



some animal made 2,000 years ago, are exactly like the real animal as it now exists; just as if any particular state of modification of an animal would not last as long as the circumstances which produced and are suited to maintain it, whether 2,000, or 20,000, or 200,000 years. Here we see another of the vulgarisms of vulgar errors—that which consists in supposing things always were, and always will be, just what we see them in the point of time and space to which an individual experience is confined. Astronomy teaches us that some of the nearest stars are twenty millions of millions of miles off, and that some of the more remote are 20,000 times that distance. Geology teaches that this number in miles is but equivalent to the number in years which has elapsed since the formation of the rock over which the hills of Niagara are precipitated. The enormous numbers reckoned in years and miles with which we have to deal in celestial phenomena, are familiar to all who are the least conversant with studies of this sort; but it appears that on this subject the mind of your back critic is a blank. Let it be granted that the duration of the rock in question took place only some short time, a dozen million years or so, after the earth ceased to be in an incandescent state, and a like period before animal life came upon it; nay, let us suppose that animal life came upon the earth 20,000,000 X 20,000,000 X 1,000,000 years ago; not even 20,000,000 X 1,000,000 years ago, but only 1,000,000 (though geology points to the longer period). What is 2,000 compared with even this last number? Such silly objections remind those versed in the history of scientific discovery, of the objections that were urged against the heliocentric theory on its first announcement. It was unphilosophical, it was heterodox, it was heretical, it was deistic, atheistic, blasphemous; the earth could not move, because if it did, a stone dropped from the top of a tower could not fall at its base, &c. But it is a fact worthy of note, that those who oppose against a true theory, cannot help uttering facts and considerations that, rightly interpreted, are sure to confirm it. The more they attack it, the more they bring out its strong points, and reveal their own weak ones.

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