

polar tube (in fig. 13 only on the upper pole), and so this species is transformed into *Zygartus chrysalis*).

Dimensions.—Length of the six-chambered inner cortical shell 0.25, of the middle 0.3, of the outer 0.35; greatest breadth of the first 0.07, of the second 0.11, of the third 0.14; pores (on an average) 0.01 (0.002 to 0.02), bars 0.002 to 0.005.

Habitat.—Pacific, central area, Stations 272 to 274, depth 2350 to 2750 fathoms.

Genus 174. *Zygartus*,¹ Haeckel, 1881, Prodrömus, p. 463.

Definition.—*Zygartida* with triple (or multiple) cortical shell and double medullary shell, with two hollow fenestrated tubes, opposite on both poles of the main axis.

The genus *Zygartus* differs from *Zygotampe* by the development of two hollow fenestrated tubes, on the two opposite poles of the main axis. It exhibits therefore to the latter the same relation that *Desmartus* does to *Desmocampe* and *Ommatartus* to *Ommatocampe*; it differs from these by the multiplication of the cortical shell, which is composed of at least three concentric envelopes.

1. *Zygartus doliolum*, n. sp.

Inner cortical shell composed of six (or more) kidney-shaped chambers, all nearly of the same size and structure, every chamber with four to five transverse rows of irregular, roundish pores, twice to four times as broad as the bars; the basal pores scarcely larger than the apical pores. Middle cortical shell nearly of the same structure as the inner, only the pores larger and the bars thinner. Outer cortical shell cylindrical, hemispherical at both poles, its network very delicate, with large irregular, polygonal pores, and very thin bars between them; its surface covered with thin bristle-like spines. Both medullary shells lenticular. Polar tube cylindrical, with conical apex, and with very small pores; its length equals the breadth of two internal chambers, its breadth that of the inner medullary shell. (This species appears to be a further developed form of *Ommatocampe annulata* and *Desmartus larvalis*, Pl. 40, fig. 12.)

Dimensions.—Length of the six-chambered inner cortical shell 0.25, of the middle 0.3, of the outer 0.35; greatest breadth of the first 0.07, of the second 0.11, of the third 0.15; pores of the inner shell 0.005 to 0.01, of the middle 0.003 to 0.007, of the outer 0.008 to 0.02; bars of the first 0.002, of the second and third 0.001; length of the polar tubes 0.15, basal thickness 0.02.

Habitat.—Pacific, central area, Station 270, depth 2925 fathoms.

2. *Zygartus chrysalis*, n. sp. (Pl. 40, fig. 13).

Inner cortical shell composed of six to twenty (commonly eight to twelve) chambers of different size and form. Both proximal chambers nearly hemispherical, with spiny surface and subregular,

¹ *Zygartus* = Loaf with paired joints; ζυγόν, ἀετος.