

on each pole, lying in the main axis (subgenus *Panicidium*); or a bunch or a circle of polar spines diverging radially (subgenus *Panartidium*); in the latter case the polar spines can either form a bunch on the pole itself, or a crown of thorns around it.

Subgenus 1. *Panicidium*, Haeckel.

Definition.—On both poles of the main axis only a single large spine.

1. *Panicium amphacanthum*, n. sp.

All four chambers of the cortical shell nearly of the same size and form, kidney-shaped, with subregular, circular pores, twice as broad as the bars; five to six pores on the half meridian, ten to eleven on the half equator of each chamber. Surface covered with small spines. On both poles of the main axis is a very strong, conical, apical spine, half as long as the main axis, on the base one-fourth as broad as the equatorial axis.

Dimensions.—Main axis (without polar spines) 0.22, equatorial axis 0.06; pores 0.01, bars 0.005; length of the polar spines 0.12, basal thickness 0.015.

Habitat.—Antarctic, Station 152, depth 1260 fathoms.

2. *Panicium amphistylus*, n. sp.

Both proximal chambers kidney-shaped, both distal chambers nearly hemispherical, somewhat smaller. Pores irregular, roundish, twice to three times as broad as the bars; four to six on the half meridian, eight to ten on the half equator of each chamber; a circle of larger square pores on the base of each distal chamber. Surface thorny. On both poles of the main axis one strong, pyramidal, apical spine, one-third as long as the main axis, on the base one-fourth as broad as the equatorial constriction. (Similar to *Panarium tubularium*, Pl. 40, fig. 9, but without tubes.)

Dimensions.—Main axis (without polar spines) 0.2, equatorial axis 0.05; pores 0.005 to 0.01, bars 0.003; length of the polar spines 0.07, basal thickness 0.012.

Habitat.—Antarctic, Station 156, depth 1975 fathoms.

Subgenus 2. *Panartidium*, Haeckel.

Definition.—On both poles of the main axis a bunch or a circle of aggregated spines.

3. *Panicium scoparium*, n. sp.

Both proximal chambers kidney-shaped, both distal chambers nearly hemispherical, somewhat smaller. Pores irregular, polygonal, twice to five times as broad as the bars; six to eight on the half meridian, twelve to fourteen on the half equator of each chamber. Surface spiny, covered with thin,