

proaching to him are known to have existed. This is independent altogether of the farther difficulties which attend the spontaneous origination of the mental and moral nature of our species. It would seem then that man must have been introduced, not by a process of gradual development, but in some abrupt and sudden way.

These considerations have led many of the more logical and thoughtful of the followers of Darwin to the position of supposing, not a gradual, but an intermittent and sudden development, and this, in the main, in the earliest periods of the history of living beings. In a very able essay by Dr. Alpheus Hyatt, in the *Proceedings of the Boston Society of Natural History*,* this view is very fully stated in its application to animals. On the one hand, Hyatt holds that the biological facts and the geological evidence as it has been stated by Marcou, Le Conte, Barrande, Davidson, and by the author of this paper, precludes the idea of slow and uniform change proceeding throughout geological time, and he holds justly that the idea of what he calls "a concentrated and accelerated process of evolution," in early geological times, brings the doctrine of development nearer to the position of those great naturalists like Cuvier, Louis Agassiz and Gegenbauer, who have denied any genetic connection between the leading animal types. He quotes Cope and Packard in support of his view on this point.

It is impossible to follow this subject here farther into detail, but it cannot be doubted that the facts above stated show that the laws of causation and development with reference to the introduction of animal and vegetable forms are now becoming better understood, and that the doctrine of gradual and spontaneous evolution may rapidly fade away, to be replaced by a theory which, if not absolutely perfect and exhaustive, will, at least, be in greater accord with the facts of nature as well as with the theistic beliefs of mankind.

I have looked at these matters solely on the side of Natural Science, and without reference to their possible bearing on Theology. On this, I think, no apprehension need be entertained. The mere metaphysical agnosticism of Herbert Spencer is likely to be as ephemeral as other forms of atheistic philosophy which have preceded it, and is already losing its hold, and the question of how species may have been introduced by the will of a creator, is one not likely to be soon, if ever, definitely settled by science, while in the Bible it is left in a form which does not commit us either to the extent of species or to any special doctrine with respect to the precise way in which it pleased God to make them. On this subject, I cannot do better than quote from a recent work of my own :† "When we look at the details of the narrative of creation we are struck with the manner in which the

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† Present Day Tracts of Religious Tract Society.