

Articulates and Vertebrates, had scarcely got beyond the beginning of their historical development. In subsequent periods, especially in the primary and secondary periods, these higher tribes increased in importance more and more at the expense of Molluscs and Worms, which were no match for them in the struggle for life, and accordingly decreased in number. The still living Molluscs and Worms must be considered as only a proportionately small remnant of the vast molluscan fauna, which greatly predominated in the primordial and primary periods over the other tribes. (Compare Plate VI. and explanation in the Appendix.)

No tribe of animals shows more distinctly than do the Molluscs, how very different the value of fossils is in geology and in phylogeny. In geology the different species of the fossil shells of Molluscs are of the greatest importance because they serve as excellent marks whereby to characterize the different groups of strata, and to fix their relative ages. As far as relates to the genealogy of Molluscs, however, they are of very little value, because, on the one hand, the shells are parts of quite subordinate morphological importance, and because the actual development of the tribe belongs to the earlier primordial period, from which no distinct fossils have been preserved. If therefore we wish to construct the pedigree of Molluscs, we are mainly dependent upon the records of ontogeny and comparative anatomy from which we obtain something like the following result. (Gen. Morph. ii. Plate VI. pp. 102–116.)

The lowest stage of the four classes of genuine Molluscs known to us, is occupied by the Lamp-shells or Spiral-gills (Spirobranchia), frequently but inappropriately called Arm-footers (Brachiopoda), which have become attached to the