though macerated has the dictyonal framework well preserved. This specimen, preserved by O. Schmidt himself, I have been able to use as a basis for an independent investigation of the genus and species.

I accept Schmidt's generic characters except in their last clause, which is based on the two doubtful species above referred to. In abbreviated form it reads as follows¹:— "Sponges of cylindrical or truncated conical form, with a similarly shaped thick-walled body cavity. The peripheral felt-work is wide-meshed, but strong and firm, or brittle. It forms round or prismatic tubes, which generally run obliquely from the exterior to the interior, either isolated or united with one another, and opening into the gastral cavity. Between them irregular intercanals occur."

1. Scleroplegma conicum, O. Schmidt (Pl. Cl. figs. 1, 2).

Of this species I could unfortunately procure only the single specimen figured from a photograph in Pl. CI. fig. 1. It was completely macerated, so that of the isolated skeletal elements no trace was left. The tubes, 2 to 3 mm. in width, which form the thick wall (5 to 8 mm.) of the cup-shaped body, are generally radial, and directed somewhat obliquely upwards and outwards. They open both on the internal gastral and on the external dermal surface by round apertures, and here and there exhibit anastomoses. The intercanals occurring between these anastomose abundantly, and have a uniform width; they open, however, only on the outer dermal surface, where the water enters.

The dictyonal framework consists of strong beams, superficially beset with small pointed tubercles, usually disposed in transverse rows. The nodes of intersection are spherically thickened and beset with pointed tuberculated warts, which are especially well developed in the bounding surfaces of the whole framework (Pl. CI. fig. 2). There is a remarkable absence of the conical bosses which, on the bounding surfaces of the dictyonal framework of other Dictyonalia, project for a variable distance at right angles to the nodes of intersection.

Scleroplegma conicum was found near Morrolight, West Indies, at a depth of 292 fathoms.

Genus 3. Margaritella, O. Schmidt.

Margaritella cæloptychioides, O. Schmidt (Pl. CI. figs 3-8).

From the somewhat indefinite figure and description which O. Schmidt gives of this form in his Spongien des Meerbusens von Mexico,² the body seems to exhibit a flat, cuplike form, resulting from a connected system of tubes. In the fragment which I received for comparison from Professor O. Schmidt, some free spicules were fortunately retained.