

as broad as the bars, on an average twice as large in the outer and middle as in the inner shell. Sixty to eighty short conical radial spines on the surface, about as long as the diameter of the inner shell, and one-fourth as broad at the base. Radial proportion of the three spheres = 1 : 9 : 10.

*Dimensions*.—Diameter of the outer shell 0·4 to 0·5, middle 0·35 to 0·45, inner 0·05 to 0·06.

*Habitat*.—Fossil in Barbados.

Genus 102. *Echinomma*,<sup>1</sup> Haeckel, 1881, Prodrömus, p. 453.

*Definition*.—A s t r o s p h æ r i d a with three concentric lattice-spheres and numerous simple radial spines of two different kinds ; larger main spines and smaller by-spines.

The genus *Echinomma* differs from its ancestral form, *Actinomma*, in the differentiation of the radial spines. Whilst a large number of small by-spines cover the entire surface, a smaller number of large main spines are scattered over it, or limited to certain regularly distributed points. It represents *Heliosoma* among the Haliommida.

Subgenus 1. *Echinometta*, Haeckel.

*Definition*.—Pores of the cortical shell regular, of nearly equal size and similar form.

1. *Echinomma echinidium*, n. sp.

Cortical shell thin walled, with regular, hexagonal pores, four times as broad as the bars ; ten to twelve on the radius. Both medullary shells with regular, circular pores, twice as broad as the bars. Radial proportion of the three spheres = 1 : 2 : 5. Surface covered with short bristle-shaped by-spines (one in every hexagon-corner) ; twenty main spines regularly disposed, three-sided pyramidal, as long as the diameter of the inner shell.

*Dimensions*.—Diameter of the outer shell 0·1, middle 0·045, inner 0·02 ; cortical pores 0·008, bars 0·002 ; length of the main spines 0·02, breadth 0·01.

*Habitat*.—South Pacific, Station 295, surface.

2. *Echinomma cidaris*, n. sp.

Cortical shell thin walled, with regular, circular, hexagonally framed pores, twice as broad as the bars ; six to eight on the radius. Both medullary shells with simple, circular pores. Radial proportion of the three spheres = 1 : 2 : 6. Surface covered with short bristle-shaped by-spines, half as long as the forty to fifty main spines, which are three-sided pyramidal, and reach the radius of the shell.

*Dimensions*.—Diameter of the outer shell 0·18, middle 0·06, inner 0·03 ; cortical pores 0·01, bars 0·005 ; length of the main spines 0·08, basal breadth 0·015.

*Habitat*.—Central Pacific, Station 272, surface.

<sup>1</sup> *Echinomma* = Urchin-eye ; ἐχίνος, ὄμμα.