

half equator. Irregularly scattered between them short conical thorns. Polar spines conical, about as long as the axis of the outer shell, as broad at the base as the inner shell.

*Dimensions*.—Diameter of the outer shell 0·2, middle shell 0·06, inner shell 0·04; pores of the cortical shell 0·005 to 0·02, bars 0·006; length of the polar spines 0·17, basal breadth 0·04.

*Habitat*.—North Atlantic, Gulf Stream, near Florida, depth 1500 fathoms, Schaffner.

Genus 52. *Amphistylus*,<sup>1</sup> Haeckel, 1881, Prodrömus, p. 452.

*Definition*.—*Stylosphærida* with three concentric lattice-spheres and two free spines of different size or form.

The genus *Amphistylus* differs from its ancestral form, *Amphisphæra*, by the differentiation of both polar spines, and exhibits therefore the same relation to it that *Sphærostylus* bears to *Stylosphæra*.

1. *Amphistylus clio*, n. sp.

Radial proportion of the three spheres = 4 : 2 : 1. Cortical shell thick walled, smooth; its pores regular, circular, three times as broad as the bars; eighteen to twenty on the half equator. Polar spines three-sided pyramidal, very stout, as broad at the base as the inner medullary shell; major spine somewhat longer than the diameter of the cortical shell; minor spine scarcely half as long. (Similar to *Stylosphæra clio*, Pl. 16, fig. 7, but different in the double medullary shell and the different length of the polar spines.)

*Dimensions*.—Diameter of the outer sphere 0·15, middle 0·08, inner 0·04; pores of the outer shell 0·01, bars 0·003; length of the major spine 0·17, minor 0·07, basal breadth 0·04.

*Habitat*.—Pacific, central area, Station 265, depth 2900 fathoms.

2. *Amphistylus hippocampus*, n. sp.

Radial proportion of the three spheres = 3 : 2 : 1. Cortical shell thick walled, smooth; its pores regular, circular, hexagonally lobed, three times as broad as the bars; twelve to fifteen on the half equator. Major polar spine three-sided pyramidal, about as long as the axis of cortical shell; minor spine pommel-like, edged, scarcely one-third as long. (Similar to *Sphærostylus hippocampus*, Pl. 16, figs. 10, 11, but differs in the larger size, the double medullary shell, and the straight, not curved, major spine.)

*Dimensions*.—Diameter of the outer sphere 0·11, middle 0·07, inner 0·035; pores of the outer shell 0·011, bars 0·004; length of the major spine 0·12, of the minor 0·04, breadth 0·03.

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

3. *Amphistylus glyptodon*, n. sp.

Radial proportion of the three spheres = 6 : 3 : 1. Cortical shell thick walled, spiny, with irregular, roundish pores, two to four times as broad as the bars; ten to twelve on the half equator.

<sup>1</sup> *Amphistylus* = Shell with styles on both poles; ἀμφί, στῦλος.