The genus Panartus represents the common ancestral form of all Panartida, as all other genera of this subfamily must be derived from it, and are only further developmental stages, from an ontogenetic as well as from a phylogenetic point of view. The cortical shell of Panartus is constantly composed of four fenestrated chambers jointed to one another in the main axis; both proximal chambers are separated from one another by the equatorial ring-like constriction, in the centre of which lies the double medullary shell; both distal chambers are separated from the former by two other annular constrictions (in planes parallel to the equatorial plane). All four chambers may exhibit the same (kidney-shaped) form and structure (in the subgenera Panartella and Panartoma); or the proximal chamber may differ more or less in shape and size from the distal (in the subgenera Panartissa and Panartura). The outer surface of the cortical shell is sometimes smooth (as in Panartella and Panartissa), at other times spiny or thorny (as in Panartoma and Panartura). The double medullary shell is sometimes spherical, or commonly compressed at both poles and spheroidal or lenticular.

Subgenus 1. Panartella, Haeckel.

Definition.—Surface of the cortical shell smooth, without spines or thorns. All its four chambers exhibit nearly the same form and structure.

1. Panartus tetraplus, n. sp.

All four chambers of the cortical shell of the same form, size, and structure, kidney-shaped, twice as broad as long. Pores rather regular, hexagonal, all nearly of the same size and form, four times as broad as the thin bars; five to six pores on the half meridian, nine to ten on the half equator of each chamber. Surface of the cortical shell smooth, its main axis three times as long as its equatorial axis (in the median constriction). Both concentric medullary shells spherical; the equatorial axis of the outer half as long as that of the cortical shell. (All four chambers of this species have the same appearance as the two proximal chambers of Panartus diploconus, Pl. 40, fig. 1.)

Dimensions.—Main axis of the cortical shell 0.21, equatorial axis 0.07; breadth of every chamber 0.09; meshes 0.013, bars 0.03.

Habitat.—Central area of the Pacific, Stations 270 to 274, depth 2350 to 2925 fathoms.

2. Panartus tetracolus, n. sp.

All four chambers of the cortical shell of the same form, size, and structure, kidney-shaped, twice as broad as long. Pores regular, circular, with hexagonal frame, twice as broad as the bars; six to seven pores on the half meridian, ten to twelve on the half equator of each chamber. Surface of the cortical shell smooth; its main axis three times as long as the equatorial axis. Both concentric medullary shells spheroidal, somewhat compressed at both poles; the equatorial axis