

same manner do genera differ more or less one from the other, even in the same family; and such inequality, and not an equable apportionment, is the norm throughout nature. In classes, it is not only exhibited in the variety of their forms, but also, to an extraordinary extent, in their numbers, as, for instance, in the class of Insects compared to that of Worms or Crustacea. The primary divisions of the animal kingdom differ in the same manner one from the other. Articulata are by far the most numerous branch of the whole animal kingdom; their number exceeding greatly that of all other animals put together. Such facts are in themselves sufficient to show how artificial classifications must be which admit only the same number and the same kind of divisions for all the types of the animal kingdom.

SECTION III.

ORDERS AMONG ANIMALS.

Great as is the discrepancy between naturalists respecting the number and limits of classes in the animal kingdom, their disagreement in regard to orders and families is yet far greater. These conflicting views, however, do not in the least shake my confidence in the existence of fixed relations between animals, determined by thoughtful considerations. I would as soon cease to believe in the existence of one God, because men worship Him in so many different ways, or because they even worship gods of their own making, as distrust the evidence of my own senses respecting the existence of a preëstablished and duly considered system in nature, the arrangement of which preceded the creation of all things that exist.

From the manner in which orders are generally characterized and introduced into our systems, it would seem as if this kind of groups were interchangeable with families. Most botanists make no difference even between orders and families, and take almost universally the terms as mere synonyms. Zoölogists have more extensively admitted a difference between them, but while some consider the orders as superior, others place families higher; others admit orders without at the same time distinguishing families, and *vice versa* introduce families into their classification without admitting orders; others still admit tribes as intermediate groups between orders and families. A glance at any general work on Zoölogy or Botany may satisfy the student how utterly arbitrary the systems are in this respect. The *Règne animal* of Cuvier exhibits even the unaccountable feature, that while orders