distal chamber a circle of large square meshes. The breadth of the pores is eight to twelve times that of the bars between them. The whole surface is covered with small bristle-like spines.

Dimensions.—Total length of the cortical shell 0.14, greatest breadth (in the equator of each proximal chamber) 0.07; meshes 0.008 to 0.015, bars 0.002, spines 0.01.

Habitat.—Pacific (Philippine and Californian Sea), 3300 and 2300 fathoms, Ehrenberg; Station 200, depth 250 fathoms; Station 253, depth 3125 fathoms.

15. Panartus pluteus, n. sp. (Pl. 40, fig. 2).

Both proximal chambers kidney-shaped, with irregular, roundish pores, twice to four times as broad as the bars; their surface everywhere covered with short conical thorns. From both polar circles arise ten to twelve radial rods, which bear a fenestrated cap, and form thus either the beginning of a second, external, cortical shell, or (if remaining thus) two imperfect distal chambers. The spherical segment, which forms their surface, is concentric with the proximal chambers, is perforated by the same irregular, roundish pores, and covered with numerous bristle-like spines.

Dimensions.—Main axis of the cortical shell 0.17, equatorial axis (in the constriction) 0.06; distance between the proximal and distal chambers 0.03; pores 0.003 to 0.01, bars 0.003 to 0.005.

Habitat.—Pacific, central area, Station 272, depth 2600 fathoms.

Genus 164. Peripanartus, n. gen.

Definition.—Panartida with double cortical shell and double medullary shell, without polar spines or tubes on both poles of the main axis.

The genus *Peripanartus* differs from *Panartus* only in the development of an outer reticulated envelop, which mantle-like surrounds the shell and represents a second or external cortical shell. This mantle or veil envelops either the whole internal cortical shell or only both proximal chambers. *Peripanartus* exhibits the same relation to *Panartus* as in the foregoing ancestral family *Cypassis* bears to *Cyphonium*.

Subgenus 1. Peripanartula, Haeckel.

Definition.—Surface of the outer cortical shell smooth, without spines or thorns.

1. Peripanartus palliatus, n. sp.

Internal cortical shell with four kidney-shaped chambers of equal size and similar form, identical with the cortical shell of *Panartus tetrathalamus* and *Panartus quadrijugus* (Pl. 40, fig. 3), with irregular, roundish pores, twice to three times as broad as the bars. It differs from these two species

¹ Peripanartus = Panartus with muntle ; περιπάναρτος.