

gave me a hint as to a subject, and I determined to devote my address to a consideration of questions which geology has not solved, or has only imperfectly and hypothetically discussed.

Such unsolved or partially solved questions must necessarily exist in a science which covers the whole history of the earth in time. At the beginning it allies itself with astronomy and physics and celestial chemistry. At the end it runs into human history, and is mixed up with archæology and anthropology. Throughout its whole course it has to deal with questions of meteorology, geography and biology. In short, there is no department of physical or biological science, with which this many-sided study is not allied, or at least on which the geologist may not presume to trespass. When, therefore, it is proposed to discuss in the present chapter some of the unsolved problems and disputed questions of this universal science, the reader need not be surprised if it should be somewhat discursive.

Perhaps we may begin at the utmost limits of the subject by remarking that in matters of natural and physical science we are met at the outset with the scarcely solved question as to our own place in the nature which we study, and the bearing of this on the difficulties we encounter. The organism of man is decidedly a part of nature. We place ourselves, in this aspect, in the sub-kingdom vertebrata and class mammalia, and recognise the fact that man is the terminal link in a chain of being, extending throughout geological time. But the organism is not all that belongs to man, and when we regard him as a scientific inquirer, we raise a new question. If the human mind is a part of nature, then it is subject to natural law, and nature includes mind as well as matter. Indeed, without being absolute idealists we may hold that mind is more potent than matter, and nearer to the real essence of things. Our science is in any case necessarily dualistic, being the product