

rows of chambers; it connects the end points of the arm radius in such a manner that the whole shell becomes a regular square.

Dimensions.—Diameter of the phacoid shell 0·09, of the medullary shell 0·045; length of the arms 0·1, greatest breadth 0·08.

Habitat.—South Pacific, Station 295, depth 1500 fathoms.

Genus 210. *Pentactura*,¹ Haeckel, 1881, Prodrömus, p. 459.

Definition.—Coccodiscida with five chambered arms on the margin of the circular or pentagonal disk, without a connecting patagium.

The genus *Pentactura* possesses five free radial arms, and resembles *Pentalastrum* among the Porodiscida. The distance of the five arms seems to be sometimes equal, at other times different in one and the same species.

1. *Pentactura pentactis*, Haeckel.

Astromma pentactis, Ehrenberg, 1875, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 66, Taf. xxx. fig. 1.

Phacoid shell two and a half times as broad as the medullary shell, with eight pores on its radius. Arms regularly or irregularly disposed, nearly square, about half as large as the phacoid shell, at the truncated distal end little broader than at the base. In the specimen figured, and very imperfectly described by Ehrenberg, (*loc. cit.*), the arms were asymmetrically disposed, two opposite in one axis of the disk, two others on one side of this axis, the fifth opposite to these on the other side. Another specimen which I found in the Barbados rocks had five arms of equal size, regularly disposed, at equal intervals.

Dimensions.—Diameter of the phacoid shell 0·1, of the medullary shell 0·04; length and breadth of the arms 0·05 to 0·06.

Habitat.—Fossil in the rocks of Barbados.

2. *Pentactura astropecten*, n. sp.

Phacoid shell three times as broad as the medullary shell, with ten pores on its radius. Arms regularly disposed, club-shaped, nearly twice as long as the diameter of the phacoid shell, and equal to it in breadth at the rounded distal end. The latter is armed with a short conical spine, and is twice as broad as the base.

Dimensions.—Diameter of the phacoid shell 0·09, of the medullary shell 0·03; length of the arms 0·17, basal breadth 0·05, distal breadth 0·08.

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

¹ *Pentactura* = Stellated shell with five rays; πέντε, ἀκτίς, οὐρά.