tube, or siphon, have the margin of the aperture of the shell channelled; as in the Whelk, or *Buccinum*. Almost all the land and fresh-water species have entire openings, and are, for the most part, herbivorous; while the greater number of the marine univalves have the aperture indented or notched, and are carnivorous. Some of these mollusca, too, have a retractile proboscis, armed with minute teeth, by which they can rasp or bore into the shells of the species on which they prey. There are some exceptions to the above rules, but the prevalence of the characters specified afford pretty certain indications of the fluviatile or marine nature of the originals. The application of these data to geological investigations will be demonstrated hereafter.

In the generic distinctions of the simple univalves, the form of the mouth becomes, therefore, a very important character; while in the bivalves, the configuration of the hinge affords an equally convenient aid for their classification.

Some tribes of testaceous mollusca are exclusively marine; many are restricted to the brackish water of estuaries; others live only in fresh-water; and some on the land. Their geographical distribution is alike various: certain groups inhabit deep water only, and are provided with an apparatus by which they can rise to the surface from the depths of the ocean; while others are littoral, that is, live in the shallows along the sea-shores. Many exist in quiet, others in turbulent waters; some are