

The genus *Theophormis* commences the series of the Theophormida, or the multi-radiate Podocyrta, as their oldest and simplest form. The three-jointed shell is flat, campanulate or hat-shaped, and pierced by four or more radial ribs, four of which are primary or perradial, the others secondary or interrarial. *Theophormis* may be derived from the similar *Sethophormis* by development of a lumbar constriction, and a third joint or abdomen.

1. *Theophormis callipilium*, n. sp. (Pl. 70, figs. 1-3).

Shell flat, hat-shaped, with two sharp annular strictures. Cephalis large, flatly cap-shaped, with small, irregular, square meshes (fig. 3). The collar septum (fig. 2) is composed (as in the following species) of four crossed, thin, horizontal beams, each of which is inserted at the collar stricture by a three forked branch. From the centre of the collar stricture (in the common nodal point of the four beams) there arises a vertical, axial rod, which is inserted at the flat top of the cephalis by five branches (one central and four lateral). Length of the three joints = 1 : 3 : 2, breadth = 2 : 6 : 11. Thorax flat, campanulate, with four primary perradial ribs (prolongations of the four cortinar beams), and numerous (twenty to thirty) interpolated secondary ribs; four of these are interrarial (mid-way between the four primary ribs), and bisect the four large, semicircular, perradial meshes at the base of the thorax. Network of the thorax and abdomen subregular, with hexagonal meshes and thin bars. Abdomen flatly expanded, somewhat curved, like the brim of a hat, half as broad in the anterior (frontal) part as in the posterior (occipital) part, which is about as broad as the radius of the thorax. The twenty to thirty radial ribs of the abdomen are prolongations of the thoracic ribs, and are somewhat prominent at the margin of the peristome, which appears therefore elegantly indented.

*Dimensions*.—Length of the three joints, *a* 0.02 to 0.03, *b* 0.06 to 0.08, *c* 0.03 to 0.06; breadth, *a* 0.05 to 0.08, *b* 0.2 to 0.3, *c* 0.4 to 0.5.

*Habitat*.—Central Pacific, Station 271, surface.

2. *Theophormis medusa*, n. sp.

Shell flatly campanulate, with two distinct, annular strictures. Length of the three joints = 1 : 2 : 1, breadth = 2 : 5 : 8. Cephalis large, hemispherical. Thorax flatly conical, with four crossed ribs, opposite in pairs in two meridional planes, perpendicular one to another, and prolonged into the flat, nearly discoidal abdomen, which is half as broad as the thorax. The wall of the abdomen is pierced by eight radial ribs; four secondary ribs being interpolated between the four primary. Network of the entire shell very delicate, with regular, hexagonal meshes, and very thin bars. Peristome circular, not dentate.

*Dimensions*.—Length of the three joints, *a* 0.03, *b* 0.07, *c* 0.04; breadth, *a* 0.06, *b* 0.16, *c* 0.24.

*Habitat*.—Central Pacific, Station 266, surface.

3. *Theophormis cruciata*, n. sp.

Shell flat, campanulate, with two distinct annular strictures. Cephalis flat, cap-shaped, with irregular, square meshes. Thorax flat, conical, with hexagonal meshes. Abdomen flatly expanded,