

*Mollusca.*

Recent mollusca are principally found at moderate depths in the sea, and respire the air contained in water; some particular tribes live in fresh water, and either breathe the air in water by branchiæ, or come to the surface to respire by lungs; others live on the land. In a very few cases certain stratified masses appear to have been accumulated either in limited areas of fresh water, or in estuaries so much under the influence of rivers and inundations as to contain land and fresh-water shells alone or mixed with the exuviæ of marine animals. But these few and exceptional cases yield, perhaps, altogether in England not one twentieth part of the number of fossil testaceous remains; on the continent of Europe the proportion is not very different. In the existing economy of nature, however, the land shells are so extremely numerous that, with the fresh-water tribes, they probably constitute one fourth of the total number of known species. We must not, however, conclude, from the comparative rarity of land and fresh-water shells in a fossil state, that the ancient land and fresh waters were but scantily supplied with mollusca; for, in the first place, their remains would seldom be transported to the ocean; and further, the presumed fresh-water shells are extremely plentiful in the coal tracts, weald of Sussex, and fresh water beds of the Isle of Wight. The total number of fossil marine mollusca already collected is about equal to that of the living races: what may be the proportions hereafter is difficult to estimate, for it is certain that great additions will be made to both the catalogues.

It is not entirely without reason that geologists have been long accustomed to look on the study of fossil shells as more instructive with regard to the physical conditions of the globe in ancient times than most other reliquiæ of animal life. They are of all fossils the most numerous, the most generally diffused through rocks of all ages, most perfectly preserved, and of such definable forms as to be easily described, figured, and