

manner. The polyps are completely retractile, there is no circlet of spicules at the base of the tentacles, and there are no spicules in the tentacles. When the polyps are withdrawn, the tentacles invaginate, their bases forming a central knob-like mass, the upper walls of the mesenterial chambers, which when the tentacles are infolded become inflated, forming an eight-rayed frill, next sink in, forming a series of eight depressions which extend from the bases of the tentacles to the external body-wall of the polyp. The spicules are for the most part spiny spindles, with numerous pink stellate forms and a few club-shaped forms with attenuated foliaceous expansions.

Pseudoplexaura crassa (Ellis and Solander) (Pl. XXXIII. fig. 3).

Gorgonia crassa, Ellis and Solander, The Natural History of many curious and uncommon Zoophytes, &c., p. 91, 1786.

It is with a great deal of doubt that a series of large fragments, dredged in shallow water at the Bermudas, is referred to this species. The original description is as follows:—“*Gorgonia teres dichotoma*, ramis crassis virgatis divaricatis ascendentibus, carne violacea crassa, osculis prominulis æqui distantibus, polypos octotentaculatos marginibus cirratis exserentibus, osse subfusco corneo,” and “this Fleshy Gorgon is round and dichotomus with long fleshy branches, which bend a little out and then grow upright. The flesh is of a violet colour, plump and full of little rising mouths, disposed on the surface near one another and at equal distances, these send forth polypes with eight claws, these have small fibres on each side. The bone is of a dark brown colour like horn.” The specimen described was preserved in spirits, and the remark is added that “the flesh is very thick and the bone very small at the extremities; in large old specimens the bone is very black and like horn.” We are thus particular, as Verrill¹ records a species from the same locality under this name which he thinks agrees perfectly with the description of Ellis. In his remarks on this agreement Verrill quotes Ellis as describing the arrangement of the cells as “scattered,” whereas it will be seen from the above quotation that Ellis describes them as “disposed near one another and at equal distances.”

Verrill gives *Gorgonia porosa*, Esper, *Gorgonia antipathes*, Esper, and *Gorgonia vermiculata*, Lamk., as synonyms of this species, but an examination of these species shows marked differences between each of them, and that they are not even very closely related to this form; *Plexaura porosa* (Esper) has a well-marked layer of foliaceous and one-sided spiny clubs. *Plexaura antipathes* (Esper) is easily distinguished by its spiny spheres and branching spiny spindles, while *Gorgonia vermiculata*, Lamk., is a *Plexaurella*.

The colony is feebly branched, mostly in one plane. The height of the various fragments collected, apparently torn from the one base, varies from 150 to 225 mm., with a basal diameter of 8, 10, and 12 mm. respectively, which tapers to one of 4 mm. at the

¹ Bull. Mus. Comp. Zool., 1865, vol. i. p. 34.