

Insects proper, but also the Myriapoda, the Arachnids, and the Crustacea; it corresponds more accurately to the division of Arthropoda of modern systematists. The class of Worms, the most heterogeneous of all, includes besides all Radiata or Zoophytes and the Mollusks of modern writers, also the Worms, intestinal and free, the Cirripeds, and one Fish, (Myxine.) It was left for Cuvier¹ to introduce order in this chaos.

Such is, with its excellences and short-comings, the classification which has given the most unexpected and unprecedented impulse to the study of Zoölogy. It is useful to remember how lately even so imperfect a performance could have so great an influence upon the progress of science, in order to understand why it is still possible that so much remains to be done in systematic Zoölogy. Nothing, indeed, can be more instructive to the student of Natural History, than a careful and minute comparison of the different editions of the "Systema Naturæ" of Linnæus, and of the works of Cuvier and other prominent zoölogists, in order to detect the methods by which real progress is made in our science.

Since the publication of the "Systema Naturæ" up to the time when Cuvier published the results of his anatomical investigations, all the attempts at new classifications were, after all, only modifications of the principles introduced by Linnæus in the systematic arrangement of animals. Even his opponents labored under the influence of his master spirit, and a critical comparison of the various systems which were proposed for the arrangement of single classes or of the whole animal kingdom shows that they were framed according to the same principles, namely, under the impression that animals were to be arranged together into classes, orders, genera, and species, according to their more or less close external resemblance. No sooner, however, had Cuvier presented to the scientific world his extensive researches into the internal structure of the whole animal kingdom, than naturalists vied with one another in their attempts to remodel the whole classification of animals, establishing new classes, new orders, new genera, describing new species, and introducing all manner of intermediate divisions and subdivisions under the name of families, tribes, sections, etc. Foremost in these attempts was Cuvier himself, and next to him Lamarck. It has, however, often happened that the divisions introduced by the latter under new names, were only translations into a more systematic form of the results Cuvier had himself obtained from his dissections and pointed out in his "*Leçons sur l'anatomie comparée*," as natural divisions, but without giving them distinct names. Cuvier himself beautifully expresses the

¹ It would be injustice to Aristotle not to mention that he understood already the relations of the animals united in one class by Linneus, under the name of Worms, better than the great Swedish naturalist.

Speaking, for instance, of the great genera or classes, he separates correctly the Cephalopods from the other Mollusks, under the name of Malakia. Hist. Anim., Lib. I., Chap. VI.