

it; by it the animal adheres to marine bodies: the upper valve, like the *Patella*, is sub-conical with a prominent vertex, and the two valves are not connected by a hinge.

A due consideration of all these circumstances, of this radiation, as it were, from a typical form as a centre, by various roads towards different tribes, seems to prove, and the observation is confirmed by facts in other departments of nature, that the world of animals, as well as that of heavenly bodies, consists of numerous systems, each, so to speak, with its central orb, and all concatenated, and revolving as it were wheel within wheel, and all tending towards or branching from a common centre. It seems, in the present instance, taking the group expressed by *Patella* of Linné as the common centre, that from thence, though by different and diverging routes, we may arrive at almost every molluscan group or tribe.

The Molluscans that we have hitherto been considering, with the exception of the herbivorous chitons, derive their nutriment from the sea-water itself, either from animalcules or other marine substances requiring only absorption; but the Gastropods, that we are next to notice, live upon more solid food, and such as cannot be digested without a more powerful action upon it. Of this description are the dippers* which are furnished with a singular organ or

* *Bulla*.

The *Clios*, as shown in a preceding page, are eminently provided with predatory weapons, the *Scyllæ* browse the sea-weed by means of a pair of strong lateral cutting jaws, the horny blades of which, both in shape and mode of action, are literally shears or scissors, and they possess, moreover, in the interior of their gizzards twelve cutting knives, so disposed as to chop up food when swallowed. The *Laplysia* feed on little shell-fish that they swallow whole, and although deprived of jaws have gizzards armed with crushing-plates of horn, and recurved hooks to tear up solid substances. The mouth of the *Patellæ* is a structure quite unique; their tongue, when not in use, is packed in spiral coils within the body, and when unrolled is seen to have its surface armed from end to end with triple rows of spiny teeth arranged transversely, by means of which the aliment is triturated