

with true campanulate and pedunculate hydrothecæ, and will leave the remainder of those which would have come under Lamarck's definition to find their places in other genera.

It is unfortunate, however, that the trophosome seldom presents any character which would enable us to assert that its gonophores are hedrioblasts rather than planoblasts, and since in many of the species obtained by the Challenger the gonosome is entirely absent, we are forced to regard the allocation of these species to definite genera as possessing only a provisional validity, liable to be set aside on the discovery of the gonosome.

*Campanularia insignis*, n. sp. (Pl. IX. figs. 1, 2).

*Trophosome*.—Colony attaining a height of six inches; stem monosiphonic, clustered, springing from a creeping tubular fibre, regularly set with pinnately disposed alternate ramuli, but otherwise simple or very sparingly branched, both stem and ramuli divided into internodes by equidistant transverse joints. Hydrothecæ borne both by stem and ramuli in two alternate series, every internode supporting a hydrotheca on a point close to its distal end; hydrothecæ deep, cylindrical for some distance from the orifice, and then gradually narrowing into a short peduncle which is borne through the medium of a very short annular segment on the summit of a lateral process of the internode; margin perfectly entire and surrounded by a narrow band.

*Gonosome* not present.

*Locality*.—Off Bermudas; depth, 30 fathoms.

*Campanularia insignis* is a large and handsome species. The long, almost always undivided stems spring from the hydrorhizal plexus in clusters of five or six, and carry along nearly their entire length alternately disposed pinnæ. Every pinna carries two opposite series of alternate hydrothecæ, and two exactly similar series are carried by the stem.

The walls of the hydrotheca are towards the base slightly more convex on the side which is turned away from the internode than on that which faces it, and the perforated diaphragm which forms the floor of the hydrotheca and separates its true cavity from that of the peduncle is oblique. The peduncle joins the supporting process of the internode through the medium of a very short annular segment.

*Campanularia insignis* comes very near to one of the Gulf Stream Hydroida which, under the name of *Obelia marginata*, was in the absence of the gonosome referred provisionally to the genus *Obelia*. It differs, however, from that species in the shape of the hydrothecæ, which in the Gulf Stream species have rather the form of an inverted cone caused by the gradual diminution of the diameter towards the base; while a further difference is found in the interposition in *Campanularia insignis* of a short annular segment between the peduncle of the hydrotheca and its supporting internode.