Subgenus 2. Peripanartium, Haeckel.

Definition.—Surface of the outer cortical shell covered with spines or thorns.

4. Peripanartus atractus, n. sp. (Pl. 40, fig. 7).

Inner cortical shell with four very unequal chambers; both proximal chambers spheroidal (with subregular, roundish pores, twice to three times as broad as the bars), both distal chambers nearly conical, with a circle of eight to ten very large square pores at the base; the other pores very small, roundish. Outer cortical shell envelops only the proximal chambers and the basal half of the distal chambers, appearing as the direct continuation of the microporous covering of their apical half. The whole external cortical shell is inflated in the equatorial zone, and hence assumes an irregular, spindle-like appearance. Its whole surface is rough with innumerable very short thorns.

Dimensions.—Main axis 0.28, equatorial axis 0.17; pores of the external cortical shell 0.002 to 0.004, bars 0.002; main axis of the proximal chambers of the internal cortical shell 0.07, equatorial axis 0.09; pores 0.007, bars 0.004.

Habitat.—North Pacific, Station 244, depth 2900 fathoms.

5. Peripanartus cylindrus, n. sp. (Pl. 40, fig. 6).

Internal cortical shell with four unequal chambers; both proximal chambers kidney-shaped (with regular, circular, hexagonally framed pores of the same breadth as the bars), both distal chambers nearly hemispherical, with a circle of eight to ten very large square pores at their base; the other pores very small, roundish. External cortical shell envelops the whole internal like a perfect hollow cylinder, which is closed at both poles by a hemispherical cap. The whole surface of this cylindrical mantle is perforated by innumerable very small roundish pores, and covered with small bristle-like spines.

Dimensions.—Main axis of the cylinder 0.3, equatorial axis 0.12; pores and bars 0.006; spines of its surface 0.012 to 0.15; main axis of the internal cortical shell 0.2; equatorial axis (in the constriction) 0.06; pores and bars of its proximal chambers 0.007, of its distal chambers 0.003; large square pores at their base 0.02.

Habitat.—Pacific, central area, Stations 270 to 274, depth 2350 to 2925 fathoms.

Genus 165. Panicium, n. gen.

Definition.—Panartida with simple cortical shell and double medullary shell, with two opposite apical spines on both poles of the main axis, or with a group of polar spines.

The genus *Panicium* comprises those forms of *Panartus* which develop a peculiar armature on both poles of the cortical shell. This may be only a single strong spine

1 Panicium=A kind of bread.