

curved parallel with the intestine, and the testis is in the concavity of the ovary (Pl. XXXVI. fig. 5). The vas deferens has a remarkable course. It arises from the side of the testis opposite to the ovary and intestine, and runs for a short distance away from these organs towards the dorsal edge. It then turns anteriorly, and converges towards the rectum, which it crosses close to the anus (fig. 5, *v.d.*).

In the Liverpool Free Public Museum there are several colonies of *Ecteinascidia turbinata*, from Alexandria Harbour; 3 to 5 fathoms.

The Challenger expedition obtained one large colony, of about twenty adult individuals and some buds, at Bermuda, in shallow water.

Clavelina, Savigny.

Ascidia, O. F. Müller, Zoologia Danica, vol. ii. 1780. In part.

Ascidia, Cuvier, Mém. du Mus., t. ii. 1815. In part.

Clavelina, Savigny, Mémoires sur les Animaux sans Vertèbres, 2nd partie, 1st fasc., p. 87; and Tableau Systematique, p. 171. 1816.

Clavelina, Milne-Edwards, Observations sur les Ascidiées Composées des côtes de la Manche. Mém. Inst. France, t. xviii. 1842.

Clavelina, Giard, Recherches sur les Synascidiées, Arch. Zool. expér. et génér., t. i. 1872.

Body oblong, more or less stalked.

Test gelatinous or cartilaginous. Apertures circular, not lobed.

Mantle thin.

Branchial Sac with no internal longitudinal bars; stigmata straight.

Dorsal Lamina in the form of languets.

Tentacles simple.

Viscera extending beyond the branchial sac posteriorly.

In 1816, Savigny founded this genus for the reception of two species, which had previously been classed under *Ascidia*, viz.:—*Ascidia borealis*, Savigny (= *Ascidia clavata*, Pallas), and *Ascidia lepadiformis*, Müller. He characterised the genus in his "Mémoires" as including pedunculated Simple Ascidiées with a gelatinous test. In the "Tableau Systematique" (p. 171), he gives a full diagnosis, which might almost stand unmodified as the definition of the genus as used at the present day. It is as follows:—

"Corps pédiculé par la base, à enveloppe gélatineuse ou cartilagineuse.

"Orifice branchial dépourvu de rayons; l'anal de même.

"Sac branchial non plissé, très-court, et n'arrivant pas au milieu de la tunique, surmonté de filets tentaculaires simples; les mailles du tissu respiratoire dépourvues de papilles.

"Abdomen totalement inférieur. Foie nul ou peu distinct des parois de l'intestin. Point de côte s'étendant du pylore à l'anus.

"Ovaire unique, compris dans l'abdomen."

Savigny seems not to have known of the power of budding possessed by the Clavelinidæ, and as far as the genus *Clavelina* was concerned, Milne-Edwards was the first, in