

than the posterior, and being perfectly circular (Pl. XXV. fig. 11, *st.*). The stomach is thin walled and has no folds. In this respect it differs from the stomach of *Amaroucium lævigatum*, while in other respects the two alimentary canals are rather similar. The posterior end of the stomach tapers rapidly into the first portion of the intestine, which is a narrow tube running directly backwards. This is separated by a constriction from the second part of the intestine, which is wide and thick walled (Pl. XXV. fig. 11, *i.*) and turns abruptly towards the ventral side, and then anteriorly to open into the rectum. The last portion of the alimentary canal is a long thick-walled tube (Pl. XXV. fig. 11, *r.*) which runs forwards alongside the intestine, stomach, and œsophagus, crossing about the middle of its course so as to reach the dorsal side of the branchial sac. The rectum is much dilated at its commencement, and this part is separated from the intestine by a constriction or short narrow part of the tube.

The post-abdomen is large, and is not separated by any external constriction from the abdomen (Pl. XXV. fig. 11, *p.ab.*). The lower end of the post-abdomen is broad and rounded.

This species and *Amaroucium lævigatum* are certainly allied, notwithstanding their positions in distinct genera.

Aplidium, Savigny.

Aplidium, Savigny, Mémoires, 1816. In part.

Aplidium, Milne-Edwards, Observations, &c., 1842.

Aplidium, Forbes, British Mollusca, vol. i. p. 10, 1853. In part.

Aplidium, Giard, Recherches, &c., p. 635, 1872 (as a subgenus).

Aplidium, Delle Valle, Contribuzioni, &c., p. 34, 1877. In part.

Aplidium, von Drasche, Die Synascidien, p. 25, 1883 (as a subgenus).

Colony massive or lobed, not pedunculated.

Systems compound and irregular.

Ascidiozooids not much elongated; branchial aperture six-lobed, atrial lobed or having a rudimentary languet, and placed far back.

Test gelatinous or cartilaginous.

Branchial Sac fairly well developed.

Alimentary Canal of moderate size. Stomach-wall folded longitudinally.

Post-Abdomen usually short.

This genus, in the restricted sense in which it is now used, was established by Giard, and corresponds only to the first tribe of Savigny's *Aplidium*, a section characterised by the shortness of the post-abdomen. Giard in his classification of the Polyclinidæ used *Aplidium* in two senses:—(1) as a generic term opposed to *Polyclinum*, and including not only all the forms that Savigny included but the genus *Sidnyum* in addition; and