Subfamily 1. Sethopilida, Haeckel, 1881, Prodromus, p. 431.

Definition.—Tripocyrtida, with the basal mouth of the shell open (vel Dicyrtida triradiata aperta).

Genus 534. *Dictyophimus*, Ehrenberg, 1847, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 53.

Definition.—Sethopilida (vel Dicyrtida triradiata aperta) with three complete thoracic ribs, prolonged into three solid divergent feet on the peristome. Cephalis with an apical horn.

The genus *Dictyophimus*, comprising many common species, may be regarded as the common ancestral form of all Sethopilida, and therefore also of the whole family of Dicyrtida. The cephalis bears an apical horn, and the thorax three ribs, which are prolonged over the open mouth into three solid feet. *Dictyophimus* may be derived either from *Euscenium* or *Peridium* (Archiperida), or from *Tripospyris* (Zygospyrida), or from *Plectaniscus* (Plectanida), by development of lattice-work between the three terminal feet, which therefore become thoracic ribs.

Subgenus 1. Dictyophimium, Haeckel.

Definition.—Shell smooth or rough, without prominent spines on the edges of the three thoracic ribs. (Commonly one single horn on the cephalis.)

1. Dictyophimus sphærocephalus, n. sp. (Pl. 57, fig. 10).

Shell smooth, with a deep collar stricture, separating two joints of nearly equal size. Cephalis subglobular, rough, with a stout pyramidal horn of half the length, and regular, circular, hexagonally framed pores. Thorax nearly three-sided prismatic, smooth, with three stout, little divergent or nearly parallel ribs, which are prolonged into conical subvertical feet half as long. Thoracic pores irregular, roundish.

Dimensions.—Cephalis 0.08 long, 0.08 broad; thorax 0.08 long, 0.08 broad. Habitat.—Western Tropical Pacific, Station 225, depth 4475 fathoms.

2. Dictyophimus tripus, Haeckel.

Dictyophimus tripus, Haeckel, 1862, Monogr. d. Radiol., p. 306, Taf. vi. fig. 1.

Shell with a slight collar stricture, separating two joints of slightly different size. Cephalis nearly ellipsoidal, large, with a slender conical horn of the same length. Thorax truncate three-sided

1 Dictyophimus = Net goblet; dixtuos Quade.