the water; they also reproduce their tentacles when cut off. Portions of the base when divided are reproductive, but they do not separate from the parent till their tentacles are completely formed. Their internal organization, however, is much more advanced than that of the polypes. They have a separate alimentary sac or tube, surrounded by longitudinal muscles, and even nervous nodules or ganglions, and also several ovaries.

In mild, calm weather, when the sun shines, they may be seen in places where the water is not very deep, expanding their many-coloured flowers at the surface of the waters but upon the slightest indication of danger, the flowers suddenly disappear, the animal contracts itself and wears the aspect of a mass of flesh. They, as it were, vomit up their young, or the germs formed in the ovaries : but they sometimes force their way out from other parts. When inclined to change their station they glide upon their base, or, completely detaching themselves, commit themselves to the guidance of the waves. Reaumur observed them use their tentacles like the Cephalopods, for locomotion. They fix themselves with so much force, that they cannot be detached without crushing them.

It is not wonderful that so many of the lower aquatic animals should have been mistaken for plants, when they so exactly represent their forms, their roots, their branches and twigs, their leaves and their flowers—but besides the irritability of the animal substance, which, however, is partially exhibited by some plants, there is another character which seems, as a strong line of demarcation, to be drawn between them, and to which I have before adverted;\* animals take their food by a mouth at one extremity of the body, plants by roots diverging from the other. The reproductive organs in the latter occupy the place and ornature

\* See above, p. 155.