7. Dicranastrum trifarium, n. sp.

Arms trifid, three times as long as broad at their base; each arm with three pointed terminal branches, ending in strong sulcate spines; the middle branch twice as large as the two others. The simple basal part of each arm two and a half times as long as the trifid distal part.

Dimensions.—Radius of the arm 0.35, basal breadth 0.03, greatest breadth (in the distal part) 0.05.

Habitat. - South Pacific, Station 298, surface.

Subgenus 3. Tetracranastrum, Haeckel.

Definition.—Each cross-arm with four terminal branches, the two fork-branches being again bifurcated.

8. Dicranastrum bifurcatum, n. sp. (Pl. 47, figs. 1, 1a).

Arms doubly forked or quadripartite, six times as long as broad at their base; each arm in its proximal half simple, three times as long as broad; in its distal half doubly forked; the secondary branches with blunt, roundish ends, nearly as large as the primary branches. Central disk (fig. 1a) with three concentric rings around the central chamber; from its periphery radiate thin radial beams in the spongy framework of the delicate arms. The central capsule has the same form as the skeleton, and is only a little smaller.

Dimensions.—Radius of the arm 0.45, basal breadth 0.08; breadth of the terminal branches 0.03.

Habitat.—North Pacific, east of Japan, Station 241, surface.

Genus 239. Myelastrum, Haeckel, 1881, Prodromus, p. 460.

Definition.—Porodiscida with four forked, spongy, or chambered arms, without a patagium; shell bilateral, with paired different arms; two equal anterior arms of different shape from the two equal posterior arms.

The genus Myelastrum differs from the foregoing Dicranastrum, the ancestral form, by the twofold differentiation of the four arms. Whilst in the latter all four arms are equal, separated by equal angles, here the two anterior arms are constantly different from the two posterior. The lateral angles between the two arm-pairs are equal, while the posterior and the anterior angle (between the two arms of each pair) are more or less different. The shell assumes, therefore, a very characteristic bilateral form, similar to the "quadricorn cross" of the grey central substance in the transverse section of the human medulla spinalis. Though the spongy shell is commonly a most delicate and

¹ Myelastrv m = Medullary starrulet; μύελος, ἄστζον.