

certainty to one or other of the above described forms, nor are the characteristics sufficiently distinctive to permit of the erection of a definite species. In some of the fragments, however, several features are very distinctly developed, to some of which it seems worth to refer. In Pl. XC. figs. 9, 10, and 11, I have given figures from photographs of a plate-like specimen dredged near the Bermuda Islands (Station 56, lat. $32^{\circ} 8' 45''$ N., long. $64^{\circ} 59' 35''$ W.), from a depth of 1075 fathoms and a coral mud ground. One surface, probably the dermal, has unfortunately been very much rubbed (fig. 11), so that on surface view only the deeper layers of the framework are to be seen. The surface represented in fig. 10 seems to me to be gastral, so that the very regularly formed layer of the framework, displayed with its distinctly rectangular meshes in fig. 11, lies close beneath the gastral surface. A section at right angles through the best preserved portion of the plate (fig. 9), displays very distinctly the alternation of the straight funnel-shaped spaces of the afferent and efferent canals.

Among numerous small macerated fragments dredged near the Penguin Islands (Station 148A, lat. $46^{\circ} 53'$ S., long. $51^{\circ} 52'$ W.), from a depth of 550 fathoms and a bottom of hard ground, gravel, and shells, besides the larger plates represented in Pl. LXXXVII. figs. 1 and 2, there was another which exhibited a very characteristic thickness. In the cross section (Pl. XC. fig. 8), as in the above instance (Pl. XC. fig. 9), the alternation of funnel-shaped canal spaces can be detected. I am inclined to believe that the *Scleroplegma herculeum* (from Santa Cruz), referred to by Oscar Schmidt in his *Spongien des Meerbusens von Mexico* (p. 57), is a similar form.

In the neighbourhood of St. Thomas (Station 23B, lat. $18^{\circ} 28'$ N., long. $63^{\circ} 35'$ W.), from a depth of 590 fathoms, and a Pteropod ooze bottom, other small *Chonelasma* fragments were obtained, as also on the coast of Portugal at localities not recorded.

Family IV. TRETODICTYIDÆ, F. E. Schulze (Pls. XCII.–XCVIII.).

With irregularly arranged afferent and efferent canals, which penetrate the body-wall, and especially the more or less thick dictyonal framework, not transversely but obliquely, or in a longitudinal direction, or even in a coiled course.

Genus 1. *Hexactinella*, Carter (Pls. XCIII.–XCVI.).

1885. H. T. Carter, *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xv, p. 387.

History.—After I had completed my investigation of the Challenger Hexactinellida, and had given names to the new forms which I had determined, I discovered that the form designated by Carter *Hexactinella ventilabrum*¹ was identical with the species to which

¹ *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xv, p. 387, 1885.