

sword-shaped, two-edged, of equal breadth, with simple apex. Eight polar spines very short, conical, also with simple apex. Base without leaf-cross, a simple pyramid.

*Dimensions.*—Length of the four equatorial spines 0·18, of the eight tropical spines 0·14, of the eight polar spines 0·04.

*Habitat.*—Central Pacific, Station 271, surface.

2. *Belonostaurus bicuspis*, n. sp.

Four equatorial spines compressed, almost lanceolate in the basal half, bifid, with two large, bent, little divergent horns in the distal half. Eight tropical spines nearly of the same form, but only half as large, with much smaller horns. Eight polar spines rudimentary, very short, conical, with simple apex. Base with a large leaf-cross.

*Dimensions.*—Length of the four equatorial spines 0·2, of the eight tropical spines 0·1, of the eight polar spines 0·02.

*Habitat.*—Central Pacific, Station 263, surface.

Genus 336. *Lonchostaurus*,<sup>1</sup> Haeckel, 1862, Monogr. d. Radiol., p. 397  
(*sensu emendato*).

*Definition.*—Quadrilongchida with four equatorial spines of unequal size and form; the principal spines (in the longitudinal axis) larger than the lateral spines (in the transverse axis); both opposite spines of each pair equal. Sixteen other spines much smaller (often the eight tropical larger than the eight rudimentary polar spines). No apophyses.

The genus *Lonchostaurus* differs from the two preceding genera in the unequal size and shape of both equatorial pairs of spines, whilst the two opposite spines of each pair are equal. Therefore the equatorial plane is here a rhombus, not a square, as in the preceding genera. We encounter here for the first time the differentiation of the two equatorial axes, the longitudinal (or hydrotomical) and the transverse (or geotomical) axis. The sixteen other spines are constantly smaller (often also the eight polar more or less rudimentary).

1. *Lonchostaurus rhomboides*, n. sp. (Pl. 131, fig. 6).

Four equatorial spines cylindrical, twice to three times as broad as the sixteen smaller spines, conical at the distal apex; the two opposite spines of the longitudinal axis twice as long as those of the transverse axis. Sixteen smaller spines conical at the base, with simple bristle-shaped apex. The surface of the rhombical calymma, including the spines, was covered in the figured specimen with small plates like those of *Sphaerocapsa*.

*Dimensions.*—Length of the cross (longitudinal axis) 0·24, breadth (transverse axis) 0·12.

*Habitat.*—South Pacific, Station 302, depth 1450 fathoms.

<sup>1</sup> *Lonchostaurus* = Spear-cross; λόγχη, σταυρός.