inner or proximal ends, whilst their outer or distal ends project over the surface of the spherical calymma, and develop a great variety of manifold branches and terminal appendages. Usually (with the exception of a single genus only) the surface of the calymma is covered by an