

1. The still living Monera; 2. The Amœboidea, or Protoplasts; 3. The Whip-swimmers, or Flagellata; 4. The Flimmer-balls, or Catallacta; 5. The Train-weavers, or Labyrinthuleæ; 6. The Flint-cells, or Diatomeæ; 7. The Slime-moulds, or Myxomycetes; 8. The Ray-streamers, or Rhizopoda.

The most important groups at present distinguishable in these eight classes of Protista are named in the systematic table on p. 51. Probably the number of these Protista will be considerably increased in future days by the progressive investigations of the ontogeny of the simplest forms of life, which have only lately been carried on with any great zeal. With most of the classes named we have become intimately acquainted only during the last ten years. The exceedingly interesting Monera and Labyrinthuleæ, as also the Catallacta, were indeed discovered only a few years ago. It is probable also that very numerous groups of Protista have died out in earlier periods, without having left any fossil remains, owing to the very soft nature of their bodies. We might add to the Protista from the still living lowest groups of organisms—the Fungi; and in so doing should make a very large addition to its domain. Provisionally we shall leave them among plants, though many naturalists have separated them altogether from the vegetable kingdom.

*The pedigree of the kingdom Protista* is still enveloped in the greatest obscurity. The peculiar combination of animal and vegetable properties, the indifferent and uncertain character of their relations of forms and vital phenomena, together with a number of several very peculiar features which separate most of the subordinate classes sharply from the others, at present baffle every attempt distinctly to make out their blood relationships with one