

only by the external cortical shell enveloping the whole internal one, in the same manner as in *Peripanartus cylindrus* (Pl. 40, fig. 6). The two shells are connected by numerous radial rods. The surface of the outer cortical shell is quite smooth, its irregular, roundish pores about half as large as those of the inner cortical shell.

Dimensions.—Main axis of the external cortical shell 0.27, of the internal 0.2; greatest breadth of the former (in the equator of each chamber) 0.13, of the latter 0.09; pores of the external cortical shell 0.002 to 0.004, of the internal 0.004 to 0.008; bars of the former 0.002, of the latter 0.003.

Habitat.—Pacific, central area, Stations 271, 272, depth 2425 to 2600 fathoms.

2. *Peripanartus laevigatus*, n. sp.

Internal cortical shell with four unequal chambers, both proximal kidney-shaped (with subregular polygonal pores, twice to three times as broad as the bars), both distal nearly hemispherical, with subregular, roundish pores of half that size. External cortical shell envelops only the proximal chambers, and appears as the direct continuation of the internal shell of the distal chambers, with the same small roundish pores. The outer surface is quite smooth. This species has nearly the same structure as *Peripanartus amphicornus* (Pl. 40, fig. 8), but differs from it by the absence of the polar spine-circles, and by the perfect smoothness of the surface.

Dimensions.—Main axis of the shell 0.25, greatest breadth (in the equator of the proximal chambers) 0.15; equatorial stricture of the external shell 0.10, of the internal 0.07; pores of the internal shell of the proximal chambers 0.013, of the external 0.006; bars 0.003.

Habitat.—Pacific, central area, Station 274, depth 2750 fathoms.

3. *Peripanartus amphicornus*, n. sp. (Pl. 40, fig. 5).

Inner cortical shell with four very unequal chambers; both proximal chambers kidney-shaped (with regular, circular, hexagonally framed pores, twice as broad as the bars); both distal chambers conical, with a circle of large square pores at the base, the other pores very small, roundish. Outer cortical shell very thin, quite smooth, with irregular, roundish pores, envelops in younger specimens only the distal chambers. But the radial spines on the surface of the internal cortical shell of the proximal chambers indicate that these will also be afterwards enclosed by the growing of the external shell. This species exhibits the progressive (ontogenetic as well as phylogenetic) development of *Panartus amphicornus*.

Dimensions.—Main axis of the outer cortical shell 0.3, its greatest breadth (at the prominent distal ends of the radial rods between the large square pores) 0.15; pores 0.003 to 0.001, bars 0.005; main axis of the inner cortical shell 0.26, its greatest breadth 0.13; pores of its distal chambers 0.003, of its proximal chambers 0.01; large square pores 0.03; bars 0.004.

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