The genus Distephanus of Stöhr, therefore, is nothing other than the Dictyocha of Ehrenberg. But I think it is more convenient to retain the name Distephanus for those forms of Dictyocha which possess a simple apical mesh surrounded by a ring of lateral meshes, and in which each piece of the skeleton forms a small truncated pyramid. The basal plane of this pyramid is marked by the original basal ring (Mesocena), the truncated upper plane by the parallel apical ring, and the edges of the pyramid by the rising bars which connect both rings. In this sense, so far as the two rings lying in parallel planes are concerned, the term *Disterbanus* is correct (but not in the original sense of Stöhr). The number of the rising bars between the two rings varies from four, five, six to eight It seems rather constant in each species, so that all the pieces of the skeleton of one specimen possess either four or six or eight lateral meshes, &c. But sometimes individual irregularities occur. In the majority of species each skeleton-piece is armed with spines. Usually a radial horizontal spine starts centrifugally from each corner of the basal ring, and on the side of this a small tooth or thorn often starts centripetally or downwards. In the twin-pieces, where the two basal rings are united, these teeth catch into one another. In some species upper spines also occur, starting from the corners of the apical ring. The perradial spines of the corners of the basal ring alternate regularly with the interradial ascending bars, which bisect the sides of the ring, as in Dictyocha.

1. Distephanus crux, Haeckel.

Dictyocha crux, Ehrenberg, 1840, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 207; Mikrogeol., 1854, Taf. xviii. fig. 56, Taf. xx. fig. 46, Taf. xxxiii. Nr. xv. fig. 9. Dictyocha bipartita, Ehrenberg, 1844, loc. cit., p. 79, Taf. xxii. fig. 44.

Each pileated piece of the skeleton exhibits four pentagonal lateral meshes around one square central mesh, and is composed of two horizontal square rings; the smaller upper square is connected with the larger lower square by four ascending interradial beams, which start from the corners of the former and bisect the sides of the latter; from the corners of the basal ring arise four short perradial spines.

Dimensions.—Diameter of the basal ring 0.02 to 0.03, of the apical ring 0.008.

Habitat.—Tropical Atlantic, Station 347, surface; fossil in Tertiary deposits of the Mediterranean (Sicily, Oran).

2. Distephanus mesophthalmus, Haeckel.

Dictyocha mesophthalma, Ehrenberg, 1844, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 80; Mikrogeol., 1854, Taf. xxii. fig. 43.

Each pileated piece of the skeleton exhibits four lateral meshes around the central mesh, and is composed of two parallel horizontal square rings, like those of Distephanus crux, but distinguished