

shells. My learned friend, Savigny, in his elaborate and admirable work on *The Invertebrate Animals*, who also considers them as a separate class, denominates them *Ascidians*,\* dividing them into two orders, *Tethydans* and *Thalidans*.† Many alcyons of Linné and others, are now referred to the class we are treating of.

The characters of the class may be thus stated: ANIMAL, either gelatinous or leathery, covered by a double *tunic*, or envelope. The external one, analogous to the shell of Molluscans, distinctly organized, provided with two apertures, the one *oral*, for respiration and nutrition, the other *anal*; the interior envelope, analogous to their mantle, provided also with two apertures adhering to those of the outer one. *Body* oblong, irregular, divided interiorly into many cavities, without a head; *gills* occupying, entirely or in part, the surface of a cavity within the mantle; *mouth* placed towards the bottom of the respiratory cavity between the gills; *alimentary tube*, open at both ends; a *ganglion*, sending nerves to the mouth and anus.

These animals are either simple or aggregate; fixed or floating: the simple ones are sometimes sessile,‡ and sometimes sit upon a footstalk.§ The aggregate ones possess many characters in common with the polypes, inhabiting, as it were, a common body, somewhat analogous to the polypary, except that it is more intimately connected with the animals that it encloses: the *mouth* of all is surrounded with rays or tentacles, as is also, in many, the anal orifice; but in their organization they differ very widely, exhibiting traces of a nervous system, and even, in some, of one of circulation. The fixed ones are commonly attached to rocks or other inorganized substances, but sometimes they are parasitic; thus a species of botrylle|| envelopes, like a cloak, certain

\* *Ascidia*.† *Tethydes*, *Thalides*.‡ *Cynthia*.§ *Clavelina*.|| *Botryllus polycyclus*.