

breadth measure respectively 0·3 and 0·025; 0·35 and 0·016 mm. In the inner stratum of the mesoderm the spicules are spindles with sharp spines, which often present ramified projections at both sides. Sometimes these are straight, sometimes bent, and occasionally two or three are closely united.

In length and breadth these measure respectively 0·27 and 0·05; 0·23 and 0·03; 0·25 and 0·04 mm.

In the tentacles spicules occur of the first form, and also simple, smooth, straight or bent needles.

The colour of the colony in spirit is grayish-white.

*Habitat*.—Station 190, in the Arafura Sea; lat. 8° 56' S., long. 136° 5' E.; depth, 49 fathoms; bottom, green mud.

*Telesto (Carijoa) trichostemma* (Dana).

*Gorgonia trichostemma*, Dana, Zooph., p. 665, pl. lix. figs. 3, 3a, 3b, 1846.

*Telesto trichostemma*, Verrill, Amer. Journ. Sci. and Arts, vol. xlv. p. 415, 1868.

Dana described, under the title *Gorgonia trichostemma*, an Aleyonarian from the Fiji Islands, which in its habit presents a great resemblance to a species of *Telesto*. Verrill has examined the original specimen and has described it as a parasitic polyp allied to *Cornularia*, and probably a *Telesto*. In part it covered the dead axis of an *Antipathes*, in part it exhibited free hollow branches.

A *Telesto*-like Cornularid, which was obtained by the Challenger Expedition in Torres Strait from a slight depth, agrees so well with the representation given by Dana, that we cannot but refer it to the same species. The colony consists of creeping stems, which are beset with lateral polyps, and of single upright branches. The stems arise from stolons which cover foreign bodies and form a thick network, sometimes fusing into flattened discs.

The stems are axial polyps of the first order; they are at first provided with a thick wall, which gradually becomes thinner in the ascending portion, and this is terminated by the calyx aperture. The creeping portion of the stem attains a diameter of 5 mm., and in old specimens is covered by a parasitic siliceous sponge. In this region the spicules, which lie in the sheath surrounding the gastral cavities of the polyps, form by close apposition a firm tube. In the older portion this is further strengthened by the cementing of the spicules by a horny substance. This horny material gives the tube a yellowish-brown colour, and causes it to exhibit exactly the appearance and consistence of a Gorgonid axis, on which the soft cœnenchyma appears to be cortical. In the younger portion of the stem, the horny substance disappears, and the axial portion has a white colour and a loose consistence.

Only in the ascending terminal portion of the stem do the spicules cease to be united, so that this region exhibits exactly the appearance of an ordinary *Telesto*. From one