

existence of grass and fruit trees antecedent to the same, or even under the condition of the invisibility of the sun as a sun.

Genesis i. is therefore (if interpreted in a natural sense, and as intended to be a true description of the genesis of the earth and all that is thereon) not tenable.

It is inconceivable that such a description, intended to be a literally true description, could have been dictated by the Author of all truth to Moses in the mount.

I must now, in my utter weariness of the subject, refer you to my article in the *Guardian* for what I am convinced is an approximate solution of all difficulties; and the more so, the more I cogitate. But read carefully what I have said there and here. A *young child* I would teach Genesis as it stands in a natural sense. To an intelligent youth I should say: This is the tradition of an ancient vision, aided by God, for the purposes of teaching men, in the infancy of the world, that the God of the Hebrew fathers created the world, and all that therein is, in love and wisdom. The verses or visions are pictures of what God has done, not of the order, or the means by which He did it.

It is a Divine moral tale, not a scientific memoir.

#### PROFESSOR STOKES ON GENESIS. (2.)

##### II.

YOU wish me to make remarks on Dr. Pritchard's letter.

1. On the nebular hypothesis I think it more probable than not that the earth had cooled sufficiently for vegetation before the sun had condensed into a definite globe.

2. Vegetation demands light, but not necessarily *direct* sunshine. The coal flora shows large cryptogams, equisetæ, ferns, etc.; and many kinds of ferns do better in shady places than in direct sunshine.

3. In the conjecture I threw out, I supposed "face of the

waters" was not to be taken literally. The language is such as would lead an uneducated and utterly unscientific mind to form some sort of an idea of a state of chaos, even though it were far from coming up to the reality. Such a person would not take in the idea of a *congeries* of discrete, as yet unassociated, atoms. Prior to any association, the whole would naturally be in a state of darkness. The expressions in ver. 2 would naturally convey to the mind an idea of perfect dissolution, which would be sufficient for all practical purposes, though the pictures formed in the mind of the reader might be very different from the reality.

4. I do not know what the ideas of the ancients were about rain; but surely in common observation rain and cloud are connected, and in a mountainous country you constantly see mountain tops which have been ascended to above clouds.

5. I think the greater light might very well not have assumed its present definite form till after vegetation had appeared upon the earth; and the lesser might well be maintained along with the greater, even though it was collected into a definite orb long before. 6, 7 already referred to. 8, 9, I do not think so.

In the main I agree with Dr. Pritchard. The theological difficulty turns on the adoption of what is equivalent to the theory of verbal inspiration. Are we to suppose that it was intended that a miracle should be wrought in the nineteenth century for the conviction of gainsayers? If so, then we might expect to find complete accordance even in detail discerned, as the book of science was opened out. But if we suppose that the record in Genesis was meant for the people of the time, and designed to give them ideas correct from a theological, or rather religious, point of view, then it would be preposterous to demand scientific accuracy of detail. A general rough accordance is all that we ought to expect; and that I think we have. We are not however

even *obliged* to suppose that the account was communicated by revelation to Moses. Genesis i. to ii. 3 and ii. 4 to ii. 25 may have been two traditions of creation. There is nothing in the account we have of what was revealed to Moses on the mount that relates to creation, except the allusion in the fourth commandment; and that might have been an allusion to an existing tradition, which was adopted as substantially correct for the purpose intended. It is not, I think, safe to attempt to make a nineteenth century miracle out of Genesis i.

The expression, "the windows of heaven were opened," in Genesis vii. 2, may well have been a poetical mode of describing a tremendous rain. It cannot, I think, be taken to *prove* that the readers of the book supposed that there was a reservoir with physical holes, through which the waters poured down in rain.

Yours sincerely,

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#### PROFESSOR PRITCHARD'S REPLY.

##### II.

I HAVE given much thought to Prof. Stokes's remarks.

He gives a philosophical account of what he, in common with the best-instructed physicists of this day, would give: it is the one commonly accepted now by the very few men competent to give an opinion thereon; that is, on the genesis of the material worlds, considered as apart from their living occupants. Virtually, it amounts to this:

1. Light existed before the consolidation of the earth.
2. The earth, he thinks, may have been consolidated before the concentration of solar matter into a sun.
3. He implies, also, and truly, that the moon was consolidated before the earth.

Prof. Stokes then goes on to say that *he is in utter dis-*