

two series of pinnately-disposed, alternate, free ribs, each rib carrying near its base a hydrotheca. Gonangia springing from the rachis.

The remarkable mode in which the branches of *Acanthocladium* terminate, recalls the very similar condition presented by the genus *Acanthella*; but while *Acanthocladium* is a Statoplean form, *Acanthella* belongs to the Eleutheroplea. The gonosome of *Acanthella* is unknown, but the specimens of *Acanthocladium huxleyi* the only species of the genus as yet discovered, are, on the contrary, abundantly provided with this important element of the colony. The phylactocarp of *Acanthocladium* belongs to the same type as that of the *Aglaophenia distans* and *Aglaophenia bispinosa* of the Gulf Stream Report,¹ every rib carrying, as in these last, near its base a modified hydrotheca. The distal portion of the rib is in all these cases the greatly modified mesial nematophore of this hydrotheca, while the proximal portion is a peduncle which springs from the rachis and supports the modified hydrotheca and its appendages. (See p. 11).

Acanthocladium huxleyi, Busk, sp. (Pls. IX. and XX. figs. 1-3).

Plumularia huxleyi, Busk, Voyage of the "Rattlesnake," vol. i. p. 395, 1852.

Trophosome.—Colony attaining a height of fifteen inches; stem fascicled, springing from a dense cushion of fine entangled tubes, undulated, giving off pinnately-disposed alternate simple branches about two inches in length, which carry the hydrocladia and terminate each in a jointed prolongation which is composed of numerous (twelve to sixteen) internodes, every internode carrying a slightly curved spine, which is supported on the extremity of a short process from alternate sides of the internode, and carries two rows of small cup-shaped nematophores; hydrocladia alternate, short, about one-tenth of an inch in length. Hydrothecæ approximated, wide and rather shallow, with an anterior parietal fold and a very short intrathecal ridge; orifice of hydrotheca with its plane parallel to the axis of the short internode, margin crenate; mesial nematophore adnate to the entire height of the hydrotheca wall, and then continued as a long, free, curved spine which arches over the orifice of the hydrotheca; lateral nematophores short, crescentic.

Gonosome.—Phylactocarps developed in a continuous series on each side of the branches near their middle, every series having the unmodified hydrocladia at its proximal and usually also at its distal side; costæ of phylactocarp twenty-six to thirty in number springing alternately from the sides of the rachis, over which they arch, each carrying a double row of cup-shaped nematophores, and at about one-third of its length from the base, a single small deep hydrotheca. Gonangia ovoid, springing from the rachis, each close to the origin of a costa.

The long flexile undulating stem and simple plume-like branches of *Acanthocladium*

¹ Allman, Report on the Hydroida collected during the exploration of the Gulf Stream, by L. F. De Pourtalès, United States Coast Survey, 1877, p. 44, pl. xxvi. figs. 1-8, and p. 46, pls. xxvii., xxviii.