THE RIDDLE OF THE UNIVERSE

in the Explanation of a Thing as a Natural End." It seemed to Kant so impossible to explain the orderly processes in the living organism without postulating supernatural final causes (that is, a purposive creative force) that he said: "It is quite certain that we cannot even satisfactorily understand, much less elucidate, the nature of an organism and its internal faculty on purely mechanical natural principles; it is so certain. indeed, that we may confidently say, ' It is absurd for a man to conceive the idea even that some day a Newton will arise who can explain the origin of a single blade of grass by natural laws which are uncontrolled by design '- such a hope is entirely forbidden us." Seventy years afterwards this impossible "Newton of the organic world "appeared in the person of Charles Darwin, and achieved the great task that Kant had deemed impracticable.

Since Newton (1682) formulated the law of gravitation, and Kant (1755) established "the constitution and mechanical origin of the entire fabric of the world on Newtonian laws," and Laplace (1796) provided a mathematical foundation for this law of cosmic mechanicism, the whole of the inorganic sciences have become purely mechanical, and at the same time purely Astronomy, cosmogony, geology, meteoratheistic. ology, and inorganic physics and chemistry are now absolutely ruled by mechanical laws on a mathematical The idea of "design" has wholly disapfoundation. peared from this vast province of science. At the close of the nineteenth century, now that this monistic view has fought its way to general recognition, no scientist ever asks seriously of the "purpose" of any single phenomenon in the whole of this great field. Is any astronomer likely to inquire seriously to-day into the