CHAPTER XVIII.

PEDIGREE AND HISTORY OF THE ANIMAL KINGDOM.

I. Animal-Plants and Worms.

The Natural System of the Animal Kingdom.—Linnæus and Lamarck's Systems.—The Four Types of Bär and Cuvier.—Their Increase to Seven Types.—Genealogical Importance of the Seven Types as Independent Tribes of the Animal Kingdom.—Derivation of Zoophytes and Worms from Primæval Animals.—Monophyletic and Polyphyletic Hypothesis of the Descent of the Animal Kingdom.—Common Origin of the Four Higher Animal Tribes out of the Worm Tribe.—Division of the Seven Animal Tribes into Sixteen Main Classes, and Thirty-eight Classes.—Primæval Animals (Monera, Amœbæ, Synamœbæ), Gregarines, Infusoria, Planæades, and Gastræades (Planula and Gastrula).—Tribe of Zoophytes.—Spongiæ (Mucous Sponges, Fibrous Sponges, Calcareous Sponges).—Sea Nettles, or Acalephæ Corals, Hood-jellies, Comb-jellies).—Tribe of Worms.

The natural system of organisms which we must employ in the animal as well as in the vegetable kingdom, as a guide in our genealogical investigations, is in both cases of but recent origin, and essentially determined by the progress of comparative anatomy and ontogeny (the history of individual development) during the present century. Almost all the attempts at classification made in the last century followed the path of the artificial system, which was first established in a consistent manner by Charles