12. Euchitonia acuta, Stöhr.

Euchitonia acuta, Stöhr, 1880, Palæontogr., vol. xxvi. p. 111, Taf. v. fig. 6.

Distance between the paired arms two-thirds as great as their distance from the odd arm. All three arms nearly of the same size and form, two and a half times as long as broad, nearly lanceo-late, at their broadest part one and a half times as broad as at their base. Patagium complete, enveloping the whole triangular disk, with five to six concave chamber-rows. In the figure of Stöhr the ends of the arms are simply pointed, while I find in the same fossil form a short terminal conical spine.

Dimensions.—Radius of all three arms 0.14; breadth at the base 0.04, at the broadest part 0.06.

Habitat.—Fossil in Tertiary rocks of Sicily, Grotte (Stöhr), Caltanisetta (Haeckel).

13. Euchitonia ypsiloides, Haeckel.

Histiastrum ypsiloides, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 843.

Distance between the paired arms two-thirds as great as their distance from the odd arm, which is somewhat larger. Length of the arms equals five times the breadth of the narrow base, which is half that of the distal end; this latter is armed with three to five short conical spines. Patagium complete, with six to seven concave chamber-rows, enveloping the whole arms with the exception of the terminal spines. (Differs from *Euchitonia mülleri* almost solely by the possession of terminal spines.)

Dimensions.—Radius of the arms 0.18 to 0.2; breadth at the base 0.04, at the distal end 0.08. Habitat.—Mediterranean (Messina), Atlantic (Canary Islands), surface.

14. Euchitonia echinata, n. sp. (Pl. 43, fig. 11).

Distance between paired arms three-fourths as great as their distance from the odd arm, which is somewhat larger. Arms one and a half times as long as broad, somewhat constricted in the middle part, armed at the rounded ends with numerous (thirty to forty) strong, conical spines. Patagium complete, with four or five rectilinear parallel chamber-rows, enveloping the whole of the arms with the exception of the spiny ends.

Dimensions.—Radius of the arms (without spines) 0.2, breadth 0.06 to 0.09.

Habitat.—North Pacific, Station 253, depth 3125 fathoms.

Genus 231. Chitonastrum, Haeckel, 1881, Prodromus, p. 460.

Definition.—Porodiscida with three forked, chambered arms, without a patagium. (Arms and angles between them either equal or unequal.)

The genus Chitonastrum differs from its ancestral form, Dictyastrum, by the bifurcation of the distal ends of the arms. The few species of this genus are partly