

somewhat larger and more square. Outer cortical shell cylindrical, hemispherical at both poles, with irregular, polygonal pores, on an average twice as large as those of the inner, but the bars between them much thinner. Outer surface spiny. Both medullary shells lenticular. Polar tubes conical, a little longer than one internal chamber, as broad at the base as the inner medullary shell. Sometimes the tubes exhibit prominent edges (as in the lower spine of fig. 12); the pores of these are very small, and roundish.

Dimensions.—Length of the six-chambered internal cortical shell 0.23, of the external 0.3; greatest breadth of the former 0.07, of the latter 0.11; pores of the inner shell 0.004 to 0.01, of the outer 0.01 to 0.02; bars of the former 0.002, of the latter 0.001; length of the polar tubes 0.05, basal thickness 0.02.

Habitat.—North Pacific, Station 241, depth 2300 fathoms.

2. *Desmartus tubulatus*, n. sp.

Inner cortical shell composed of six to ten kidney-shaped chambers, tapering in size towards both poles, every chamber with six to seven transverse rows of irregular, roundish pores, twice to six times broader than the bars. Outer cortical shell spindle-shaped, in the equatorial zone inflated, tapering towards both poles, its network similar to the inner, only more delicate. Polar tubes conical, twice as long as an inner chamber, as broad at the base as the outer medullary shell. Both medullary shells lenticular.

Dimensions.—Length of the six-chambered internal cortical shell 0.25, of the external 0.32; greatest breadth of the former 0.08, of the latter 0.12; pores of the inner shell 0.002 to 0.012, of the outer 0.003 to 0.01; bars of the former 0.002, of the latter 0.001; length of the polar tubes 0.07, basal thickness 0.03.

Habitat.—North Pacific, Station 256, depth 2950 fathoms.

Genus 173. *Zygocampe*,¹ n. gen.

Definition.—Zygartida with triple (or multiple) cortical shell and double medullary shell, without polar tubes.

The genus *Zygocampe* differs from *Desmocampe* and *Ommatocampe* by the multiplication of the cortical shell, which is composed of three or more concentric envelopes. The three mentioned genera form therefore a phylogenetic series, produced by the concentric increase on the outside of the jointed cortical shell. Commonly the second cortical shell is not as complete as the first (or innermost), and the third (or outermost) is yet more incomplete. Rarely the number of the concentric cortical shells surpasses three.

1. *Zygocampe pupula*, n. sp.

Inner cortical shell with six to twelve chambers of nearly the same size and form. Every chamber kidney-shaped, with four to five transverse rows of circular, subregular pores, twice as

¹ *Zygocampe* = Caterpillar with paired joints; ζυγόν, κάμπη.