

# THE WARFARE OF SCIENCE WITH THEOLOGY.

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## CHAPTER I.

### *FROM CREATION TO EVOLUTION.*

#### I. THE VISIBLE UNIVERSE.

AMONG those masses of cathedral sculpture which preserve so much of mediæval theology, one frequently recurring group is noteworthy for its presentment of a time-honoured doctrine regarding the origin of the universe.

The Almighty, in human form, sits benignly, making the sun, moon, and stars, and hanging them from the solid firmament which supports the "heaven above" and overarches the "earth beneath."

The furrows of thought on the Creator's brow show that in this work he is obliged to contrive; the knotted muscles upon his arms show that he is obliged to toil; naturally, then, the sculptors and painters of the mediæval and early modern period frequently represented him as the writers whose conceptions they embodied had done—as, on the seventh day, weary after thought and toil, enjoying well-earned repose and the plaudits of the hosts of heaven.

In these thought-fossils of the cathedrals, and in other revelations of the same idea through sculpture, painting, glass-staining, mosaic work, and engraving, during the Middle Ages and the two centuries following, culminated a belief which had been developed through thousands of years, and which has determined the world's thought until our own time.

Its beginnings lie far back in human history; we find

them among the early records of nearly all the great civilizations, and they hold a most prominent place in the various sacred books of the world. In nearly all of them is revealed the conception of a Creator of whom man is an imperfect image, and who literally and directly created the visible universe with his hands and fingers.

Among these theories, of especial interest to us are those which controlled theological thought in Chaldea. The Assyrian inscriptions which have been recently recovered and given to the English-speaking peoples by Layard, George Smith, Sayce, and others, show that in the ancient religions of Chaldea and Babylonia there was elaborated a narrative of the creation which, in its most important features, must have been the source of that in our own sacred books. It has now become perfectly clear that from the same sources which inspired the accounts of the creation of the universe among the Chaldeo-Babylonian, the Assyrian, the Phœnician, and other ancient civilizations came the ideas which hold so prominent a place in the sacred books of the Hebrews. In the two accounts imperfectly fused together in Genesis, and also in the account of which we have indications in the book of Job and in the Proverbs, there is presented, often with the greatest sublimity, the same early conception of the Creator and of the creation—the conception, so natural in the childhood of civilization, of a Creator who is an enlarged human being working literally with his own hands, and of a creation which is “the work of his fingers.” To supplement this view there was developed the belief in this Creator as one who, having

. . . “from his ample palm  
Launched forth the rolling planets into space,”

sits on high, enthroned “upon the circle of the heavens,” perpetually controlling and directing them.

From this idea of creation was evolved in time a somewhat nobler view. Ancient thinkers, and especially, as is now found, in Egypt, suggested that the main agency in creation was not the hands and fingers of the Creator, but his *voice*. Hence was mingled with the earlier, cruder belief regarding the origin of the earth and heavenly bodies by the Almighty the more impressive idea that “he spake

and they were made"—that they were brought into existence by his *word*.\*

Among the early fathers of the Church this general view of creation became fundamental; they impressed upon Christendom more and more strongly the belief that the universe was created in a perfectly literal sense by the hands or voice of God. Here and there sundry theologians of larger mind attempted to give a more spiritual view regarding some parts of the creative work, and of these were St. Gregory of Nyssa and St. Augustine. Ready as they were to accept the literal text of Scripture, they revolted against the conception of an actual creation of the universe by the hands and fingers of a Supreme Being, and in this they were followed by Bede and a few others; but the more material conceptions prevailed, and we find these taking shape not only in the sculptures and mosaics and stained glass of cathedrals, and in the illuminations of missals and psalters, but later, at the close of the Middle Ages, in the pictured Bibles and in general literature.

Into the Anglo-Saxon mind this ancient material conception of the creation was riveted by two poets whose works

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\* Among the many mediæval representations of the creation of the universe, I especially recall from personal observation those sculptured above the portals of the cathedrals of Freiburg and Upsala, the paintings on the walls of the Campo Santo at Pisa, and, most striking of all, the mosaics of the Cathedral of Monreale and those in the Cappella Palatina at Palermo. Among peculiarities showing the simplicity of the earlier conception the representation of the repose of the Almighty on the seventh day is very striking. He is shown as seated in almost the exact attitude of the "Weary Mercury" of classic sculpture—bent, and with a very marked expression of fatigue upon his countenance and in the whole disposition of his body.

The Monreale mosaics are pictured in the great work of Gravina, and the Pisa frescoes in Didron's *Iconographie*, Paris, 1843, p. 598. For an exact statement of the resemblances which have settled the question among the most eminent scholars in favour of the derivation of the Hebrew cosmogony from that of Assyria, see Jensen, *Die Kosmologie der Babylonier*, Strassburg, 1890, pp. 304, 306; also Franz Lukas, *Die Grundbegriffe in den Kosmographien der alten Völker*, Leipsic, 1893, pp. 35-46; also George Smith's *Chaldean Genesis*, especially the German translation with additions by Delitzsch, Leipsic, 1876, and Schrader, *Die Keilinschriften und das Alte Testament*, Giessen, 1883, pp. 1-54, etc. See also Renan, *Histoire du peuple d'Israel*, vol. i, chap. i, *L'antique influence babylonienne*. For Egyptian views regarding creation, and especially for the transition from the idea of creation by the hands and fingers of the Creator to creation by his *voice* and his "word," see Maspero and Sayce, *The Dawn of Civilization*, pp. 145-146.

appealed especially to the deeper religious feelings. In the seventh century Cædmon paraphrased the account given in Genesis, bringing out this material conception in the most literal form; and a thousand years later Milton developed out of the various statements in the Old Testament, mingled with a theology regarding "the creative Word" which had been drawn from the New, his description of the creation by the second person in the Trinity, than which nothing could be more literal and material:

"He took the golden compasses, prepared  
In God's eternal store, to circumscribe  
This universe and all created things.  
One foot he centred, and the other turned  
Round through the vast profundity obscure,  
And said, 'Thus far extend, thus far thy bounds:  
This be thy just circumference, O world!'" \*

So much for the orthodox view of the *manner* of creation.

The next point developed in this theologic evolution had reference to the *matter* of which the universe was made, and it was decided by an overwhelming majority that no material substance existed before the creation of the material universe—that "God created everything out of nothing." Some venturesome thinkers, basing their reasoning upon the first verses of Genesis, hinted at a different view—namely, that the mass, "without form and void," existed before the universe; but this doctrine was soon swept out of sight. The vast majority of the fathers were explicit on this point. Tertullian especially was very severe against those who took any other view than that generally accepted as orthodox: he declared that, if there had been any pre-existing matter out of which the world was formed, Scripture would have mentioned it; that by not mentioning it God has given us a clear proof that there was no such thing; and, after a manner not unknown in other theological controversies, he threatens Hermogenes, who takes the opposite view, with

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\* For Gregory of Nyssa, Augustine, and the general subject of the development of an evolution theory among the Greeks, see the excellent work by Dr. Osborn, *From the Greeks to Darwin*, pp. 33 and following; for Cædmon, see any edition—I have used Bouterwek's, Gütersloh, 1854; for Milton, see *Paradise Lost*, book vii, lines 225-231.

