

important works which deal with this subject since the age of Mill in England and the return to Kant in Germany. But it is hardly from a philosophical point of view—*i.e.*, from the point of view of the theory of knowledge as such—that the more important investigations have been undertaken, or that the great revolution regarding the aspect of the problem of knowledge is being prepared. This has been done in the interests of science itself, which everywhere has been brought face to face with fundamental problems, having outgrown the language and terms in which it was clothed a hundred years ago. With the intention of providing more suitable expressions, more elastic notions, and wider principles, some of the foremost scientific thinkers have, within the last fifty years, attacked the fundamental conceptions with which science operated in their time. This I showed, at sufficient length, in the first part of this History,<sup>1</sup> where the leading principles of modern science were discussed, and the different stages

of Science' (1892), in which he refers to Kirchhoff and Mach, and develops independently correcter notions of the principles of science; following on the lines indicated in this country by Mill and Stanley Jevons on the one side, by Clerk Maxwell and Clifford on the other. French literature, after having in the early years of the century, notably under the influence of Lagrange and later on through Poncelet and Carnot, contributed so largely to the clearing up of the principles of pure science, has quite recently produced two original works on the subject by M. Henri Poincaré, entitled 'La Science et l'Hypothèse' (1903 and 1905). But it should also be

noted that already in his 'Essais de Critique Générale' Renouvier gave some very clear and correct definitions of fundamental mechanical principles, at a time when both in Germany and in this country the notions on this subject were still generally in a state of great confusion.

<sup>1</sup> I shall return to this subject in a later chapter, which will deal not so much with the leading principles of scientific research as with the philosophical problem of nature, *i.e.*, with the various attempts to comprehend the totality of things as revealed to us by our outer senses,—what we may term the cosmological problem.