of the reaction of mind on nature, and must be largely subjective and anthropomorphic. Hence, no doubt, arises much of the controversy of science, and much of the unsolved difficulty. We recognise this when we divide science into that which is experimental, or depends on apparatus, and that which is observational and classificatory-distinctions these which relate not so much to the objects of science as to our methods of pursuing them. This view also opens up to us the thought that the domain of science is practically boundless, for who can set limits to the action of mind on the universe, or of the universe on mind. It follows that science, as it exists at any one time, must be limited on all sides by unsolved mysteries; and it will not serve any good purpose to meet these with If we so treat the enigmas of the sphinx clever guesses. nature, we shall surely be devoured. Nor, on the other hand, must we collapse into absolute despair, and resign ourselves to the confession of inevitable ignorance. It becomes us rather boldly to confront the unsolved questions of nature, and to wrestle with their difficulties till we master such as we can, and cheerfully leave those we cannot overcome to be grappled with by our successors.

Fortunately, as a geologist, I do not need to invite attention to those transcendental questions which relate to the ultimate constitution of matter, the nature of the ethereal medium filling space, the absolute difference or identity of chemical elements, the cause of gravitation, the conservation and dissipation of energy, the nature of life, or the primary origin of bioplasmic matter. I may take the much more humble *rôle* of an inquirer into the unsolved or partially solved problems which meet us in considering that short and imperfect record which geology studies in the rocky layers of the earth's crust, and which leads no farther back than to the time when a solid rind had already formed on the earth, and was already covered with an ocean. This record of geology covers but a small

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