hat is either a central mesh or an apical spine. Other spines arise from the basal ring, as in the former genera. The number of corner-spines on the basal ring is either four, six, or eight (in individual abnormalities also five or seven).

1. *Cannopilus superstructus*, Haeckel.

Dictyocha superstructa, Ehrenberg, 1844, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 80; Mikrogeol., Taf. xxii. fig. 45.

Each pileated piece of the skeleton is a reticulated four-sided pyramid. The base of it (or the lower ring) is a square, from the four perradial corners of which start four centrifugal horizontal spines. In the centres of the four basal bars (or the sides of the square) arise four interradial beams, which unite in the second (or upper) square ring. This latter forms a second (but much smaller) four-sided pyramid, the apex of which is truncated. Therefore the little hat bears nine meshes; around the large central opening four upper smaller and four lower larger quadrangular meshes.

Dimensions.—Diameter of the basal ring 0·03, of the apical ring 0·01.

Habitat.—Fossil in Tertiary rocks of Sicily (Caltanisetta).

2. *Cannopilus diplostaurus*, n. sp. (Pl. 114, fig. 10).

Each pileated piece of the skeleton is a truncated quadrangular pyramid. From the corners of the square basal ring start four perradial, nearly horizontal, spines. Between these arise four interradial beams, which are united above by an upper square ring. This latter is divided into four small square meshes by a regular cross of perradial bars, the distal ends of which are prolonged into four short ascending spines. In the centre of the cross arises a vertical apical spine.

Dimensions.—Diameter of the basal ring 0·04, of the apical ring 0·016.

Habitat.—Western Tropical Pacific, Station 225, depth 4475 fathoms.

3. *Cannopilus calyptra*, Haeckel.

Dictyocha heptacanthus, Ehrenberg, 1840, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 208; Mikrogeol., 1854, Taf. xix. fig. 39 (?).

Each pileated piece of the skeleton is a truncated six-sided pyramid, like that of *Dictyocha speculum*, but distinguished by the reticulation of the upper (smaller) ring, which is divided by six beams into six meshes, lying in the horizontal plane of the upper ring. Six peripheral spines on the corners of the lower ring. (The irregular form, figured by Ehrenberg as *Dictyocha heptacanthus*, *loc. cit.*, is probably only an individual abnormality with seven peripheral spines, instead of six; similar abnormalities occur also among the regular hexagonal forms which I found in the Tertiary rocks of Caltanisetta (Sicily).

Dimensions.—Diameter of the basal ring 0·05, of the apical ring 0·02.

Habitat.—Fossil in Tertiary deposits of Greece and Sicily.