to be the most common of the living forms and widely distributed over all warmer seas. I observed in Ceylon, taken on the surface, the living specimen figured in Pl. 101, fig. 10; the numerous spicula were irregularly scattered over the spherical surface of the alveolate calymma. Other specimens occur in various preparations of the Challenger collection, from the Atlantic and the Pacific. The majority of the siliceous little hats exhibited the stirrup-form shown in fig. 11, and many were united in pairs, forming a twin-piece (fig. 12). Intermingled with these are found some irregular forms, representing the specific form of some allied species, viz., Dictyocha speculum, Dictyocha staurodon, Dictyocha epiodon and Dictyocha messanensis.

Dimensions.—Diameter of the basal ring 0.015 to 0.03, of the meshes 0.005 to 0.012.

Habitat.—Cosmopolitan; Atlantic, Pacific, Indian Ocean, in the Tropical and warmer regions; Stations 159, 244, 266-272, 318, 352, &c.

12. Dictyocha rhombus, n. sp.

Each pileated piece of the skeleton stirrup-shaped, similar to *Dictyocha stapedia*, with four paired meshes. It differs from the latter in the rhomboid form of the basal ring and the larger size of the two opposite meshes, which are two to three times as large as the two others. Therefore the four centripetal teeth of the basal ring do not stand in the four single meshes, but in pairs only in the two larger meshes.

Dimensions.—Diameter of the basal ring 0.02, of the meshes 0.005 to 0.01.

Habitat.—North Atlantic; Færöe Channel, Gulf Stream, depth 50 to 600 fathoms, John Murray.

Genus 663. *Distephanus*, Stöhr, 1880, Palæontogr., vol. xxvi. Taf. ii. p. 121.

Definition.—Cannorrhaphida with a skeleton composed of pileated pieces, each of which is a small truncated pyramid with one girdle of meshes (the apical ring being simple).

The genus Distephanus was founded in 1880 by Stöhr (loc. cit.) for a single twin-piece of the skeleton of Dictyocha speculum. Among the common fossil forms of this species he once found in the Tertiary rocks of Caltanisetta, Sicily, a single piece (loc. cit., Taf. vi. fig. 9), which seemed to be composed of two equal pieces so united that they formed a little sphere with fourteen meshes; on each pole of the sphere lies a central hexagonal mesh surrounded by six pentagonal meshes, and from the six corners of the equatorial ring arise six centrifugal spines. No doubt this was a mistake, and the apparent little sphere was one of the above mentioned twin-forms, composed of two separate hexagonal truncated pyramids, which were loosely connected by their basal rings. I have often seen such twin-pieces of Dictyocha speculum and of other species (Pl. 101, fig. 12; Pl. 114, fig. 8), and was always able to separate the two loosely connected halves of the bivalve shell by slight compression.

¹ Distephanus = Double corona; διστέφωνος.