spines. The diameter of the central disk is larger than the length of the arms. The angles between the arms are equal and filled up by an incomplete patagium, so that the whole disk forms a regular pentagon with five concave sides.

Dimensions.—Radius of each arm (without terminal spine) 0.14; breadth at their base 0.02, at

their terminal joint 0.03; radius of the central disk 0.06.

Habitat.—Pacific, central area, Station 266, depth 2750 fathoms.

2. Pentinastrum goniaster, n. sp.

? Stephanastrum sp., Bury, 1862, Polycystins of Barbados, pl. xx. fig. 1.

All five arms equal, four times as long as broad, club-shaped, at their globose distal end twice as broad as at their base, and armed with a strong conical terminal spine. Diameter of the central disk equals only one-third of the length of the arms. The articulation of the spongy arms is somewhat obscure. Patagium complete, totally fills up the interbrachial spaces, so that the whole disk forms a regular pentagon with five rectilinear sides, except that the terminal spines project at the corners.

Dimensions.—Radius of each arm 0·18, basal breadth 0·02, distal breadth 0·04; radius of the central disk 0·05.

Habitat.—South Pacific, Station 295, depth 1500 fathoms; also fossil in the rocks of Barbados.

Genus 242. Pentophiastrum, n. gen.

Definition.—Porodiscida with five forked chambered arms, without a patagium.

The genus *Pentophiastrum* differs from the two preceding genera by the bifurcation of the five arms, and can be derived either from *Pentalastrum* by the ramification of the distal ends of the arms, or from the similar *Myelastrum* by the increase in the number of arms.

1. Pentophiastrum dicranastrum, n. sp.

All five arms equal, with equal angles between them. Each arm in the basal half simple, in the distal half forked; both branches of it equal, with obtuse ends. (This regular species resembles *Dicranastrum furcatum*, Pl. 47, fig. 2, but with five rays instead of four; also the form of the arms is more slender and the edges smooth.)

Dimensions.—Radius of each arm 0.25, breadth 0.05.

Habitat.—Equatorial Atlantic, Station 347, depth 2250 fathoms.

Subgenus Pentophiastromma, Haeckel.

Definition.—Arms of different size, one odd arm opposite to the angle between both arm-pairs.

1 Pentophiastrum=Starrulet with five snakes; πίντε, όφις, ἄστρον.