1. Astrolophus stellaris, n. sp.

Radial spines from one hundred to two hundred, of very different sizes, but of similar form; about sixteen to twenty very large spines, forty to fifty of medium size, and one hundred to one hundred and twenty much smaller. All spines cylindrical in the greater part of their length, with simple apex, gradually thickened towards the central part, conical, without edges. The base itself is a slender pyramid with four to eight edges.

Dimensions.—Length of the largest spines 0.3 to 0.4, of the majority 0.1 to 0.2, of the smallest 0.05 to 0.1.

Habitat.—South Pacific, Station 288, surface.

2. Astrolophus solaris, n. sp. (Pl. 132, figs. 12a, 12b).

Radial spines from two hundred to three hundred, of very different sizes, but of similar form; about twenty to thirty very large spines, sixty to eighty of medium size, and one hundred and twenty to one hundred and fifty much smaller. All spines cylindrical in the greater part of their length, with simple apex, gradually thickened and four-edged towards the central base. The base itself is a slender pyramid with four to eight edges; partly the faces, partly the edges of these basal pyramids rest one upon another, the points of the larger spines meeting in the centre.

Dimensions.—Length of the largest spines 0.4 to 0.5, of the majority 0.2 to 0.3, of the smallest 0.1 to 0.16; basal thickness of the largest spines 0.015.

Habitat.—South-east Pacific (off Juan Fernandez), Station 296, surface.

Genus 319. Actinastrum, n. gen.

Definition.—Astrolophida with thirty-two simple radial spines, regularly disposed within four meridian planes in such an order that their distal ends fall into five parallel zones. Central ends of the thirty-two spines supported one upon another in the centre of the spherical central capsule.

The genus Actinastrum differs from the two preceding genera in the definite number and order of the thirty-two radial spines, which are disposed in a very remarkable manner. Twenty radial spines are disposed after the Müllerian law of Icosacantha (compare above, p. 717). The remaining twelve spines are four equatorial spines lying in the two secondary meridian planes, and eight tropical spines lying in the two primary meridian planes. We have therefore together eight equatorial, sixteen tropical, and eight polar spines (compare above, p. 729).

¹ Actinastrum = Radiant star ; deris, dorgov.