The analogy of other sciences has been referred to, as sanctioning this attempt to refer the whole train of facts to known causes. To have done this, it has been said, is the glory of Astronomy: she seeks no hidden virtues, but explains all by the force of gravitation, which we witness operating at every moment. But let us ask, whether it would really have been a merit in the founders of Physical Astronomy, to assume that the celestial revolutions resulted from any selected class of known causes? When Newton first attempted to explain the motions of the moon by the force of gravity, and failed because the measures to which he referred were erroneous, would it have been philosophical in him, to insist that the difference which he found ought to be overlooked, since otherwise we should be compelled to go to causes other than those which we usually witness in action? Or was there any praise due to those who assumed the celestial forces to be the same with gravity, rather than to those who assimilated them with any other known force, as magnetism, till the calculation of the laws and amount of these forces, from the celestial phenomena, had clearly sanctioned such an identification? We are not to select a conclusion now well proved, to persuade ourselves that it would have been wise to assume it anterior to proof, and to attempt to philosophize in the method thus recommended.

Again, the analogy of Astronomy has been referred to, as confirming the assumption of perpetual uniformity. The analysis of the heavenly motions, it has been said, supplies no trace of a beginning, no promise of an end. But here, also, this analogy is erroneously applied. Astronomy, as the science of cyclical motions, has nothing in common with Geology. But look at Astronomy where she has an analogy with Geology; consider our knowledge of the heavens as a palætiological science;—as the study of a past condition, from which the present is derived by causes acting in time. Is there then no evidence of a beginning, or of a progress? What is the import of the Nebular Hypothesis? A luminous matter is condensing, solid bodies are forming, are arranging themselves into systems of cyclical motion; in short, we have exactly what we are told, on this analogy, we ought not to have;—the beginning of a world. I will not, to justify this argument, maintain the truth of the nebular hypothesis; but if geologists wish to borrow maxims of philosophizing from astronomy, such speculations as have led to that hypothesis must be their model.

Or, let them look at any of the other provinces of palætiological speculation; at the history of states, of civilization, of languages. We