# 2. Quadrilonche platystaura, n. sp. (Pl. 131, fig. 2).

Four equatorial spines lanceolate, compressed, with two opposite triangular simple apophyses in the broadest middle part. Sixteen other spines also lanceolate, much smaller, of about half the length, but only of one-fourth the breadth, without apophyses.

Dimensions.—Length of the four major spines 0.2, breadth 0.018; length of the sixteen minor spines 0.1, breadth 0.004.

Habitat.—North Pacific, Station 235, surface.

### Subgenus 2. Quadrilonchidium, Haeckel.

Definition.—All twenty spines provided with transverse apophyses.

# 3. Quadrilonche mesostaura, n. sp. (Pl. 131, fig. 1).

Four equatorial spines almost of the same form and length as the sixteen others, but of double or triple the breadth; each spine in its middle third with two opposite broad triangular apophyses, in the basal third rectangular, compressed, in the distal third isosceles triangular, with simple apex.

Dimensions.—Length of the four major spines 0·16, breadth 0·01 to 0·015; length of the sixteen minor spines 0·12, breadth 0·005.

Habitat.—Tropical Atlantic, Station 345, surface.

#### 4. Quadrilonche telostaura, n. sp.

Four equatorial spines one and a half times as long and three times as broad as the sixteen others; all twenty spines cylindrical, of equal breadth throughout their whole length, with simple conical apex; each spine crossed in the distal third by two opposite, simple, conical apophyses.

Dimensions.—Length of the four major spines 0.3, breadth 0.012; length of the sixteen minor spines 0.2, breadth 0.004.

Habitat.—South Atlantic, Station 325, surface.

# Genus 339. Xiphoptera, Haeckel, 1881, Prodromus, p. 466.

Definition.—Quadrilonchida with two opposite branched (but not latticed) apophyses, either on each radial spine or only on a part of the twenty spines.

The genus Xiphoptera differs from the preceding ancestral genus Quadrilonche in the ramification of the apophyses, which bear perpendicular branches on their distal side. These are therefore parallel to the spine itself. If the branches become united by transverse beams then we get Lithoptera.

<sup>1</sup> Xiphoptera = Sword-wing; ξίφος, πτειόν.