but faulty in some of its arguments from his imperfect knowledge of physical laws.

The theory of the evolution of the solar systems commonly called the nebular hypothesis, which held undisputed sway for nearly a century, and which still, in spite of many contradictions recently discovered, occupies the premier position in the minds of scientific men generally, was enunciated by the great French scientist, Laplace in 1796.

Laplace called attention to the fact that all the motions of rotation and revolution in the solar system then known were in the same direction and almost in the same plane. He computed that the probability of this being a mere accident was about one part in 500,000,000, conclusively showing it to be due to some initial state from which the system had developed.

This theory as amended by himself, and with some later additions is, that our system was originally a nebula probably somewhat condensed towards the centre, which extended beyond the orbit of the farthest planet, that it rotated as one body in the direction in which the planets now move and that it gradually condensed and got hotter under the mutual gravitation of its parts, exactly as we have already postulated. Simultaneously with the contraction, the rate of rotation necessarily increased from a well known dynamical law. After some time the centrifugal force at the equator became equal to the central attraction, and a ring of nebulous matter was left off, the remainder continuing to contract and leave off rings at the distances of the planets. The rate of rotation and the temperature of course increased with the contraction.

The rings left off scarcely could have had a uniform structure and, separating at some point, would coalesce forming the planets, while the satellites would be formed from rings left off from the contracting planets, Saturn's ring being an example still remaining. By the time these rings had formed planets and these latter had cooled down to a solid condition, the central part, the sun, would have gone through some of the changes outlined previously, and would have reached its present condition of approximate equilibrium, the loss of heat due to radiation being compensated by the gain due to contraction.

Such is the nebular hypothesis which remained unquestioned for more than half a century, and which has exercised an incalculable influence on the science and philosophy of the nineteenth century. Unfortunately the nebular hypothesis, beautiful and complete as it is, can not, in the form it was left by Laplace be made to account for the facts as they are now known. It has, since about 1860, been subject to continuous attacks and if now accepted must be in a considerably modified form. A