## THE RIDDLE OF THE UNIVERSE

stance as far as the simpler relations of inorganic bod. ies are concerned, physiology took up the story, and proved its application to the entire province of the organic world. It showed that all the vital activities of the organism—without exception—are based on a constant "reciprocity of force" and a correlative change of material, or metabolism, just as much as the simplest processes in "lifeless" bodies. Not only the growth and the nutrition of plants and animals, but even their functions of sensation and movement, their sense-action and psychic life, depend on the conversion of potential into kinetic energy, and vice versa. This supreme law dominates also those elaborate performances of the nervous system which we call, in the higher animals and man, "the action of the mind."

Our monistic view, that the great cosmic law applies throughout the whole of nature, is of the highest moment. For it not only involves, on its positive side, the essential unity of the cosmos and the causal connection of all phenomena that come within our cognizance, but it also, in a negative way, marks the highest intellectual progress, in that it definitely rules out the three central dogmas of metaphysics—God, freedom, and immortality. In assigning mechanical causes to phenomena everywhere, the law of substance comes into line with the universal law of causality.