

compared with that of the various species of *Halecium*. While in these, however, the hydrothecæ are evanescent, and not only the tentacular crown but the body of the hydranth always remains uncovered, in *Sertularia exserta* and in *Thuiaria hyalina* the hydrothecæ are especially well developed, and though the tentacular crown in these two Hydroids always remains exposed, the body of the hydranth remains under cover of the hydrotheca.

Another feature of great interest and significance is found in the fact that in the present species every tentacle is provided at its base with a remarkable organ in the form of a little cushion-like prominence loaded with slightly curved, rod-shaped thread-cells (figs. 1*b*, 1*c*). It is scarcely possible not to recognise in these little batteries of thread-cells defensive organs compensating for the loss of the protection which in other cases is afforded by the hydrothecæ. Whether, however, similar organs occur in the equally exposed hydranths of *Thuiaria hyalina* the state of the specimen did not allow me to determine; while we cannot overlook the fact that in the still more exposed hydranths of *Halecium* no such organs have been detected.

The gonangia of *Sertularia exserta* are exceedingly beautiful. The thin but very prominent annular ridges with which they are encircled give to them the appearance of a symmetrical pile of discs, while the profusion in which the gonangia are developed gives to the entire colony an aspect no less pleasing than striking.

The specimens in the collection have a height of between one and two inches, while the comparatively good state of preservation in which the soft parts are retained allowed of a satisfactory determination of the points here described.

*Sertularia echinocarpa*, n. sp. (Pl. XXVIII. figs. 1, 1*a*).

*Trophosome*.—Stem fascicled towards the root, becoming monosiphonic distally, pinnately branched, branches alternate. Hydrothecæ alternate, large, tubular, cylindrical, slightly tumid towards the base on the apocauline side, free for about two-thirds of their height, orifice quite even and circular.

*Gonosome*.—Gonangia springing each by a short peduncle from a point close to the base of a hydrotheca, pyriform, thickly set with hollow, blunt, spine-like outgrowths of their chitinous perisarc.

*Locality*.—Station 149D, Royal Sound, Kerguelen Island; depth, 28 to 60 fathoms.

*Sertularia echinocarpa* is a large and strong form, attaining a height of upwards of six inches. The main stem is slightly wavy and set with hydrothecæ along its entire length. It sends off at nearly equal intervals shorter pinnately disposed alternate branches, which are set with hydrothecæ and differ in no respect except in length from the main stem.

The long tubular hydrothecæ, free for the greater part of their height, afford a very