

be folded. The thick wall of the cup thus folded consists simply of a system of anastomosing tubes, which open internally into the gastral cavity, and probably also directly to the exterior. On the other hand, the connected interstitial system of spaces between the above tube work is closed on the internal gastral surface of the body, but probably covered externally only by a porous skin, which admits the incurrent water.

Species 1. *Dactylocalyx pumiceus*, Stuchbury.

The body forms a broad flat cup which is borne on a short, somewhat meshed and thin-walled stalk firmly fixed to the substratum. The cup expands into a broad (30 cm.) thin-walled plate- or cup-shaped body, which is laterally provided with a somewhat backward bent, gently sinuous, rounded margin. The radially disposed grooves of the external inferior and internal superior surface here and there exhibit a dichotomous external division. The tubular network is very narrow meshed and the whole thick connected skeleton is firm and strong. It is composed of finely-tubercled beams without thickened nodes of intersection. The loose spicules of the parenchyma are represented by small hexacts with lank, terminally thickened, in part elongated and somewhat curved rays, and also, according to Bowerbank,¹ by oxyhexasters with three long, slightly curved terminals on each of the short principals, and lastly by discohexasters with somewhat long terminals. The oxypentacts described by Sollas are to be referred to the dermal skeleton. There is no trace of uncinates or of scopulæ. Barbados; West Indies.

Species 2. *Dactylocalyx subglobosus*, Gray.

A deep, thick-walled goblet in which the grooves on the gastral or internal surface are less broad than those on the external. The parenchyma contains, besides hexacts with terminal knob-like thickenings (sphærohexacts) numerous discohexasters of various size, with long terminal rays, but *no* oxyhexasters. The tangential rays of the rough dermal pentacts are terminally club-shaped, while the longer proximal radial ray runs out to a point. West Indies.

Species 3. *Dactylocalyx patella*, n. sp.

The dictyonal framework of this probably flat patelliform species, of which only a fragment of macerated skeleton was procured, consists of smooth beams forming an approximately square-meshed network, and forms an anastomosing system of tubes which in many respects resemble those of the other species of *Dactylocalyx*, but are at least twice as broad. (Perhaps identical with *Ioanella compressa*, O. Schmidt, *loc cit.*) Bermuda, 1075 fathoms; coast of Portugal.

¹ *Proc. Zool. Soc. Lond.*, 1869, p. 77, pt. iii.