

The genus *Pterocanium* differs from the preceding *Theopodium* in the fenestration of the three terminal feet, which are basal prolongations of the three radial ribs, enclosed in the wall of the thorax and the abdomen. Often also these ribs are partly or wholly fenestrated. It corresponds to *Lychnodictyum* among the Dicyrtida, and may be derived from this by development of an abdomen. The latter forms sometimes three concave bays, at other times three convex lobes between the three latticed feet.

Subgenus 1. *Pterocanarium*, Haeckel.

*Definition*.—Free basal edge of the abdomen between the three feet concave, forming three shallower or deeper bays between them.

1. *Pterocanium proserpinæ*, Ehrenberg.

*Pterocanium proserpinæ*, Ehrenberg, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, 1872, p. 299, Taf. xi. fig. 22.

*Pterocanium proserpinæ*, Haeckel, 1862, Monogr. d. Radiol., p. 332.

Shell campanulate, rough. Length of the three joints = 1 : 4 : 2, breadth 1 : 5 : 6. Cephalis subspherical, with a triangular-pyramidal vertical horn of thrice the length. Thorax hemispherical, without prominent swellings. Abdomen shorter, with three concave basal bays. Pores in the thorax and abdomen nearly equal, subregular, circular. Feet from the girdle (or the lumbar stricture) little divergent, nearly straight.

*Dimensions*.—Length of the three joints, *a* 0·02, *b* 0·08, *c* 0·04; breadth, *a* 0·3, *b* 0·1, *c* 0·12.

*Habitat*.—Mediterranean, Candia, Spratt, depth 1100 fathoms.

2. *Pterocanium gravidum*, n. sp., (Pl. 73, fig. 3).

Shell campanulate, nearly three-sided pyramidal, smooth. Length of the three joints = 1 : 4 : 3, breadth = 1 : 6 : 10. Cephalis subspherical, with a pyramidal straight horn of twice the length. Thorax hemispherical, without prominent swellings. Abdomen shorter, with three concave basal bays; its network prolonged to the ends of the feet. Pores in the thorax and abdomen of nearly equal size, irregular, roundish. Feet from the girdle strongly divergent, with convex back.

*Dimensions*.—Length of the three joints, *a* 0·015, *b* 0·075, *c* 0·06; breadth, *a* 0·02, *b* 0·12, *c* 0·2.

*Habitat*.—South Atlantic, Station 332, depth 2200 fathoms.

3. *Pterocanium orcinum*, n. sp. (Pl. 73, fig. 2).

Shell campanulate, nearly three-sided pyramidal, covered with conical spines. Length of the three joints = 1 : 4 : 3, breadth = 1 : 5 : 6. Cephalis hemispherical, with a conical horn of the same length. Thorax without prominent swellings, with subregular, circular pores. Abdomen