

2. *Peripanarium cenocylindricum*, n. sp.

Internal cortical shell with four unequal chambers, the two proximal kidney-shaped, the two distal conical, and somewhat smaller; pores irregular, polygonal-roundish, twice to five times as broad as the bars. External cortical shell nearly spindle-shaped, in the equatorial zone inflated, conical, tapering towards both poles, its pores very small, roundish, its surface covered with small thorns. The shell of this species resembles very much *Peripanartus attractus* (Pl. 40, fig. 7), but differs by the hollow cylindrical polar tubes, which arise from both poles of the inner cortical shell and attain more than half the length of the main axis. They are open at their ends (broken away), about as broad as the outer medullary shell, and perforated by irregular, roundish pores.

*Dimensions*.—Main axis (without polar tubes) 0.28, greatest breadth (in the equator) 0.16; pores of the inner cortical shell 0.004 to 0.01, of the outer 0.002 to 0.005; bars of the former 0.004, of the latter 0.002; total length of the polar tubes 0.16, breadth of them 0.03.

*Habitat*.—Pacific, central area, Station 268, depth 2900 fathoms.

## Family XVII. ZYGARTIDA, Haeckel (Pl. 40, figs. 10–13).

*Zygartida*, Haeckel, 1881, Prodrömus, p. 462 (*sensu restricto*).

*Definition*.—P r u n o i d e a with annulated cortical shell, the external shell being divided by five or more parallel transverse constrictions into six or more chambers, enclosing in the centre two internal concentric shells (medullary shells). Central capsule cylindrical, commonly annulated (corresponding to the transverse annular constrictions of the cortical shell).

The family *Zygartida*, the seventh and last of the *P r u n o i d e a*, comprises, in the sense here restricted, all those *P r u n o i d e a* in which the cortical shell is annulated and composed of six to twenty or more (at least six) camerae, lying one behind another in the elongated main axis, and separated by five or more annular constrictions. When I constituted this family in 1881 (*loc. cit.*), I had given to it a much wider extent, embracing all those *P r u n o i d e a* which exhibit annular constrictions of the cortical shell; as the number of these, in consequence of further researches, is much increased, it seems now more convenient to restrict the family to the extent here given.

No doubt the *Zygartida* must be derived from the *Panartida* by progressive growth of the cortical shell in the main axis and accompanying increase of the number of its chambers. Whilst this number in the *Panartida* is constantly restricted to four, in the *Zygartida* it amounts to ten, twenty, or more, and is in the lowest case six (Pl. 40, fig. 10). The maximum number is variable in the different species, but of course also different in the various degrees of individual development. Each *Zygartid* is at the beginning of its growth a *Cyphinid*, later a *Panartid*. The number of the annular constrictions separating the chambers and lying in parallel transverse planes is at least