

*Cystodytes draschii*, n. sp. (Pl. XIX. figs. 1-15).

*The Colony* is of a rudely elliptical shape, flat, and incrusting, and is of moderate thickness. The colour is of a dull brownish-grey, darker in the centre and more transparent round the edges. The surface is uneven, but smooth and glistening. The common cloacal apertures are inconspicuous.

The length is 6 cm., the breadth is 3 cm., and the average thickness is 5 mm.

*The Ascidiozooids* are somewhat elongated antero-posteriorly, and are placed nearly always at right angles to the surface. The usual size is 3 mm. antero-posteriorly, and 2 mm. dorso-ventrally and laterally. The anterior end is rather narrow, and terminates in the branchial aperture, while the posterior is broad and rounded. The posterior three-fourths or so of the Ascidiozoid is encased in a capsule formed by disk-shaped calcareous plates closely placed or overlapping. The anterior end projects from this calcareous capsule, and is free and unprotected.

*The Test* is soft but firm. It is very smooth on the upper surface. It is fairly transparent, especially near the edges. It is of much the same thickness throughout, and the edges are prominent and rounded. The test consists of a clear homogeneous matrix, which is greatly broken up by the presence of numerous large bladder cells, and contains great numbers of smaller cells of various shapes. Near the surface, for a short distance, the test is compact, and contains no bladder cells, but throughout the rest of its extent it is vesiculated. Around the bodies of the Ascidiozooids are formed in the test the discoid spicules which compose the calcareous capsule.

*The Mantle* is fairly muscular. The muscle fibres are delicate but numerous, and they form a close network. Transverse and longitudinal bands are equally numerous.

*The Branchial Sac* is small and rather thick walled. The transverse vessels are all of the same size. The stigmata are comparatively small.

*The Tentacles* are very long and narrow. There are about fifty of them, and they are of two sizes, long and short, placed alternately.

*Locality*.—Off Barra Grande; depth, 400 fathoms.

A single specimen of this interesting species was obtained off Barra Grande, Brazil, on the 10th September 1873, from a depth of 400 fathoms. It is a flat expanded colony of considerable size (Pl. XIX. fig. 1). The edges are generally thick and rounded, but in some places slightly expanded thin margins are present. The upper surface is nearly flat; here and there, however, it is slightly raised into small rounded knobs and ridges which give an equally distributed unevenness to the whole. This upper surface is very smooth and glistening. The lower surface is rough and rather irregular; it has evidently all served as an adhering area with the exception of a slight margin, which is in some places 5 mm. wide.