

CHAPTER SECOND.

LEADING GROUPS OF THE EXISTING SYSTEMS OF ANIMALS.

SECTION I.

GREAT TYPES OR BRANCHES OF THE ANIMAL KINGDOM.

THE use of the terms types, classes, orders, families, genera, and species, in the systems of Zoölogy and Botany, is so universal, that it would be natural to suppose that their meaning and extent are well determined and generally understood; but this is so far from being the case that it may on the contrary be said, that there is no subject in Natural History respecting which there exists more uncertainty or a greater want of precision. Indeed, I have failed to find anywhere a definition of the character of most of the more comprehensive of these divisions, while the current views respecting genera and species are very conflicting. Under these circumstances, it has appeared to me particularly desirable to inquire into the foundation of these distinctions, and to ascertain, if possible, how far they have a real existence. And, while I hope the results of this inquiry may be welcome and satisfactory, I am free to confess that it has cost me years of labor to arrive at a clear conception of their true character.

It is such a universal fact in every sphere of intellectual activity, that practice anticipates theory, that no philosopher should be surprised to find that zoölogists have adopted instinctively natural groups, in the animal and vegetable kingdoms, even before the question of the character and of the very existence of such groups in nature was raised. Did not nations speak, understand, and write Greek, Latin, German, and Sanscrit, before it was even suspected that these languages, and so many others, were kindred? Did not painters produce wonders with colors before the nature of light was understood? Had not men been thinking about themselves and the world before logic and metaphysics were taught in schools?