The Position.

Before describing any part of the anatomy of an Ascidian, it is necessary to state the position in which one considers its body placed, and to define such terms as anterior, posterior, dorsal, and ventral; as these have been used by some writers to denote entirely different regions of the body.

Savigny[1] placed his specimens, when describing them, in the natural position in which most species are found, namely, with the apertures (or the branchial aperture when they are far apart) superior, and the base of attachment inferior. He called the edge on which the atrial aperture is placed the anterior region, and the opposite side, that next the endostyle, posterior. Consequently, in all typical Simple Ascidians (*e.g.*, *Ascidia mentula*), according to Savigny's nomenclature of regions, the stomach and intestine would lie on the right side of the branchial sac.

Alder (1863),[2] Alder and Hancock (1870), and afterwards Hancock alone (1870),[3] employed a modification of Savigny's method. Their right and left sides were the same as Savigny's, but they designated the region of the branchial aperture anterior, and the base of attachment posterior. The two edges (anterior and posterior of Savigny) they called dorsal and ventral. This was a distinct improvement, but the two last terms were misapplied, the atrial edge being considered ventral, and the endostyle dorsal.

Milne-Edwards,[4] like Savigny, placed the body upright, and called the branchial end superior, and the place of attachment inferior. He differed from Savigny, however, in considering the endostyle as anterior, and the atrial region as posterior, the result being that his right and left sides are not synonymous with those of Savigny.

Kupffer's[5] terms are partly those of Milne-Edwards. He calls the region of the branchial aperture either superior or anterior, and the base of attachment inferior or posterior. The edges, however, he designates as dorsal and ventral, applying these terms not as Alder and Hancock did, but correctly—the atrium being dorsal, and the endostyle ventral. The right and left sides thus come to be the same as those of Milne-Edwards. Heller's[6] system is much the same; he places the animal upright, and calls the branchial aperture anterior, and the endostyle ventral. R. Hertwig[7] also considers the branchial aperture as anterior or oral, and the base of attachment as posterior or aboral, while the dorsal side is indicated by the nerve ganglion, and the ventral by the endostyle.

Lacaze-Duthiers[8] adopts an extraordinary system of nomenclature. He places the

[1] Mém. sur les anim. sans Vert., part ii. fasc. 1.
[2] Observ. on Brit. Tun., *Ann. Mag. Nat. Hist.*, ser. iii., vol. xi. p. 152.
[3] On the larval state of *Molgula*, &c., *Ann. Mag. Nat. Hist.*, ser. iv., vol. vi. p. 353.
[4] Observ. sur les Asc. Comp., &c., *Mém. de l'Acad. de Paris*, vol. xviii. p. 217.
[5] Jahresberichte der Kommission zur Untersuchung der deutschen Meer in Kiel. Berlin, 1874.
[6] Untersuch. ü. d. Tun. des adriat. Meeres, *Denkschr. k. Akad. Wissensch.*, Bd. xxxiv.
[7] Beiträge zur Kenntniss des Baues der Ascidien, *Jen. Zeitschr.*, vol. viii. p. 74.
[8] Asc. Simp. des côtes de France, *Arch Zool. expér.* t. iii.