## Synopsis of the Genera of Chiastolida.

I. Subfamily

Chiastolidina.
Sixteen diametral spines, derived by concrescence of thirty-two radial spines,.

. 321. Chiastolus.

II. Subfamily

Acanthochiasmida.

Ten diametral spines, derived by concrescence of twenty radial spines,

. 322. Acanthochiasma.

## Genus 321. Chiastolus, n. gen.

Definition.—Chiastolida with sixteen diametral spines, derived from thirty-two radial spines opposite and grown together in pairs.

The genus *Chiastolus*, hitherto known only by a single observed specimen, comprises the Chiastolida with sixteen diametral spines, which are loosely crossed in the centre of the body. Four of these spines are equatorial, four polar, and eight tropical. We derive *Chiastolus* from *Actinastrum* by concrescence of every two opposite spines in one axis of the body (compare above, pp. 729, 732).

## 1. Chiastolus amphicopium, n. sp. (Pl. 129, figs. 3, 3a, 3b).

Spines in the central part cylindrical, spirally convoluted in a very peculiar manner, broadened towards both ends, strongly compressed, two-edged; the broadest parts are the two truncated distal ends, five to seven times as broad as the thinnest central part, which is placed between two spindle-shaped intumescences. These cochleary central parts of the sixteen spines seem to be resting one upon another. Each spine (composed of two opposite equal radial spines) has nearly the form of a double oar. The single observed specimen (preserved in glycerine) exhibited a most regular disposition of the thirty-two spines (grown together in pairs in the centre). The diameter of the dark non-transparent spherical central capsule equalled one-fifth to one-fourth of the total length of the double spines. When the soft parts of the body were destroyed by sulphuric acid, the sixteen single spines were suddenly dispersed.

Dimensions.—Length of the sixteen double spines 0.5, distal breadth (of the truncated ends) 0.05, central breadth 0.01; diameter of the central capsule 0.12.

Habitat.—South-east Pacific (near Juan Fernandez), Station 297, surface.

## Genus 322. Acanthochiasma, Krohn, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 810.

Definition.—Chiastolida with ten diametral spines, derived from twenty radial spines opposite and grown together in pairs.

<sup>1</sup> Chiastolus=With crossed arms; χιαστός, ώλος.

<sup>&</sup>lt;sup>2</sup> Acanthochiasma = Spine-cross; ἀκανθα, χιαςμα.