

CHAPTER XVI.

PEDIGREE AND HISTORY OF THE KINGDOM OF THE
PROTISTA.

Special Mode of Carrying out the Theory of Descent in the Natural System of Organisms.—Construction of Pedigrees.—Descent of all Many-Celled from Single-Celled Organisms.—Descent of Cells from Monera.—Meaning of Organic Tribes, or Phyla.—Number of the Tribes in the Animal and Vegetable Kingdoms.—The Monophyletic Hypothesis of Descent, or the Hypothesis of one Common Progenitor, and the Polyphyletic Hypothesis of Descent, or the Hypothesis of Many Progenitors.—The Kingdom of Protista, or Primæval Beings.—Eight Classes of the Protista Kingdom—Monera, Amœbæ, or Protoplastæ.—Whip-swimmers, or Flagellata.—Ciliated-balls, or Catallacta.—Labyrinth-streamers, or Labyrinthuleæ.—Flint-cells, or Diatomeæ.—Mucous-moulds, or Myxomycetes.—Root-footers (Rhizopoda).—Remarks on the General Natural History of the Protista: Their Vital Phenomena, Chemical Composition, and Formation (Individuality and Fundamental Form).—Phylogeny of the Protista Kingdom.

By a careful comparison of the individual and the palæontological development, as also by the comparative anatomy of organisms, by the comparative examination of their fully developed structural characteristics, we arrive at the knowledge of the degrees of their different structural relationships. By this, however, we at the same time obtain an insight into their true *blood relationship*, which, according to the Theory of Descent, is the real reason of the structural relationship. Hence by collecting, comparing, and