and cold, collecting and condensing the rain, and bringing it down; and so similar to present meteorological phenomena do these ancient showers appear to have been, that we may conclude that electrical reactions, in all respects were the same as at present.

The preservation of the tracks of numerous animals in some of the sandstones shows us how deep and permanent an impression the most trivial action of a living being may make. In these footmarks we sometimes notice a change in the direction of the animal along the surface; and, of course, an impression deeper or more shallow than usual, of parts of the foot, by the action of the muscles employed in changing the animal's course. Here, then, we have the register of so slight an action as an increased or diminished action of a particular muscle of the leg. Nay, further, such a movement affords us an infallible register of an act of the animal's will, since that must have preceded the change; and that implies an electric current, first inward along the sensor nerves, and then outward along the motor nerves.

Geology lays open before us a map of the changes in organic nature from the apparent commencement of life on the globe, and thus enables us to see examples of this kind of reaction. We find different economies of life to have appeared, but all of them most wisely adapted to existing circumstances. In each economy we perceive the balance between the different tribes provided for. If, for instance, one race of carnivorous species died out, new races were created to occupy their place, so that the herbivorous species should not overrun the globe. Thus, when the early sauroid fishes diminished, the gigantic and carnivorous marine saurian reptiles were introduced. And when the chambered shells, whose occupants were carnivorous, disappeared with the secondary period, numerous univalve mollusks were created to feed on other animals; although previously that family were herbivorous. It would seem, however, as if each successive economy of organic life had contained within itself the seeds of extinction. It was, indeed, mainly a change of climate which first caused some species to disappear. But their destruction so disturbed the balance of creation that others followed, until total extinction was the result, which, however, was often hastened by catastrophes.