

consequently upon differences in their capability of development. A small number of Monera would then have given origin to the animal kingdom, and, again, a small number would have produced the vegetable kingdom. Between these two groups, however, there would have developed, independently of them, a large number of independent tribes, which have remained at a lower stage of organization, and which have neither developed into genuine plants nor into genuine animals.

A safe means of deciding between the monophyletic and polyphyletic hypotheses is as yet quite impossible, considering the imperfect state of our phylogenetic knowledge. The different groups of Protista, and those lowest forms of the animal kingdom and of the vegetable kingdom which are scarcely distinguishable from the Protista, show such a close connection with one another and such a confused mixture of characteristics, that at present any systematic division and arrangement of the groups of forms seem more or less artificial and forced. Hence the attempt here offered must be regarded as entirely provisional. But the more deeply we penetrate into the genealogical secrets of this obscure domain of inquiry, the more probable appears the idea that the vegetable kingdom and the animal kingdom are each of independent origin, and that midway between these two great pedigrees a number of other independent small groups of organisms have arisen by repeated acts of spontaneous generation, which on account of their indifferent neutral character, and in consequence of their mixture of animal and vegetable properties, may lay claim to the designation of independent Protista.

Thus, if we assume one entirely independent trunk for