

CHAPTER V

THE HISTORY OF OUR SPECIES

Origin of Man—Mythical History of Creation—Moses and Linné—The Creation of Permanent Species—The Catastrophic Theory : Cuvier — Transformism : Goethe — Theory of Descent : Lamarck—Theory of Selection : Darwin—Evolution (Phylogeny)—Ancestral Trees—General Morphology—Natural History of Creation—Systematic Phylogeny—Fundamental Law of Biogeny—Anthropogeny—Descent of Man from the Ape—Pithecoïd Theory—The Fossil Pithecanthropus of Dubois

THE youngest of the great branches of the living tree of biology is the science we call biological evolution, or *phylogeny*. It came into existence much later, and under much more difficult circumstances, than its natural sister, embryonic evolution or *ontogeny*. The object of the latter was to attain a knowledge of the mysterious processes by which the individual organism, plant or animal, developed from the egg. Phylogeny has to answer the much more obscure and difficult question: "What is the origin of the different organic species of plants and animals?"

Ontogeny (embryology and metamorphism) could follow the empirical method of direct observation in the solution of its not remote problem; it needed but to follow, day by day and hour by hour, the visible changes which the fœtus experiences during a brief period in the course of its development from the ovum. Much