

ends, and these seek further protection, either by burying themselves in the sand or perforating the rocks, or by suspending themselves by a byssus; others, again, which only open their shells at certain times, as the oyster, fix themselves to any convenient substance. To these succeed others, whose shell is transversely divided into many pieces,* but yet, taken together, it forms a single valve protecting the back of a gastropod, or slug-like animal, which for further protection, when it is not moving, and to supply the place of a lower valve, fastens itself to a rock or other substance.

With the Patellidans begin the undivided univalve shells, which, like the preceding animals, protect their lower side by fixing themselves to the rocks; the sea-ears,† which are still more open, have recourse to a similar mode of protecting themselves, they preserve a communication with the atmosphere or water without elevating their shells, by means of a line of apertures, under the thickest margin near the apex; these apertures begin, when the animal is young, near the spire, and as it grows it stops up one and opens another, as its occasions require. I have a very large specimen, in which there are traces of eighteen apertures, and all but six are stopped up. If we turn our eyes from these to the Buccinidan or Whelk tribe, we are struck by an open Peruvian shell, which at first sight seems like a limpet,‡ but upon inquiry we find that it is defended by an operculum, the plan of protection being here changed, and, instead of an under-valve, or a rocky munition, it is closed by a broad plate, which some peculiarity in its structure and organization doubtless required; from this by *Purpura* and *Monoceros* to the true *Buccinum*, the mouth narrows and the operculum with it.

If we examine the common periwinkle, we find the mouth

* Chiton.

† Haliotis.

‡ Concholepas.