Subgenus 1. *Trigonastrella*, Haeckel.

Definition.—All three arms of the same size and form, equidistant; fundamental form of the shell therefore a regular, equilateral triangle.

1. *Trigonastrum regulare*, n. sp. (Pl. **43**, fig. 16).

Chitonastrum regulare, Haeckel, 1881, Prodromus et Atlas (pl. xliii. fig. 16).

All three arms equal and equidistant. Each arm has the form of an isosceles triangle, twice as high as broad, the truncated apex of which is inserted into the large circular central disk, whilst its distal base (four times as broad) is divided by a deep incision (half as long as the arm)· Each arm with ten to twelve joints. Patagium between the arms nearly complete, spongy· (Differs from *Chitonastrum triglochin* mainly in the possession of a patagium.)

Dimensions.—Radius of each arm 0·24, greatest breadth 0·11, basal breadth 0·03; length of the sides of the regular triangle 0·45.

Habitat.—Pacific, central area, Station 274, surface.

Subgenus 2. *Trigonastromma*, Haeckel.

Definition.—One odd arm different in form or size from the other two arms, which are paired; distance between them different; fundamental form of the shell therefore an isosceles triangle.

2. *Trigonastrum krohnii*, Haeckel.

Euchitonia krohnii, Haeckel, 1862, Monogr. d. Radiol., p. 507.

All three arms different; distance between the two paired arms smaller than their distance from the odd arm. Odd arm with six joints. Each paired arm with seven joints, increasing in breadth towards the distal end. Odd arm and one paired arm forked at the end, the other paired arm simple. Patagium nearly complete. (The asymmetry in this form may perhaps be an individual anomaly, as also in *Myelastrum anomalum*, Pl. **47**, fig. 9.)

Dimensions.—Radius of the arms about 0·13 to 0·16, breadth 0·05 to 0·08.

Habitat.—North Atlantic, Funchal, Madeira, Krohn, surface.

3. *Trigonastrum gegenbauri*, Haeckel.

Euchitonia gegenbauri, Haeckel, 1862, Monogr. d. Radiol., p. 506, Taf. xxxi. figs. 2, 3.

Arms different; distance between the paired arms larger than their distance from the odd arm, which is one-third shorter. Odd arm egg-shaped, simple, with seven joints, undivided. Both paired arms equal, with ten joints, in the distal third forked. Patagium nearly complete.

Dimensions.— Radius of the odd arm 0·14, greatest breadth 0·08; radius of the paired arms 0·2.

Habitat.—Mediterranean (Messina), Haeckel, surface.