

covered with three or four verticils of four long curved bristles; at the distal apex inflated, with four crossed, divergent, stout, curved horns. Around the pyramidal base of each spine a corona of eight pores (two on each of the four faces). Mouth cruciform, with four triangular, convergent teeth.

Dimensions.—Diameter of the shell 0.16, length of the spines 0.18.

Habitat.—South Pacific, Station 298, depth 2225 fathoms.

Genus 712. *Circospathis*,¹ Haeckel, 1879, Sitzungsber. med.-nat. Gesellsch.
Jena, Dec. 12, p. 5.

Definition.—Circoporida with a subregular, spherical, or polyhedral shell, composed of fourteen triangular, nearly equal plates, with nine corners, from which arise nine radial spines, symmetrically disposed.

The genus *Circospathis* exhibits the remarkable and peculiar form of a "Tetradecahedron," or a subregular polyhedron with fourteen triangular faces, thirty edges, and nine corners, from which arise nine radial spines. These lie in three meridional planes, which are crossed at equal angles (three equidistant spines in each plane). The same interesting form occurs also in some Astrosphærida, which bear nine regularly disposed radial spines, as *Haliomma echinaster*. All four observed species of *Circospathis* are South Atlantic.

1. *Circospathis furcata*, n. sp. (Pl. 115, figs. 4–6).

Shell polyhedral or nearly spherical, with nine prominent corners, from which arise nine radial spines, about as long as the diameter of the shell. The polygonal plates of the shell are separated by high crests, usually hexagonal or pentagonal, irregular, about twelve to fifteen on the half meridian. Radial spines cylindrical, straight, about as long as the diameter of the shell, with spirally turned edges, covered with numerous curved bristles, at the distal end forked; the two fork branches curved, one-third as long as the simple basal part. The inflated base of each spine is surrounded by a corona of nine to twelve ovate basal pores. Mouth pentagonal, with five thick, mammillate and spinulate, somewhat convergent teeth (fig. 5).

Dimensions.—Diameter of the shell 0.6, length of the spines 0.5.

Habitat.—South Atlantic (east of Buenos Ayres), Station 325, depth 2650 fathoms.

2. *Circospathis novena*, n. sp. (Pl. 117, figs. 3, 3a).

Shell polyhedral (tetradecahedral), with fourteen triangular, plane, or slightly convex faces, covered with small, irregular, polygonal (usually hexagonal) plates, and nine prominent corners, from which arise nine radial spines, shorter than the diameter of the shell. Each spine is surrounded at the broader base by a circle of twelve to sixteen pores and a corona of bristles, and bears at the

¹ *Circospathis* = Shell with verticils around the spines; κίρκος, σπαθίς.