

The classification of Vogt (*Zoologische Briefe*, q. a., p. 180) presents several new features, one of which is particularly objectionable. I mean the separation of the Cephalopoda from the other Mollusks, as a distinct primary division of the animal kingdom. Having adopted the fundamental distinction introduced by K lliker between the animals in which the embryo is developed from the whole yolk, and those in which it arises from a distinct part of it, Vogt was no doubt led to this step in consequence of his interesting investigations upon *Act on*, in which he found a relation of the embryo to the yolk differing greatly from that observed by K lliker in Cephalopods. But as I have already shown above, this cannot any more justify their separation, as branches, than the total segmentation of the yolk of *Mammalia* could justify the separation of the latter from the other Vertebrates. Had the distinction made by Vogt, between Cephalopods and the other Mollusks, the value he assigns to it, *Limax* should also be separated from the other Gasteropods. The assertion that Protozoa produce no eggs, deserves no special consideration after what has already been said in the preceding sections respecting the animals themselves. As to the transfer of the Ctenophora to the type of Mollusks, it can in no way be maintained.

Before closing this sketch of the systems of Zo logy, I cannot forego the opportunity of adding one general remark. If we remember how completely independent the investigations of K. E. von Baer were from those of Cuvier, how different the point of view was from which they treated their subject, the one considering chiefly the mode of development of animals, while the other looked mainly to their structure; if we further consider how closely the general results at which they have arrived agree throughout, it is impossible not to be deeply impressed with confidence in the opinion they both advocate, that the animal kingdom exhibits four primary divisions, the representatives of which are organized upon four different plans of structure, and grow up according to four different modes of development. This confidence is further increased when we perceive that the new primary groups which have been proposed since are neither characterized by such different plans, nor developed according to such different modes of development, but exhibit simply minor differences. It is, indeed, a very unfortunate tendency, which prevails now almost universally among naturalists, with reference to all kinds of groups, of whatever value they may be, from the branches down to the species, to separate at once from one another any types which exhibit marked differences, without even inquiring first whether these differences are of a kind that justifies such separations. In our systems, the quantitative element of differentiation prevails too exclusively over the qualitative. If such distinctions are introduced under well-sounding names, they are almost certain to be adopted; as if science gained any thing by concealing a difficulty under a Latin