## PREFACE.

WHILE most readers seeking comprehensive information may have had their attention drawn to the generalizations contained in the first part of this work, the naturalists who have studied the second and third parts may have noticed that the subjects under consideration there are treated in a different manner from that generally adopted in similar investigations. Confident that what have been called our classifications are in reality the various readings of a system which truly exists in nature, I have endeavored to show, that, in arranging their systems, zoölogists have unconsciously followed great natural relations in the animal kingdom, and that what they have supposed to be their invention was only their instinctive perception of an order which unites under a consistent plan all the isolated facts studied by them. My first step in the attempt to demonstrate this proposition was to collect all the facts relating to our science and to compare them carefully with the systems, testing the one by the other. By the coincidence of the two I hope to have proved that the Power which originated the facts must also have originated the ideas expressed in the systems; and that the latter are true only so far as they adhere to the great system of Nature from which they have been transcribed. The first monograph, limited to a single Order, alforded, however, a meagre field for such a demonstration; though it was broad enough to allow of the attempt without modifying too much the usual mode of treatment of such subjects. But finding, after many years' application of that method in my own investigations, that, far from complicating my studies, I only derived daily additional facilities in tracing the manifold relations which unite all kinds of natural groups among animals, I have resolved upon combining, through the presentation of a whole Class, the description of the facts, with a critical analysis of their meaning, as far as they have a bearing upon classification. How successful the attempt has been, time will show.

In selecting the class of Acalephs for such an experiment on a larger scale, I was influenced by the circumstance that these animals had attracted my special attention for many years past; and that, being particularly familiar with them, it was easy for me to treat