The dorsal tubercle is placed very close to the anterior end of the dorsal lamina (Pl. IV. fig. 10, *d.t.*), and there is no proper peritubercular area. In some cases there is a slight bulging posteriorly of the peripharyngeal band at one side of the dorsal lamina, thus producing a slight enlargement of the prebranchial zone (Pl. IV. fig. 10), but this can scarcely be regarded as a true peritubercular area. The opaque yellowish-brown mass formed by the nerve ganglion and neural gland is clearly visible through the dorsal lamina (Pl. IV. fig. 10, *n.g.*).

The alimentary canal is rather small (Pl. IV. fig. 7.). The œsophagus runs posteriorly with a slight ventral curve. The stomach is ovate in form and decidedly small. It is deeply channelled externally, and has a short recurved cæcum springing from the anterior edge of its intestinal end. The intestine, which is narrower than usual in the Botryllidæ, runs ventrally for a short distance (Pl. IV. fig. 7) and then turns anteriorly and dorsally, and after running parallel with the stomach but not touching it, reaches the œsophagus, and then turns anteriorly again to become the short rectum which ends in an anus surrounded by a prominent lobed margin. The cloacal region of the peribranchial cavity into which the anus opens communicates with the common cloacal aperture of the system by a long atrial siphon formed of a prolongation of the mantle and provided with circular muscle bands which may be regarded as a diffuse atrial sphincter (Pl. IV. fig. 7, *at.*). This atrial siphon is sausage-shaped (Pl. IV. fig. 11), and has not the bulbous form found in *Polycyclus lamarcki*. It is lined in its entire extent by an invagination of the test, which at the base of the siphon expands in the peribranchial cavity into a disk-like membrane with lobed or crenated edges (Pl. IV. fig. 11, *t.*)

No ova were found in this species. The reproductive organs are placed in the usual position (see Pl. IV. fig. 7), and consist only of rather small irregularly lobed spermatic vesicles. It is rather remarkable that while ova were present along with the testes in such a closely allied species as *Polycyclus lamarcki*, they should be absent in all the Ascidiozooids examined of the present species. Only a very few buds or young Ascidiozooids were discovered. These have masses of young ova placed laterally in the usual positions, and have no testes. Hence the probability is that this is a protogynous species like others of the Botryllidæ.

Family II. Distomidæ.

Colony rounded and massive, rarely incrusting, either sessile or supported upon a long or short peduncle.

Systems irregular, inconspicuous, or absent.

Ascidiozooids of moderate length and having the body divided into two regions, thorax and abdomen; they may be provided with long vascular ectodermal appendages.