

SOLUTION OF THE WORLD-PROBLEMS

year 2697 B.C., and the plane of the ecliptic was determined by means of a gnome eleven hundred years B.C., while Christ himself had no knowledge whatever of astronomy—indeed, he looked out upon heaven and earth, nature and man, from the very narrowest geocentric and anthropocentric point of view. The greatest advance of astronomy is generally, and rightly, said to be the founding of the heliocentric system of Copernicus, whose famous work, *De Revolutionibus Orbium Caelestium*, of itself caused a profound revolution in the minds of thoughtful men. In overthrowing the Ptolemaic system, he destroyed the foundation of the Christian theory, which regarded the earth as the centre of the universe and man as the godlike ruler of the earth. It was natural, therefore, that the Christian clergy, with the pope at its head, should enter upon a fierce struggle with the invaluable discovery of Copernicus. Yet it soon cleared a path for itself, when Kepler and Galileo grounded on it their true “mechanics of the heavens,” and Newton gave it a solid foundation by his theory of gravitation (1686).

A further great advance, comprehending the entire universe, was the application of the idea of evolution to astronomy. It was done by the youthful Kant in 1755; in his famous general natural history and theory of the heavens he undertook the discussion, not only of the “constitution,” but also of the “mechanical origin” of the whole world-structure on Newtonian principles. The splendid *Système du Monde* of Laplace, who had independently come to the same conclusions as Kant on the world-problem, gave so firm a basis to this new *Mécanique Celeste* in 1796 that it looked as if nothing entirely new of equal importance was left to be discovered in the nineteenth century. Yet here