ered in ascertaining the manifold relations of animals to one another and to the world in which they live, upon which the natural system may be founded.

In considering these various topics, I shall of necessity have to discuss many questions bearing upon the very origin of organized beings, and to touch upon many points now under discussion among scientific men. I shall, however, avoid controversy as much as possible, and only try to render the results of my own studies and meditations in as clear a manner as I possibly can in the short space that I feel justified in devoting to this subject in this volume.

There is no question in Natural History on which more diversified opinions are entertained than on that of Classification; not that naturalists disagree as to the necessity of some sort of arrangement in describing animals or plants, for since nature has become the object of special studies, it has been the universal aim of all naturalists to arrange the objects of their investigations in the most natural order possible. Even Buffon, who began the publication of his great Natural History by denying the existence in nature of any thing like a system, closed his work by grouping the birds according to certain general features, exhibited in common by many of them. It is true, authors have differed in their estimation of the characters on which their different arrangements are founded; and it is equally true that they have not viewed their arrangements in the same light, some having plainly acknowledged the artificial character of their systems, while others have urged theirs as the true expression of the natural relations which exist between the objects themselves. But, whether systems were presented as artificial or natural, they have, to this day, been considered generally as the expression of man's understanding of natural objects, and not as a system devised by the Supreme Intelligence, and manifested in these objects.[1]

There is only one point in these innumerable systems on which all seem to meet, namely, the existence in nature of distinct species, persisting with all their peculiarities, for a time at least; for even the immutability of species has been questioned.[2] Beyond species, however, this confidence in the existence of the divisions, generally admitted in zoölogical systems, diminishes greatly.

With respect to genera, we find already the number of the naturalists who

[1] The expressions constantly used with reference to genera and species and the higher groups in our systems, — as, Mr. A. *has made* such a species *a genus*; Mr. B. *employs* this or that species to *form his genus*; and in which most naturalists indulge when speaking of *their* species, *their* genera, *their* families, *their* systems, — exhibit in an unquestionable light the conviction, that such groups are of their own making; which can, however, only be true in so far as these groups are not true to nature, if the views I shall present below are at all correct.

[2] LAMARCK (J. B. DE) Philosophie zoologique, Paris, 1809, 2 vols. 8vo.; 2de édit., 1830. — POWELL (THE REV. BADEN) Essays on the Spirit of the Inductive Philosophy, etc., London, 1855, 1 vol. 8vo. Compare, also, Sect. 15, below.