

5. *Astrocyclia heterocycla*, n. sp. (Pl. 36, fig. 8).

Phacoid shell two and a half times as broad as the medullary shell, surrounded by three rings of unequal breadth, the first ring as broad as the second and third together. They are divided by fifty to sixty piercing radial beams into chambers, which are square in the second and third rings, and half as large as in the first. The radial beams are alternately thicker and thinner, prolonged into short marginal spines. Pores subregular, circular; eight on the radius of the phacoid shell, two on the breadth of the first ring, a single one on each chamber of the second and third rings.

Dimensions.—Diameter of the disk (with three rings) 0·2, of the phacoid shell 0·12, of the medullary shell 0·05.

Habitat.—Equatorial Atlantic, Station 348, depth (2450) fathoms; also fossil in Barbados.

Genus 203. *Coccocyclia*,¹ Haeckel, 1881, Prodrömus, p. 458.

Definition.—Coccodiscida with numerous (five or more) solid radial spines on the margin of the circular disk. Medullary shell double.

The genus *Coccocyclia* has the same form and structure as the foregoing *Astrocyclia*, and differs from it only in the double concentric medullary shell. It bears therefore to the latter the same relation as *Coccodiscus* does to *Lithocyclia*.

1. *Coccocyclia liriantha*, n. sp.

Phacoid shell three times as broad as the outer and ten times as broad as the inner medullary shell, connected with both by six equidistant piercing radial beams. The margin of the phacoid shell is surrounded by one or two equatorial rings, each as broad as the outer medullary shell, and divided by thirty to forty radial beams into narrow chambers. Pores subregular, circular, about nine to ten on the radius of the phacoid shell, three to four on the breadth of each ring. Margin of the disk ciliated, with six regularly disposed radial spines as prolongations of the inner six piercing beams. Each spine cylindrical, delicately crenulated, about as broad as the inner medullary shell, and once to twice as long as the diameter of the whole disk, elegantly undulated, with a conical terminal point.

Dimensions.—Diameter of the disk (with two rings) 0·32, of the phacoid shell 0·2, of the outer medullary shell 0·06, of the inner 0·02.

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

2. *Coccocyclia heliantha*, n. sp. (Pl. 36, figs. 5, 6).

Phacoid shell two and a half times as broad as the outer and six times as broad as the inner medullary shell, surrounded by six to eight rings of nearly equal breadth, the outer somewhat smaller. They are divided by fifty to sixty piercing radial beams into irregular chambers. Pores

¹ *Coccocyclia* = Circular shell with nucleus; κόκκος, κύκλιος.