vessels of considerable size, with swollen end-bulbs filled with blood-corpuscles. The cells in the matrix are very few in number, and of small size.

The Mantle is strong. The muscle bands are not large, but they are very numerous and run in all directions, forming a close but very irregular network. The blood-corpuscles are of a dark green colour, and give the mantle a very decided tint.

The Branchial Sac is large, and has a number of stigmata. Internal longitudinal bars are present, and they divide the inner surface into meshes. The transverse vessels are all exceedingly narrow. The stigmata are large and regularly arranged; they are about equal in width to the fine longitudinal vessels between them.

The Tentacles are of moderate size, and are all of the same length. They are eight in number.

The Dorsal Lamina is a plain narrow membrane with no ribs nor teeth.

The Dorsal Tubercle is a small circular aperture placed in a deep triangular peritubercular area.

The Alimentary Canal is small, and does not extend far behind the branchial sac. The Reproductive Organs are placed alongside the alimentary canal. Locality.—Off Bermuda; shallow-water.

This is an interesting and important form on account of the resemblances it shows to the Botryllidæ on the one hand and to the Distomidæ on the other. It is possible that when its structure has been more minutely examined in better preserved and more abundant material it may prove to be more closely allied to the Botryllidæ than it is to the Distomidæ. A single specimen only is present in the collection. It was obtained off Bermuda, in shallow water. It consists of about ten heads connected by narrow branched peduncles, and closely united to a group of Sponges, Polyzoa, and other foreign objects, the whole forming a tree-like mass about 10 cm. in height and 2.5 cm. in greatest breadth (Pl. XVIII. fig. 7). Unfortunately the specimen is in bad condition and is evidently very much shrivelled and distorted, consequently it is impossible to get a correct idea of the external appearance.

The heads vary greatly both in size and shape. The largest is almost 2 cm. in length, but is rather narrow; others are short and broad. The dimensions in the above description are taken from a medium sized head. The top is usually wider than the base, and is more or less rounded. The sides are not flattened. The lower end of the head tapers downwards to the peduncle, which is relatively narrow (Pl. XVIII. fig. 7). The surface of the head is rendered very uneven by the shrivelling of the test between the Ascidiozooids. The colour of the colony is peculiar. The head is a dull sage green with a few reddish-brown, or, in some cases, dull orange markings. The peduncle is usually a sort of buff or dull yellowish-grey colour,