

viviparous have not all hair; those which are oviparous have scales." We have here a manifestly intentional subordination of characters: and a kind of regret that we have not names for the classes here indicated; such, for instance, as viviparous quadrupeds having hair. But he follows the subject into further detail. "Of the class of viviparous quadrupeds," he continues, "there are many genera,"¹¹ but these again are without names, except specific names, such as *man*, *lion*, *stag*, *horse*, *dog*, and the like. Yet there is a genus of animals that have names, as the horse, the ass, the *oreus*, the *ginnus*, the *innus*, and the animal which in Syria is called *heminus* (mule); for these are called *mules*, from their resemblance only; not being mules, for they breed of their own kind. Wherefore," he adds, that is, because we do not possess recognized genera and generic names of this kind, "we must take the species separately, and study the nature of each."

These passages afford us sufficient ground for placing Aristotle at the head of those naturalists to whom the first views of the necessity of a zoological system are due. It was, however, very long before any worthy successor appeared, for no additional step was made till modern times. When Natural History again came to be studied in Nature, the business of Classification, as we have seen, forced itself upon men's attention, and was pursued with interest in animals, as in plants. The steps of its advance were similar in the two cases;—by successive naturalists, various systems of artificial marks were selected with a view to precision and convenience;—and these artificial systems assumed the existence of certain natural groups, and of a natural system to which they gradually tended. But there was this difference between botany and zoology:—the reference to physiological principles, which, as we have remarked, influenced the natural systems of vegetables in a latent and obscure manner, botanists being guided by its light, but hardly aware that they were so, affected the study of systematic zoology more directly and evidently. For men can neither overlook the general physiological features of animals, nor avoid being swayed by them in their judgments of the affinities of different species. Thus the classifications of zoology tended more and more to a union with comparative anatomy, as the science was more and more improved.¹² But comparative anatomy belongs to the subject of the next Book; and anything it may be proper to say respecting its influence upon zoological arrangements, will properly find a place there.

¹¹ Εἶδη.

¹² Cuvier, *Lec. d'Anat. Comp.* vol. i. p. 17.