broad as the sixteen smaller spines, which are cylindrical, of equal breadth throughout their whole length, with bifid apex. Base of all twenty spines pyramidal, without leaf-cross. Central capsule yellow, spherical, or lenticular.

Dimensions.—Length of the four major spines 0.066, breadth in the middle 0.005, on the apex 0.008; length of the sixteen smaller spines 0.054, breadth 0.001.

Habitat.—Mediterranean (Messina), surface.

Subgenus 2. Staurolithium, Haeckel, 1862, Monogr. d. Radiol., p. 401.

Definition.—All twenty spines in the centre melted and grown together, forming one single, star-like piece of acanthin.

## 8. Acanthostaurus cruciatus, Haeckel.

Staurolithium cruciatum, Haeckel, 1862, Monogr. d. Radiol., p. 401, Taf. xx. fig. 6.

Astrolithium cruciatum, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 811.

Spines cylindrical, of equal breadth throughout their whole length. Apex simple conical. Four equatorial spines twice as long and broad as the sixteen other spines. All twenty spines in the centre melted and grown together, forming a single piece of acanthin. Central capsule spherical, red-brown, opaque.

Dimensions.—Length of the four equatorial spines 0.12, breadth 0.006; length of the sixteen smaller spines 0.06, breadth 0.003.

Habitat.—Mediterranean (Messina), surface.

## Genus 335. Belonostaurus, n. gen.

Definition.—Quadrilonchida with four equatorial spines of equal size and form, which are much larger than the sixteen other spines. Eight tropical and eight polar spines very different. No apophyses.

The genus Belonostaurus differs from the preceding Acanthostaurus in the unequal size and form of the eight tropical and the eight polar spines; the latter are much smaller than the former and often quite rudimentary, so that the skeleton appears composed only of twelve spines, four larger equatorial and eight smaller tropical spines. The central bases of the polar spines are constantly preserved. The central capsule is a flattened square disk.

## 1. Belonostaurus quadratus, n. sp.

Four equatorial spines little compressed, almost cylindrical in the basal half, lanceolate, broader, with simple apex in the distal half. Eight tropical spines a little shorter, but only half as broad,

1 Belonostaurus = Needle cross; βελόνη, σταυρός.