

slightly knobbed terminations. Branches arising very sparingly from the presumably main stems. Axis horny, with a calcareous centre and calcareous particles interspersed. Polyps crowded in a somewhat spiral manner on the stems and branches; projecting very slightly from the level of the coenenchyma, but sufficiently so to give a papilliform appearance to the colony. The polyps and tentacles are retractile; the upper walls of the eight mesenterial chambers, when the polyps expand, become inflated and form a circlet of little flaps around the base of the tentacles, these inflations are somewhat pouch-shaped and resemble an outer circlet of simple frill-like tentacles; on the tentacles becoming withdrawn, these inflations are infolded and in the dried specimen become depressed, so as to give the appearance of eight depressions around the central portion of the polyps (the chambers seem to communicate by pores with the exterior). The polyps are 1.5 mm. in their broadest diameter. The coenenchyma is thick and tough (friable when dried), the outer layer is white and semimembranous, with but few spicules and these colourless; the inner layer is packed with purple or violet coloured spicules; this dense layer sometimes shows through the outer layer. The numerous nutrient canals surround the axis.

There are no spicules in the tentacles nor at their bases. Those in the outer layer of the coenenchyma are colourless spiny spindles, and a few club-shaped forms; in the inner layer the coloured spicules are either crosses or few-rayed spindles; the following are the measurements. Colourless spiny spindles—0.52-0.1; 0.56-0.1; 0.30-0.04; 0.82-0.12 mm.; club-shaped forms 0.3-0.1; 0.32-0.18; 0.4-0.16 mm.; pink spindles 0.2-0.12; 0.34-0.14; 0.32-0.12; 0.18-0.1; 0.16-0.1; 0.14-0.1; 0.12-0.05 mm.; pink crosses 0.12-0.08; 0.16-0.1; 0.24-0.1 mm.

Habitat.—Bermuda; shallow water.

Genus *Euplexaura*, Verrill.

Euplexaura, Verrill, Proc. Essex Inst., vol. vi. p. 74, 1869.

Verrill¹ in 1865 referred a species from the Cape of Good Hope to the genus *Plexaura* as *Plexaura friabilis*, Lamk. Although it possibly might have been in part known to Lamouroux, it is certainly not the *Plexaura friabilis* of Milne-Edwards and other modern writers, because this latter proves to be a *Plexaurella*. For this form Verrill afterwards made (*loc. cit.*) the genus *Euplexaura*, naming the species *Euplexaura capensis*.

The spicules differ widely from those of *Plexaura*, and although in some respects they approach those of *Plexaurella*, yet they would seem to differ as widely from these as they do from *Plexaura*. "In external characters it resembles *Plexaurella*, with rather large, open cells. The spicula are mostly short, stout, blunt, warty spindles, of

¹ Bull. Mus. Comp. Zool., vol. iv. p. 186.