

the number of phyla, or main groups, of the vegetable kingdom may be reduced to the number of four. Mosses and ferns may likewise be comprised as "Prothallus plants" (Prothallophyta), and thereby the number of plant tribes reduced to three—Flowering plants, Prothallus plants, and Thallus plants.

Very important facts in the anatomy and the history of development, both in the animal and vegetable kingdoms, support the supposition that even these few main classes or tribes are connected at their roots, that is, that the lowest and most ancient primary forms of all three are related by blood to one another. Nay, by a further examination we are obliged to go still a step further, and to agree with Darwin's supposition, that even the two pedigrees of the animal and vegetable kingdom are connected at their lowest roots, and that the lowest and most ancient animals and plants are derived from a single common primary creature. According to our view, this common primæval organism can have been nothing but a Moneron which took its origin by spontaneous generation.

In the mean time we shall at all events be acting cautiously if we avoid this last step, and assume true blood relationship only within each tribe, or phylum, where it has been undeniably and surely established by facts in comparative anatomy, ontogeny, and phylogeny. But we may here point to the fact that two different fundamental forms of genealogical hypothesis are possible, and that all the different investigations of the Theory of Descent in relation to the origin of organic groups of forms will, in future, tend more and more in one or the other of these directions. The unitary, or *monophyletic*, hypothesis of descent will endeavour