another, or with the lowest animals on the one hand, and with the lowest plants on the other hand. It is not improbable that the classes specified, and many other unknown classes of Protista, represent quite independent organic tribes, or phyla, each of which has independently developed from one, perhaps from various, Monera which have arisen by spontaneous generation. If we do not agree to this polyphyletic hypothesis of descent, and prefer the monophyletic hypothesis of the blood relationship of all organisms, we shall have to look upon the different classes of Protista as the lower small offshoots of the root, springing from the same simple Monera root, out of which arose the two mighty and many-branched pedigrees of the animal kingdom on the one hand, and of the vegetable kingdom on the other. (Compare pp. 74, 75.) Before I enter into this difficult question more accurately, it will be appropriate to premise something further as to the contents of the classes of Protista given on the next page, and their general natural history.

It will perhaps seem strange that I should here again begin with the remarkable *Monera* as the first class of the Protista kingdom, as I of course look upon them as the most ancient primary forms of all organisms without exception. Still, what are we otherwise to do with the *still living Monera* ? We know nothing of their palæontological origin, we know nothing of any of their relations to lower animals or plants, and we know nothing of their possible capability of developing into higher organisms. The simple and homogeneous little lump of slime or mucus which constitutes their entire body (Fig. 8) is the most ancient and original form of animal as well as of vegetable plastids. Hence it would evidently be just as arbitrary and unreason-