Campanularia ptychocyathus is a minute creeping form and is rendered specially remarkable by the difference of texture in the walls of the hydrothecæ. These for about the distal third of their height become so thin and collapsible that during the retracted state of the hydranth they are generally seen to have fallen towards one another and become thrown into irregular plicæ which obscure the true form of the hydrotheca, withdrawing from view its regularly dentate margin, a condition, however, which must not be confounded with that of the opercular segments which crown the hydrothecæ in Campanulina and some allied forms. The proximal two-thirds of the hydrothecæ possess on the contrary the usual firmness of these parts, and the hydrotheca here retains at all times its true form. The peduncle presents two or three annulations just below the hydrotheca, and several at its origin from the stolon, while a group of rings near the middle of its length is also generally present.

The gonangia are developed from the creeping stolon between the peduncles of the hydrothecæ. They are rendered striking by their nearly cylindrical form, and the constriction which exists immediately below the broad truncated summit. On one or two occasions gonangia were found springing from the peduncle of the hydrotheca.

The gonangia in the specimen are those of a female colony.

Campanularia retroflexa, n. sp. (Pl. XI. figs. 1, 1a).

Trophosome.—Hydrocaulus a creeping, filiform, reticulated stolon from which the peduncles of the hydrothecæ are sent off at short intervals. Hydrothecæ deep, cylindrical, with the margin divided into about fourteen blunt teeth and abruptly everted. Peduncles either quite continuous or divided by transverse joints into long clavate internodes.

Gonosome not known.

Locality.—Honolulu; depth, 20 to 40 fathoms.

The abruptly everted margin of the deep cylindrical hydrothecæ gives to this little Campanularian, which attains a height of about two-tenths of an inch, a well-marked character. The margin is everted in a plane at right angles to the axis of the hydrotheca, and the teeth into which the rim is divided stand up from it parallel to the axis, thus suggesting the form of the escapement-wheel of a watch.

The peduncles of the hydrothecæ are in most instances intersected by rather distant constrictions, and thus divided into a series of segments. Each of these has a somewhat clavate form, being slightly thicker at its distal than at its proximal end. This condition, however, notwithstanding its rather striking character, is not universally present, some of the peduncles being of uniform thickness and destitute throughout of constrictions.

The specimen occurs growing over the surface of a Millepore.