## CHAP. L.

as arising from the confluence of the innumerable hairs or feathers which cover the backs of Birds or Mammalia, - would this not be doing, for the muscular system or for the external coverings, what is now doing, on so broad a scale, for every isolated point of ossification in the skeleton? Let us rather be satisfied to recognize the fact, that Vertebrates have a plan of their own; that this plan is carried out in one way for Fishes, in another for Reptiles, in yet another for Birds, and again in another for Mammalia. It is true, grand traits of resemblance prevail through all, showing that the same thought is variously expressed in these different classes, and that this thought has found utterance in an endless diversity of distinct beings; but this resemblance lies chiefly in the unity of the conception, and not in the similarity of the execution. The various complications introduced in this execution constitute the typical peculiarities of the orders, while the forms in which they are inclosed constitute the typical peculiarities of the families, and the finish of the execution constitutes the typical peculiarities of the genera, while the relations to one another, and to the surrounding world, of the living individuals in which these thoughts are manifested, generation after generation, constitute the typical peculiarities of the species. Then, and then only, shall we grasp at the same time the grandeur of the conception of the plan according to which the animal kingdom is framed without losing sight of the admirable complication of its execution, and the infinite variety of conditions under which life is maintained.

There is hardly any other type in the whole animal kingdom, in which the direct intervention of thought, as the first cause of its characteristic features, can be so fully and so easily illustrated as in the order of Testudinata. In the first place, these animals are so peculiar in their form and in their structure, that they strike, at first sight, every observer as belonging almost to another creation. They have been represented as inverted Vertebrata; and the peculiarity in the position and connection of their limbs has been so magnified, even to the rank of a class character, that very special conditions would seem necessary to their existence; and yet they are so extensively scattered upon the whole surface of the globe, among other animals of entirely different form and structure, upon land, in the fresh waters, and in the ocean, that, unless it can be shown that, besides its known properties, matter possesses also a turtle-making property, it must be granted that there are special thoughts expressed both in their structure and in their forms, and that the plan to which they belong, notwithstanding their striking differences, must have been devised and executed by a thinking being. In the next place, the different representatives of this order are allied to one another in such a manner, that every feature of their organization appears to have been minutely considered; for, while some of their genera are closely linked, and constitute extensive families with