

THE RIDDLE OF THE UNIVERSE

more difficult was the remote problem of phylogeny; for the slow processes of gradual construction, which effect the rise of new species of animals and plants, go on imperceptibly during thousands and even millions of years. Their direct observation is possible only within very narrow limits; the vast majority of these historical processes can only be known by direct inference—by critical reflection, and by a comparative use of empirical sciences which belong to very different fields of thought, palæontology, ontogeny, and morphology. To this we must add the immense opposition which was everywhere made to biological evolution on account of the close connection between questions of organic creation and supernatural myths and religious dogmas. For these reasons it can easily be understood how it is that the scientific existence of a true theory of origins was only secured, amid fierce controversy, in the course of the last forty years.

Every serious attempt that was made before the beginning of the nineteenth century to solve the problem of the origin of species lost its way in the mythological labyrinth of the supernatural stories of creation. The efforts of a few distinguished thinkers to emancipate themselves from this tyranny and attain to a naturalistic interpretation proved unavailing. A great variety of creation myths arose in connection with their religion in all the ancient civilized nations. During the Middle Ages triumphant Christendom naturally arrogated to itself the sole right of pronouncing on the question; and, the Bible being the basis of the structure of the Christian religion, the whole story of creation was taken from the book of Genesis. Even Carl Linné, the famous Swedish scientist, started from that basis when, in 1735, in his classical *Systema Naturae*, he