

the hydrotheca to its base, where it is slightly dilated and then becomes continuous with the canal of the peduncle.

The chitinous walls of the hydrotheca are enormously thickened, and in their thickness so far encroach on the cavity as to reduce this to the condition of the saucer-like depression with its tubular prolongation. Towards the free margin of this depression the walls thin away, and here terminate in a comparatively thin edge.

The hydrotheca is remarkable for its want of symmetry; for not only is its summit truncated obliquely, but the walls on one side are much thicker than on the other, and the cavity is thus thrown out of the axis. The hydrotheca is laterally compressed, and it is when viewed from its broad side that the departure from symmetry is apparent. When the narrower side is turned towards the observer the hydrotheca appears quite symmetrical. Between the hydrotheca and the summit of the peduncle there exists a short, nearly globular segment, and this, with the hydrotheca which it carries, may be depressed laterally on the peduncle.

The body of the hydranth rests in the saucer-like depression on the summit of the hydrotheca, and is extended through the canal as a cylindrical tube, in order to become continuous with the cœnosarc of the peduncle. Though the hydranths were imperfectly preserved in the specimen it was evident that for some distance from their oral end they lay permanently outside of the hydrotheca, and that the oral disc with its circlet of tentacles was, even in the state of extreme retraction, entirely exposed.

The gonangia are fusiform capsules attaining a height equal to about half that of the peduncles of the hydrothecæ, and contain each a single sporosac which forms an elongated oval sac springing from the side of the blastostyle near its base, and containing numerous ova. Immediately above the point from which the sporosac arises the blastostyle breaks up into a network of tubes by which the sporosac is surrounded, and which unite in the plug-like operculum which occupies the summit of the gonangium.

The excessive development of the chitinous perisarc is not confined to the hydrotheca, but shows itself in the peduncles, in the gonangia, and in the reticulated stolon, all which parts are remarkable for the great thickness of their walls. The perisarc is further remarkable for its density and transparency.

*Hypanthea aggregata* was found spreading over the fronds of a *Laminaria*-like sea-weed.

*Hypanthea hemispherica*, n. sp. (Pl. XIV. figs. 2, 2a).

*Trophosome*.—Hydrocaulus a creeping, sparingly branched stolon, which gives off both peduncles and gonangia at intervals along its length; peduncles varying in length from one-twentieth to one-tenth of an inch, cylindrical and smooth, with the distal end