2. *Pristacantha dodecodon*, n. sp. (Pl. 130, fig. 8).

Spines four-winged, of lanceolate outline, tapering from the broader middle towards the two ends. Apex pyramidal. Base with a large leaf-cross. From the four wings arise in the basal part (between first and second third of the length) twelve triangular apophyses (three from each wing).

Dimensions.—Length of the spines 0·3, breadth in the middle 0·03.

Habitat.—North Pacific, Station 244, surface.

3. *Pristacantha polyodon*, n. sp. (Pl. 130, fig. 7).

Spines in the distal half four-sided prismatic, thin, with pyramidal apex; in the basal half much broader, four-winged, with a large leaf-cross on the base. From the four wings of the basal half arises a variable number of slender teeth or triangular apophyses, commonly sixteen to twenty-four, often irregular (four to six from each wing).

Dimensions—Length of the spines 0·3 to 0·4, breadth in the distal part 0·007 to 0·01, in the basal part 0·02 to 0·03.

Habitat.—South Pacific (off New Zealand), Station 169, surface.

Family XXXVII. Quadrilonchida, Haeckel (Pl. 131).

Acanthostaurida, Haeckel, 1881, Prodromus, p. 466.

Definition.—Acantharia with twenty radial spines of very unequal size, disposed according to the law of the Icosacantha; four equatorial spines much larger than the sixteen others. No lattice-shell.

The family Quadrilonchida differs from the foregoing ancestral family, the Astrolonchida, in the unequal development of the twenty radial spines. The four equatorial spines are constantly much larger, and often also of another form and shape, than the sixteen other spines; often also among these the eight tropical spines are larger and of another form than the eight polar spines. Therefore the five parallel girdles or zones of every four spines, which in the Astrolonchida are equal, are here distinctly unequal. The whole body is flattened and compressed in the direction of the spineless axis, so that the equatorial plane is larger than any other plane, laid through the centre. In consequence of this flattening the central capsule is also commonly compressed and flattened, lenticular or discoidal, rarely spherical. In the Astrolonchida the "promorph" or the "geometrical fundamental form" is constantly a square double pyramid, the axes of which are of equal length. In the Quadrilonchida it becomes a square double pyramid, the two equatorial axes of which (or the diagonals of the square) are constantly longer than all other axes.

In the simpler forms of Quadrilonchida are found only two different kinds of spines, the four larger equatorial spines being of the same size and form, and the sixteen smaller