

## SECTION XIX.

## CONCLUSIONS.

I have attempted in the preceding sections to illustrate, so far as it was in my power, the characters of the order of Testudinata, more with the view of ascertaining what are ordinal characters, than in the hope of drawing a complete picture of the whole order. Consulting the leading works upon this subject, I have found that all original investigators agree in presenting, as characteristic of this type, the same kind of characters as I have mentioned above, and nearly in the same way, though perhaps they have not aimed so directly, and with the same care, as I have done, at admitting only such anatomical features as are truly characteristic of the whole order, and excluding every feature which occurs in other representatives of the class. If I have succeeded in this attempt, and if the characters presented above are truly those of the order of Testudinata, it follows that ordinal characters are essentially anatomical characters, and not what are commonly called zoölogical characters. They are borrowed from the peculiar complication of the anatomical structure of the class of Reptiles, so that this type furnishes direct evidence of the correctness of the definition of orders given in the first part of this work,<sup>1</sup> where it is stated that orders are natural groups, characterized by the degree of complication of their structure. It follows, therefore, that, to characterize orders correctly, we must compare their anatomical structure with that of the other orders of the same class, as I have done above,<sup>2</sup> and that, by this comparison, we ascertain the relative rank of this kind of natural groups; whereas in characterizing families, we consider the structure with reference to the form of the animal; and in characterizing classes, we illustrate, in a general manner, the ways in which, and the means by which, the plan of their respective branches is executed.

The characters of classes, like those of orders, are anatomical; but in characterizing a class, we consider the nature of the different systems of organs which constitute their living frame, we investigate the relations of their systems of organs to one another, their respective functions, etc., and not the various degrees of complication which they may exhibit in these combinations, for such complications constitute ordinal characters. If this is correct, and true to nature, it follows further, that such a distinction as is often made in Natural History, between

<sup>1</sup> See Part I., Chap. 2, Sect. 3, p. 150.

<sup>2</sup> See Part II., Chap. I., Sect. 3, p. 252.