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THE
CYCLOPÆDIA
OF
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EDITED BY
JOHN KITTO, D.D., F.S.A.

ASSISTED BY
Noted Biblical Writers, representing all the Great Evangelical Churches

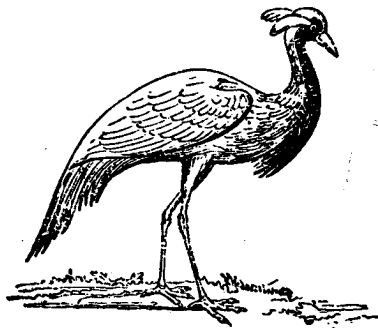
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IN TWO VOLUMES

VOLUME I.

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Where so much diversity of opinion reigns, it will be most safe to search for the true meaning by examining the internal evidence furnished by the texts in question, the two names occurring in no other instance. In Isaiah, allusion is made to the voice of both the species, which is described by the verb 'to chatter,' in accordance, or nearly so, with all the critical authorities that we have consulted. In Jeremiah, where both names occur in the same order, the birds are represented as observing the time of their coming.' Now, if the



237. [Numidian Crane: *Grus Virgo*.]

'crane' of Europe had been meant by either denomination, the clamorous habits of the species would not have been expressed as 'chattering;' and it is most probable that the striking characteristics of that bird, which are so elegantly and forcibly displayed in Hesiod and Aristophanes, would have supplied the lofty diction of prophetic inspiration with associations of a character still more exalted. 'Sus' or 'Sis' is the name of a fabulous long-legged bird in Arabian legends, but it also indicates the expressive sound of the swallow's voice; while 'agur' is transferred with slight alteration to the stork, in those northern tongues which have similarly altered the Chaldee version (כורכיא) *kurkeya*, into *kurg* and *curki* (see Nemnich, s. v. *Ardea*). The Teutonic *Aiber*, Dutch *Oyvaer*, Esthonian *Aigr* and *Aigro*, therefore, support the view that, Agur is a tribal appellation of one of the great wading birds; but neither the Hebrew text nor the Teutonic names point to the crane of Europe (*Ardea Grus*, Linn., *Grus Cinerea* of later ornithologists); since that species has a loud trumpet voice, and therefore does not 'chatter;' but especially, because in its migrations it crosses the Mediterranean into Africa, and does not appear in Palestine, unless by accident (driven thither possibly by a western storm of wind); and, when a troop of cranes alight under these circumstances, it is only for a moment; they do not give evidence of purposely assembling like the swallow. Thus the few characteristics indicated might seem to point out the stork, which does assemble in Syria in flocks, before its departure, and is not a clamorous bird, having little or no voice. But as the stork is clearly designated by a different appellation in the original, we must search for another species as the representative of *agur*; and we fortunately find one which completely answers to the conditions required; for, being neither a genuine crane, a stork, nor a heron, having a feeble voice, and striking but distinct manners; it is remarkable for beauty, numbers, residence, and periodical arrival and departure. The '*Ardea virgo*' of Linn. the '*Grus virgo*' of later writers,

and '*Anthropoides virgo*' of some, is the bird, we have every reason to conclude, intended by 'agur' though not coming from the north, but from Central Africa, down the Nile (the very circumstance which puzzled Hasselquist), and in the Spring arriving in Palestine, while troops of them proceed to Asia Minor, and some as far north as the Caspian. They are frequently found portrayed on Egyptian monuments, and the naturalist just quoted, who saw them on the Nile, afterwards shot one near Smyrna: they visit the swamp above that city, and the lake of Tiberias, and depart in the fall, but do not utter the clangor of the crane, nor adopt its flight in two columns, forming an acute angle, the better to cleave the air. This bird is not more than three feet in length; it is of a beautiful bluish grey, with the cheeks, throat, breast, and tips of the long hinder feathers and quills black, and a tuft of delicate white plumes behind each eye. It has a peculiar dancing walk, which gave rise to its French denomination of 'demoiselle.'—C. H. S.

CREATION. In the ideas implied by this term a subject of vast extent and most profound interest is suggested; at the same time, one in reference to which but little can be said to be so certainly known or distinctly understood, as to afford adequate satisfaction to that curiosity which is so naturally excited in the human mind with respect to it, and which has evinced itself in all ages by the discussions, whether of a theological or of a philosophical nature, which have so largely occupied the attention both of religious and scientific writers.

In the present article, on a point of so much importance in Biblical literature, we shall endeavour to give as comprehensive a sketch of existing views as our limits will permit; and to do this the more satisfactorily we must, in the first instance, observe the due distinction between the several branches of the inquiry, and the attainable sources of knowledge on the subject. These are, of course, comprised under the two main heads of *reason* and *revelation*. We shall, in the first instance, offer some elucidations of the views derived from each of these sources *separately*, and then advert to the degree in which they bear *upon each other*, and to the connection and degree of accordance or discordance between them, real or apparent: and though, in so doing, we must necessarily touch upon some points on which considerable and even violent controversy has been called forth, yet we shall endeavour most strictly to avoid all discussion in a polemical spirit, and to confine ourselves to the dispassionate statement of what appears to be the best established views of the actual facts.

In the first place, then, the doctrine of revelation on this point, in the most general view, is chiefly founded on the simple ascription of the original formation of all things to Divine power, and on the title of the 'Creator' applied to the Deity. This is the constant language of all parts of Scripture, both of the Old and New Testaments; and in the meaning of the term 'create' we must seek the origin of those views which constitute the theological and revealed belief respecting the mode in which the world had its beginning.

The meaning of this word has been commonly associated with the idea of 'making out of nothing.' But when we come to inquire more

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precisely into the subject, we can of course satisfy ourselves as to the meaning only from an examination of the original phrases.

Now, in the Hebrew Scriptures three distinct verbs are in different places employed with reference to the same divine act, viz. **בָּרָא** create, **פָּעַל** make, **יָצַר** form or fashion: now, though each of these has its shade of distinction, yet the best critics understand them as so nearly synonymous that, at least in regard to the idea of making out of nothing, little or no foundation for that doctrine can be obtained from the use of the first of these words. They are used indifferently and interchangeably in many passages; as, e. g. in Isa. xliii. 7, where they all three occur applied to the same divine act. The Septuagint renders **בָּרָא** indifferently by *ποιεῖν* and *κρίσειν*. But especially in the account of the Creation in Gen. i. the verbs are used irrespectively in verses 7, 16, 21, 25, &c.; and, comparing Gen. i. 27 and ii. 7, man is said to have been created, yet he is also said to have been formed out of the ground. Again, in the Decalogue (Exod. xx. 11), the verb is **פָּעַל**, made, not created. In Gen. i. the Septuagint has *ἐποίησεν* throughout.

On such a point much weight will be ascribed to the opinion of Dr. Pusey, professor of Hebrew at Oxford, who has distinctly stated his view that the word **בָּרָא** implies neither positively, on the one hand, a formation out of nothing, nor, on the other, positively a formation out of existing materials, but that it is absolutely indefinite and neutral as to either of these conditions (Buckland's *Bridgewater Treatise*, note. p. 22). Thus he observes that the original expression 'let there be light' (Gen. i. 3), by no means necessarily implies that light had never before existed (*ibid.* note, 26). Upon the whole, he considers the only difference between the three verbs to lie in the degree of force in the expression; **בָּרָא**, create, being simply the stronger and more emphatic word to express more forcibly the absolute power of the Creator.

In the New Testament we have a similar indifferently use of the words *κρίσειν* and *ποιεῖν* in a great number of passages. The former is applied to the origin of the world in Mark xiii. 19, and to the formation of man in 1 Cor. xi. 9, and in some other places; but most remarkably in Col. i. 16. The same word is also applied in a spiritual sense in Eph. ii. 10 and other passages, in which the figure clearly involves formation out of what existed before; as also in Eph. iv. 24, Col. iii. 10, &c. It manifestly implies previous materials in Heb. ix. 11, as in the Septuagint version of the corresponding passage in Lev. xvi. 16. But more particularly in Rom. i. 20, the expression *τὰ γὰρ ἄβρατα αὐτοῦ ἀπὸ κτίσεως κόσμου τοῖς ποιήμασι νοούμενα* places in synonym the substantives corresponding to the verbs 'create' and 'fashion' or 'form.' This appears to be nearly the whole substance of what we can collect from the Scriptures, whether Jewish or Christian, as to the force of the verbal expressions and the idea implied by the term 'Creation.'

If from the subject of the general idea of creation we turn to that of the particular mode in which the 'formation' of existing things (whether the crude material existed previously or not) is represented to have taken place, we find

more extensive and express declarations in various parts of the Bible. It is not our purpose to furnish a concordance of texts, nor to introduce quotations of all that bear upon the subject, any more than our readers probably would look for it. It will suffice to observe that we have many general statements of the kind, and one or two very circumstantial representations. Of the former kind we may remark that almost all refer to the attributes and perfections of the Deity evinced in the work of creation, rather than to any precise explanation of how it was accomplished. The sacred writers also refer largely to the Divine will and the announcement of that will by His word as the immediate agent, as in Ps xxxiii. 6, 9, and cxlviii. 5; Rev. iv. 11, and many other places; and this reference to the Divine word is considered by many to be in effect the same with the more direct ascription of the work of creation to the Divine λόγος in John i. 3; which again is explicitly referred to the Son of God in Eph. iii. 9, and Heb. i. 2, 3; and again, Col. i. 16. It would lead us too far from our immediate object here to discuss more minutely the precise doctrinal bearing of the passages last referred to, and others of similar import; and our readers will find full information on these topics under other more appropriate heads. We will merely observe further, that these general representations of the creation all agree in speaking of it in terms of the most unbounded extent and universality of operation: this is observable in the last cited texts, and not less pointedly in Acts xiv. 15, and xvii. 24; Rev. x. 6; besides many others; but it is to be observed, it is not expressed that this universal act took place at one and the same time, nor whether it was instantaneous or gradual.

We come next to those Scriptural representations of the Creation, which are more precise and circumstantial. Of these the earliest in order of time is that stated to have been announced by the Divine voice from Mount Sinai, in the delivery of the law to the Israelites (Exod. xx. 11), where the entire and complete work of Creation is described as carried on and ended in six days. The description pointedly applies to the whole universe; and the Great Work was succeeded by a seventh day, of rest or cessation, implying, that is, the final perfection of the process.

When the books of the Old Testament were afterwards written, the Mosaic history naturally opened with a general statement to the same effect. It is well known to be the opinion of some of the most learned critics, that the book of Genesis, in its existing form, is properly a compilation of more than one ancient document, portions of each being mixed in different parts of the narrative. Thus the short account of the Creation in Gen. ii. 4, is considered to have been the commencement of the most ancient record, while the more expanded and circumstantial account in Gen. i. and ii. 1-3, was prefixed from a later document [See Bauer's *Theology of the Old Test.* p. 11. Eng. Tr. 1838.] But it will not be material to our present purpose to follow this distinction. We are principally concerned with the terms of the description, from whatever source its materials may have been derived.

The points most important to be noticed are the following.—The first sentence is taken by

many to stand distinct from what follows, as a first general announcement, or title, as it were; then, after a break, the account of the six days' work is supposed to begin. The description in the second verse (commonly conveyed by the term Chaos) is supposed by some connected with the first verse; by others, with the subsequent. Either way it positively expresses a state of universal ruin, disorder, and darkness. Out of this chaos the divine word evokes light, and, by degrees, order and organization; but by several successive and beautifully appropriate stages, divided into periods called nights and days; in which first the grander distribution of the inert materials of the universe into their respective places occurs, and then, progressively, the stages of organized existence from the lower up to the higher forms: until at length the whole is crowned by the introduction of man, who is constituted lord of the inferior world, and the spirit of life breathed into him:—when the majestic scene closes with the final cessation put to the work in the Divine rest on the seventh day, and the pronouncing of a peculiar benediction and sanctification of it.

On the sublime and unapproachable magnificence of this description it is not our present purpose to dilate; but there is a peculiar character of unity of design and subordination and connection of parts observable throughout it, which, in any human composition, we should instantly refer to the most exalted poetical genius, and recognize as marking the most profound skill in the composition and invention of the narrative, the disposition, as it were, of the whole machinery of the great drama.

Very different is the view which some modern commentators have been induced to take of it. It will neither be necessary nor pleasing to enter into detailed descriptions of them. But the following very brief sketch of some of them is necessary:—Some do not make the separation of the first verse, before alluded to, but, taking the whole to refer to one single creative process, stretch that process out to a vast, and, in fact, unlimited length of time, by interpreting each of the six days (though most expressly described as alternations of day and night) as meaning periods of thousands or millions of years; and alleging, as their authority, that in certain parts of the prophetic writings, the term 'day' is used for an indefinitely long period, and that it is said with God 'a thousand years are as one day!' When, however, they come to the seventh day at the close (which is, nevertheless, obviously spoken of in the very same terms), they then go back to the ordinary sense of a natural day.

Others suppose the first verse, or the first two, to refer to an original formation of all things, the time, manner, and circumstances of which are left wholly undetermined. Then, after an indefinitely long interval, this original universe was totally overwhelmed and destroyed; and then, in six natural days, the whole existing world called into being in its place, in accordance with the literal terms of the remainder of the narrative.

A different class of interpreters contend that the whole account is to be taken together, as in the first of the instances just stated, but the days understood literally; the whole however is to be interpreted as referring to a more remote period

than is commonly imagined, and as not intended to describe the *existing* species of plants and animals, but various other species, now extinct, which have been, by subsequent convulsions of nature, destroyed, while others have been successively, by fresh acts of creation, introduced in their place.

We will allude only to one other interpretation, the most recent which has been proposed, and which possesses every claim to attention which can be commanded by piety, learning, and devotedness to the sole cause of truth on the part of its author, Dr. J. Pye Smith, whose volume on the *Relations of Scripture to Geology, &c.*, we earnestly recommend to the attentive perusal of all who wish to acquire a comprehensive knowledge of the whole subject, as well as to be enlightened by the philosophical views and scriptural eloquence of the venerable and excellent writer.

His interpretation is briefly of this kind: the separation of the first verse he adopts as above. This refers to the original universal creation: and in the vast undefined interval, an almost unlimited series of changes in the structure and products of the earth may have taken place. After this, at a comparatively recent epoch, a *small portion* of the earth's surface was brought into a state of disorder, ruin, and obscurity; out of which the creation of the existing species of things, with the recall of light, and the restored presence of the heavenly bodies, took place literally, according to the Mosaic narrative, in six natural days. All this is supported by profound critical distinctions as to the sense of the original words. The brevity of this sketch we trust will be productive of no misconception, as we hope all our readers will satisfy themselves out of the original work.

In this cursory review of different interpretations we have made a passing allusion to geology, and the changes which it indicates as having taken place at remote periods on the earth's surface. We shall presently recur particularly to this subject. But it will be evident to most of our readers that some consideration of these scientific conclusions has been the main motive which suggested the various interpretations, some few of which we have mentioned. Our present concern with them is, however, on purely critical and philological grounds. And in this point of view, with the utmost respect for the several authors, without going into any details of controversy, we would wish simply to put all such interpretations, on their own intrinsic merits, to the judgment of any perfectly unbiassed inquirer. Yet for ourselves (without wishing to press any decision), we must confess they all appear to suggest senses which are of a very different nature from any which the plain tenor of the narrative would seem almost unavoidably to convey. We cannot here go into details of verbal criticism: but we are fully disposed to grant all that may be urged as to the precise signification of some of the terms; which may doubtless, by long established custom and association, have been commonly received in senses which a more exact knowledge of the original language may not warrant. At the same time we do not think anything of this kind can materially affect the broad view of the subject. We are disposed to look at the narrative as a *whole*:—and even allowing the greatest latitude as to the precise shades of meaning in its particulars

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features, to ask whether the *general* impression of its design can be rationally conceived to fall in with these views of it? Whether, rather, any such signification imposed on it does not seem to do palpable violence to its integrity, its distinctness, its majestic sublimity, its special purport, bearing, and manifest object?

We will, however, add one general remark applicable to all such interpretations in a philological point of view. In attempting to ascertain the true sense of a passage in any ancient book, we ought surely to decide in our own minds distinctly *what* it is at which we aim, whether to find some sense, to our apprehensions consistent, and such as the terms of the passage in question *may be made to bear*,—or to seek, as well as we can, what meaning it was the probable *intention of the writer* to convey. These two considerations, it should be observed, though really very distinct, are too often confounded together; or rather, the latter is almost wholly lost sight of.

In the case before us, we cannot help thinking, there has been generally a great want of attention to this distinction. Some of the commentators indeed appear to allow that Moses himself may have individually intended to convey only that meaning which, they seem to confess, appears upon the face of his narrative, but at the same time they conceive there was a *hidden sense* really designed, accordant with the views they suggest, and which has not really been developed till the present day. The probability of such a doctrine in general it would be beyond our limits to discuss. But in reference to the immediate subject, we must confess, it appears to us yet more involved in complexity than the difficulties it is called in to solve.

Lastly, others have thought that the whole description must be taken literally as it stands; but yet, if found contradicted by facts, may, without violence to its obvious design and construction, be regarded as rather intended for a mythic poetical composition, or religious apologue, than for a matter-of-fact history.

To these points we shall recur; meanwhile, to follow the order of our discussion, we must here advert to another question.

The idea of 'creation,' as meaning absolutely 'making out of nothing,' or calling into existence that which did not exist before, in the strictest sense of the terms (as we have seen), is *not* a doctrine of *Scripture*, but it has been held by many on the grounds of *natural theology*, as enhancing the ideas we form of the divine power, and more especially since the contrary must imply the belief in the *eternity* and *self-existence* of *matter*. It has hence been a point largely discussed by those who have gone into the metaphysical arguments in support of the existence and attributes of the Deity. To maintain the eternity of matter is held to be the basis of materialism: and the sole self-existence of God has been upheld as essential to our idea of divinity, and the belief in a similar quality in matter strenuously objected to as either investing matter with the attributes of Deity, and thus involving us in Pantheism, or else derogatory from the divine perfections so entirely, as to leave us in a state of opinion differing little from atheism. Thus Dr. S. Clarke has argued at length against the self-existence of matter, on the ground that self-existence implies necessary existence; and

this again implies that it would be contradictory to suppose the world not to exist; which it does not, since we *can* conceive the possibility of its non-existence (see *Demonstration of the Being and Attrib. &c.*, prop. iii.). In general, we would observe that the abstract belief in a creation, as a calling into existence of the material world out of nothing, according to the definition of the schoolmen, 'Dicitur aliquid esse factum de nihil cum intelligimus esse quidem factum, sed non esse aliquid unde sit factum' (Anselm, *Monol.* c. 8), must be regarded as an opinion which rests wholly upon arguments of a metaphysical kind. It must, on the one hand, be distinguished clearly from the creation spoken of in the Bible, and, on the other, from the process by which the present order of physical existence was introduced, so far as it may be disclosed to us by the evidence of physical science. The metaphysical arguments will of course possess different degrees of weight to different minds: at all events they should be most carefully examined. And though Scripture and nature do not absolutely assert this view of the matter, yet they offer nothing at variance with it.

The *creation*, or *origin*, of the world, in a philosophical sense, is a subject which, as might be expected, has engaged the attention of philosophers of all classes and sects from the earliest times. To attempt to give any correct account of the innumerable theories and speculations which have been started on this subject would be beyond our design; but some few remarks by way of illustration may be desirable.

In general, we may observe that of these theories, many which have passed current as philosophical speculations have been framed *not on purely* philosophical grounds, but on a mixture of philosophical with legendary and fabulous systems among the heathen writers of antiquity;—and, among the moderns, with an attempt to combine the deductions of physical science with the real or supposed statements of revelation. All such speculations appear to us essentially faulty. In all such inquiries we should preserve a distinct idea of the ground on which we are proceeding. In the attempt to mix up considerations of so very different a nature in one view we shall pervert and injure both. Let the inductive conclusions stand on their own ground, and revelation on its proper evidence, then both will obtain their proper and distinct authority.

Those theories in earlier times, which were professedly based on purely philosophical grounds, were most frequently of an extremely hypothetical character. Such were the speculations of most of the ancient philosophical sects; they rather sought to make out some plausible system couched in the technical language of their schools, than fairly to trace what was really the order of nature, and follow by the humble but sure path of induction, the actual laws by which she is regulated, and which, when diligently studied, never fail to lead us on from one step of generalization to another, until we arrive at the surest conviction of that universal order and profoundly-regulated unity and harmony of physical causes, which form the irresistible evidence of the all-pervading influence of the one great moral cause of the universe. We will, however, just mention one or two illustrative instances:—

Among the ancient philosophers, Plato distinctly ascribed the formation of all things to a supreme being, but seems also to have held the independent existence of matter; that is, he maintained three principles—God, matter, idea: the idea being an incorporeal archetype existing in the Divine mind, according to which matter was moulded and fashioned (Plutarch, *De Placitis*, i. 3). This doctrine, indeed, seems to be nearly the same with that of Thales and Pythagoras, from whom it was probably borrowed. Cicero expressly tells us that 'Thales held water to be the principle of all things; and God, that mind which fashioned all things out of water' (*De Nat. Deor.* i.). Aristotle held the pre-existence of matter; and observes, 'It is the common opinion of naturalists that nothing can be made out of nothing; and that it is impossible that it should be otherwise' (*Phys.* i. 4. 8). And further: 'neither can everything be made out of everything, but out of some subject fitted thereto; as animals and plants out of their seed' (*l. c.* 9). Here, indeed, he seems to be approaching the argument of simple physical induction, the legitimate result of which ought to be to remind us of the proper boundaries of all physical argument, and to show that the question of the original constitution of matter is one which no such induction can ever solve. And though probably they did not view the subject in this philosophical light, yet some of the fathers of the Christian Church, in their discussions of these speculative questions, have expressed the truth in terms exactly harmonising with the most rigid modern philosophy. 'It is impossible,' says St. Chrysostom, 'for man's nature by curious inquiry to penetrate into the workmanship of God' (*In Gen. λογ. β'*): and Lactantius observes, 'His works are seen with the eyes, but how he made them, the mind itself cannot see' (§ 2). There are those who condemn all such speculations as evincing but the empty presumption of human reason: but they do not perceive that the real fault lies, not in the use of reason, but in the perversion of it; not in trusting to its guidance, but in refusing its cautions, and arrogantly imagining that we can penetrate regions where the only safe path of induction is manifestly closed to us.

In modern times there have not been wanting those who have pursued cosmogonical speculations on what they considered purely philosophical grounds: though to the adherents of strict inductive science their philosophical character will appear to stand on no better ground than the reveries of the ancients. For the sake of those readers who may feel interested in such theories, we may just name some of the most celebrated of these authors:—Buffon, in his *Histoire Naturelle*; Wolfe, in his *Cosmologia*; Holbach, in his *Système de la Nature* (incorrectly ascribed to Mirabaud or to Lagrange); and the disciples of Kant, as Hegel, Oken, and others, among whom the most prominent is J. Müller. As a specimen of the kind of speculation pursued, we may briefly state that his work, *Ueber die Entstehung der Welt aus Nichts*, is founded on the old maxim, 'ex nihilo nihil fit; from whence he deduces the existence of an original governing power possessing omnipotence and omniscience. But the production of a world could only take place in one of two ways, 'either in a pantheistical or a spiritual

mode; that is, the original power might create a world of which he, or an emanation from him, is the all-pervading soul, or might part with portions of his own intelligence, which might animate portions of the creation. Müller adopts the second of these, and contends that this distribution of the divine intelligence is what produces duration or time: the continued existence of time is the evidence of the continuance of divine power. This power (if we have the least idea of the author's meaning), by indefinite continuance alone becomes concentrated, as it were, in some kind of effect, which produces, or at least brings together, a sort of original matter or ether, which subsequently undergoes changes owing to three principal forces or forms of power—attraction, repulsion, and inertia; after which, rotation being communicated, worlds and systems may result. But as we cannot pretend to say that from any statements we have seen we can render the subject at all more intelligible, we must hope this specimen may suffice.

If we turn to the more strict and proper investigation of physical science, it will be important to inquire what amount of testimony with respect to the origin of the world they may be able to supply.

The science of *astronomy* has sometimes been appealed to as having reference to the probable origin and antiquity of the solar system; but on a closer examination the degree of evidence which it furnishes will be found little more than conjectural.

The most recent and complete investigations of the theory of gravitation have totally excluded all idea of the action of adventitious causes in sustaining or disturbing the system. Its apparent irregularities have been all analyzed and reduced to calculation, to system, and order, and shown to be, in fact, but portions of the exact regularity by which the whole fabric is sustained, and which recur in a perfectly determinate cycle through determinate periods, though some of them are of immense length.

All this does not, however, prove that the universe has existed through those immensely long periods: astronomical science does not show us any commencement; but there is no evidence whatever at variance with it.

Observations on the motions of Encke's comet have disclosed the *high probability* of the existence of a certain extremely rare medium through the celestial space, which offers a certain resistance to that small comet, itself composed of extremely rarified matter. This medium, or ether, must therefore oppose some resistance, however inexpressibly small, to the solid planets; and the result must be, in an inconceivably long period of time, that they will approach, and finally fall into, the sun.

Astronomy, then, may point to the *termination* of the present order of things. It has been argued, as a sort of analogous presumption, that that which will have an end had also a beginning; but this, considered in the light of evidence of creation, is surely far too slight and inconclusive to be of much value. Another argument has been sometimes dwelt on to which we must refer rather more particularly. This is what is termed 'the Nebular Hypothesis,' which may be thus very briefly explained: La Place suggested it (purely

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as a hypothesis), which might give a plausible representation from analogy of the origin of the motions of the solar system. In all parts of the heavens powerful telescopes show us star-like objects which are not, like the other stars, brilliant luminous points, but extended bodies of comparatively little lustre. These are called *nebulae*, and manifestly appear to be in various stages of condensation, from great diffuseness up to actual stars, and many of them having within them points of greater brightness. La Place perceived an analogy between these and the solar system: he conceived that our whole system was once in the state of a nebula; that it has undergone gradual condensation, the sun being the central star; and that in this process each of the planets also formed a distinct centre of condensation, while in and by the process their respective motions were communicated to them, supposing the whole mass to have had originally impressed upon it a general rotatory motion, without which, and the centrifugal force resulting, all its particles must at once have been attracted together into one central mass. Thus other planetary masses would be found revolving round that centre at different distances. As the cooling and consequent condensation advanced, similar effects on a smaller scale would take place in each of those planetary masses, until they formed solid planets accompanied by rings or satellites. The resulting motions would be orbits not much differing from circles, and in planes not greatly inclined to each other, which accords generally well enough with the actual constitution of the solar system.

All this was (as we have said) thrown out merely as a mechanical hypothesis: it does not (as has been sometimes represented) account for the creation of the solar system; but merely shows how, on mechanical suppositions, we may explain its possible formation, in conformity with more general pre-existent laws. So far then as the evidence of Creation is concerned, it amounts to this, that the same evidence which we have of infinite power and wisdom in the actual adjustment of the existing system, by certain fixed laws of inimitable unity and simplicity, is by probability carried a step further back into past time; and the sufficiency of the same unvarying principles not only to the preservation but to the original arrangement of the system, may yet more widely extend and enlarge our notions of the same sublime inferences, which the contemplation of the system, in its existing relations, is so transcendently calculated to reach.

While speaking of astronomical evidence we must not omit to notice an idea, which often prevails, of some connection between astronomical epochs and events on our globe; or, at least, a disposition to attach importance to coincidences of this kind. Thus some have dwelt upon the circumstance that by calculation of the motion of apsides of the earth's orbit, La Place found that the major axis of the orbit coincided with the line of the equinoxes in the year 4004 B.C. [*Mec. Cel.* iii. 113], which, according to Archbishop Usher's system, is the date assigned to the Mosaic Creation. But it is difficult to see any physical reason why the globe should be more likely to be brought into its present state, or man placed upon it, under that particular combination of circumstances rather than any other.

There is, however, another branch of science from which information of a more positive kind may be extracted.

In referring to the evidence which **GEOLOGY** may give on the subject of the origin of the world we must premise, 1st. That the object of this science is not that of attempting any such discovery: the testimony which it may afford is but incidental. 2nd. The science itself is but of very modern origin, and its researches have as yet been carried but a little way, compared with what we must reasonably expect they will be: yet to that small extent its foundations have been laid in absolutely determined facts, and general results, which are real, settled, inductive truths, which no subsequent investigations can overthrow; which, in fact, can only be called in question on grounds which, if true, must overthrow not only geology, but all inductive science whatever, that is, the whole extent of human knowledge, and render our reasoning faculties useless, and all philosophy a mere illusion. 3rd. The evidence to which alone we can look on such a question as the present must be restricted to those portions of the subject which are of this strictly inductive character, and we must not mix up with them those conjectural hypotheses (however just and valuable for their proper purposes) in which geologists of all schools occasionally indulge.

In very briefly stating the general results of this evidence, which, little as it is, is yet undeniably certain, we shall, of course, not attempt any thing like geological *discussion*, or elementary explanation: we shall presume that the reader is either moderately acquainted with the elements of the science, or at least can have recourse to the works of the most eminent geologists, in which he will find ample proof of the assertions we bring forward, which in our narrow limits, of course, pretend to be no more than a recapitulation or summary of the evidence. For our facts then we simply refer the reader to Mr. Lyell's *Principles of Geology*, 4 vols.; his *Elements of Geology*, 1 vol.; Professor Phillip's *Treatise on Geology* (extracted from the *Encyclopædia Britannica*); Sir H. De la Beche's *Geological Manual*; Dr. Buckland's *Bridgewater Treatise*; and, for more general discussion, to Dr. J. Pye Smith's work before named, and to Professor Powell's *Connexion of Natural and Divine Truth*.

The pursuit of geological inquiry discloses the evidence and monuments of successive changes which have occurred in the state of the earth's surface (including under that term the solid portion extending to some depth below). In the attempt to trace these to their causes, sound induction recognises the one grand principle of referring to those which are both true and sufficient to explain the phenomena. We cannot find true causes except in such as are really proved to exist, and are found by experience to be in operation. The action of the waters on the land (whether the continual action of the rivers and the ocean, or the occasional force of inundations and torrents), the subterranean force of earthquakes, and the external operations of volcanoes; the contractions and expansions which must accompany changes in the temperature of any considerable thickness of the earth's crust; the fractures, flexures, and varieties of form which must arise from subterranean upheaving forces;—these and the like

are the real causes to which alone the sound geologist refers.

The accumulation of soil at the bottom of the waters, the imbedding of animal and vegetable remains in those depositions, the elevations of portions of the land out of the sea, are operations really and continually going on. When therefore we find fossil remains of organized beings imbedded in rocks, bearing also marks of a similar mode of deposition, we refer to such operations as those just mentioned as true causes to explain the phenomena: and numerous series and successions of such depositions, containing the remains of species now extinct, and successively, in the order of deposition, containing fewer of recent and more of extinct kinds, even to whole general classes and orders of being, call for the like reference to the continued action of similar causes through periods of countless duration.

Numerous large districts of the earth contain immense deposits of marine shells, which must therefore once have formed the bed of the ocean above which they are now elevated; and as they exhibit an unbroken level, we infer that they were gradually elevated without disturbance by similar slowly-acting subterranean causes, such as have been shown to produce elevating forces now gradually raising parts of existing continents.

Again; in other districts we trace the marks of sudden and violent local inundations at remote epochs: precisely such inundations have been known to be produced by submarine volcanic actions. Such effects may clearly be supposed to have taken place upon a larger scale where the phenomena indicate it, but we are still not departing from just analogies.

All the changes of which we have evidence in past epochs have been manifestly *local*; just as the operation of existing causes is confined to a series of the like partial and local alterations. Thus no sound inductive geologist at the present day can admit anything like a universal simultaneous formation, or sudden action, applying at once to the entire surface of the present dry land. One small portion after another has been successively deposited, elevated, peopled with animal and vegetable life, again in the course of profoundly-adjusted changes to be obliterated and overwhelmed, while another has been in progressive advance.

Just and sober inductive science, applied to the examination of the actual structure of the earth's crust, enables us with satisfaction and certainty to trace the changes which have taken place on the surface of a globe possessing the same general nature as the existing earth, and in the structure and habits of organized beings *analogous* to those now inhabiting the world. It investigates the alterations which have been effected by physical agents resembling those now in operation, and in accordance with general laws the same as those now recognised in the economy of nature. But it does not and cannot rise to the disclosure of what might have occurred under a different state of things, or owing to the action of causes of a different order from those now discovered by physical research. It cannot show a *chaos*, or trace the evolution of a world out of it. It cannot reason upon a supposed state of universal confusion and ruin, and the immediate re-creation of it into order and arrangement.

It can investigate the changes of things, but not their origin. In a word, sound *geology* will never aspire to the character of *cosmogony*. Yet geology is peculiarly distinguished from other branches of physical science, in this, that, while they teach us only the *existing* order of nature, it carries us back in time, and shows a period when the present races of organized beings did not exist, and by consequence establishes the *fact of their having in some way received a commencement of being*, and in truth the occurrence of *many such events*; and these not brought about at any one marked period, or extending to all animated nature at once, but by the slow and gradual introduction of each new species while yet the older partially remained; and each in turn thus progressively yielding its place to be filled up with fresh forms of organization. All that geology establishes in respect to organized life is the *fact* of the gradual origination of new species, but by no means the *particular method or process* by which it was brought about.

It is true there have not been wanting theories to explain these processes on supposed natural principles: yet these have not been altogether satisfactory or free from material objections. Physical research, indeed, in its nature, cannot bring us to any distinct conception of what we term an act of creation. If we consider the simple case of the introduction of a single species, or even an individual of a new species, there is an obvious limit imposed on our speculations. On the other hand, it is certainly quite open to the physiological inquirer to trace, as closely as he can, the secondary means, if any, as far as the nature of the case admits, by which it is conceivable that such changes may have been brought about or modified. Such inquiries may produce no satisfactory results, but certainly it is the *only legitimate channel* open to the inductive inquirer, to examine carefully all the possible effects which different combinations of natural conditions, as temperature, domestication, crossing of breeds, and the like, may produce. Theories, indeed, of this kind have been proposed and carried out by some to a most singular and preposterous extent, and a series of transmutations of species imagined which seem more like the hallucinations of insanity than the sober deductions of science. Yet the broad question respecting the immutability of species, and the abstract possibility of a transition from one into another, of the modifications of intermediate races being perpetuated, of new species being thus eventually introduced, have fairly formed subjects of debate among physiologists. At all events, if natural science ever should be able to conduct us to any satisfactory knowledge on such a subject, it can only be by some such route as this. But in comparing what may have occurred in remote epochs with the analogous facts of modern observation on the modifications of species, there is one point most carefully to be remembered—the *limited time* during which existing operations have been contemplated—from which it would be unsafe to argue what may have taken place in the vast and almost unlimited periods of past duration.

In those rocks, of whatever date, which are of igneous origin, or show marks of having undergone fusion, if organic remains ever existed, it is clear they must have been destroyed, or

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that we can argue nothing from their non-appearance.

With reference to the present question, it will be readily apparent that our knowledge of the subject can go no higher than the evidence of fossil remains carries us.

In the earliest rock in which any organic remains have *yet been found*, these remains are not those of *plants*, out of *animals*, and these not absolutely of the *lowest* kind; and from this first *observed* origin of organic life there is no break in the vast chain of organic development till we reach the existing order of things—no one geological period, long or short—no one series of stratified rocks everywhere devoid of traces of life: the world, once inhabited, has apparently never, for any ascertainable period, been totally despoiled of its living wonders; but there have been many changes in individual forms, great alterations in generic assemblages, entire revolutions in the relative number and development of the several classes. The systems of life have been varied from time to time, to suit the altered condition of the globe, but never extinguished.

The proportionate *number* of species has gone on increasing in the successive generations up to the multitudes of existing species. The change in organic *structure* also has been in some degree proportioned to the time elapsed; but we cannot lay down any distinct principle as to the law by which its progression, its greater or less complexity or perfection in the scale of existence, can be decided; though *generally* we may say that the higher forms of life are not found till we come to the more recent strata.

Throughout the whole we trace one unbroken continuity of plan and design: different races of animals and plants have successively arisen as others disappeared, the disappearance of the one and the introduction of the other being each coincident with changes in the state of the globe.

The existing forms of life *resemble* those of times gone by, as the general aspect of the physical conditions of the world has always been analogous; and they *differ* from them as the co-relations of life and physical conditions are strict and necessary: so that all the variations of these conditions are represented in the phases of organic structure, while all their general agreements are also represented by the conformity of the great principles of structure in the creatures of every geological age, and the often-repeated analogies and parallelisms of series of forms between different geological periods, which we find as a law of nature, when comparing the most distant regions with each other. We are not then in a *different* system of nature, properly so called, from those which have been created and have been suffered to pass away before the origin of the human race; but in an *advanced part* of the *same system*, whose law of progression is fixed, though from time to time the signification of the term varies. The full and complete system of organic life now on the globe includes all the effects of sea and land, warmth and cold, divided regions, and all other things which are the diversifying causes of nature; and it is no wonder if, before the present land was raised from the deep, and the present distinction of natural regions was produced, there was not the same ex-

treme variety of natural productions which we now witness, and which is not without its end in rendering the globe a more fitting residence for intellectual beings.

Looking to the very latest periods to which Geology refers, we find detached portions of the surface composed of beds containing remains of species nearly the same as those now existing; and every indication presented by the nature, form, structure and obvious mode of formation, deposition, and elevation of these beds, is precisely similar to what is now found actually going on, and especially to the results of exactly similar modes of action which we trace in operations which have gone on within the period of the existing order of things. The imbedding of existing races of animals and plants in ancient peat bogs, in dried-up lakes, in new-formed deltas and shoals, and the destruction of other portions of the actual surface and its productions, by the action of the sea, landslips, and submergencies; as well as, above all, the exact identity of the action of modern earthquakes and volcanoes with those of old formations—all attest the unbroken uniformity of the chain of causation which unites the present state of things with all those varying conditions which we trace in earlier epochs, and which have only appeared to some to present so much more strongly-marked vicissitudes, because we are apt to crowd those events together in the perspective, and measure them too much according to our narrow ideas of duration. Thus, whether we look at these changes in time or in space, we find in the one no definite assignable period at which we can fix any one grand revolution or distinct era—no one portion of the earth's surface which we can say was all produced, with its organized inhabitants, at one time. All the epochs of change were gradual; the different orders of things passed by insensible gradations from one into another; all parts of the globe were brought into their present state by small local instalments.

In the tertiary strata (and to some extent in the older also) it must be borne in mind that the precise line of demarcation is by no means so absolute as is often imagined. The broad classification into different periods, according as a majority or a minority of existing species may appear in the several beds, is, in a great degree, conventional: *e. g.*, we cannot positively fix on any one epoch when the miocene period ended and the pleiocene began; and as those changes or modes of physical action which produced the tertiary beds were manifestly of exactly the same nature as those now going on upon the earth's surface, and as those changes were at least the accompanying conditions of the extinction of some species and the introduction or creation of others, so we can by no means infer that we have now arrived at a stationary or permanent condition, whether of unorganized or of organized existence.

The more the details of the *latest* geological phenomena are studied, the less shall we be able to imagine that there has been, at any comparatively recent period, a *clearly defined epoch* at which what we call the present order of things was completely and at once established, and a *cessation of all change* has occurred; or that further examples of creative power may not again take place by the same slow and gradual process

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by which they probably were carried on in past eras. The more the examination of the most superficial parts of the earth's surface is extended, the more evidence is accumulated of partial and local changes exactly similar to those which distinguish the tertiary functions, going on uninterruptedly up to the present time; and it is clearly contradictory to all principles of inductive analogy to assert that in the progress of these changes new modifications of local temperature, moisture, and other physical conditions, will not occur, and that their occurrence will not be accompanied by the extinction of races of beings to which the localities will then be unsuited, and that fresh instances of providential adaptation, in the creation of new species, fitted to supply their places, will not be displayed. With regard to the most material point, *the origin of the human race*, the evidence is *chiefly negative*. It is *positive* only thus far: that in the earlier formation the physical conditions of the globe, and the nature of the animals which did exist on it, concur in showing that it would have been impossible for the human race to have been sustained in life or well-being. In the latter stages of things there is no such reason why man might not have existed. But the fact is, no human remains have been found. In the tertiary strata the nearest approach has been the distinct discovery of remains of the monkey tribe. It is clearly impossible, then, on geological grounds, to affirm that human remains may not be discovered in the latest tertiary beds, or to place any such positive limit of antiquity to the possible existence of the human species. It can only be asserted, *at present*, that, *as far as research has yet gone* (1843), *it has detected no human remains older than those deposits which are probably within the period of history.*

As bearing, then, on the subject of *creation*, or the origin of life and organized structures, the whole evidence which geology furnishes is certainly irreconcilable with the idea of *one simultaneous general development of organized existence*. It points, indeed, to a *commencement of organized life*; but shows that as successive forms and species of organization from time to time disappeared, *new forms and new species were produced* to supply their places; that these changes corresponded to others in the physical conditions of the globe; but that none of them were at once universal in extent and simultaneous in time; lastly, that the human race (*probably*) did not come into existence till the period to which the present state of things belongs.

In offering this imperfect summary of the general results derivable from *geology* which bear upon the subject of *creation*, we conceive enough may have been stated to enable the discerning reader at once to perceive the nature and extent of the discrepancy which exists between the changes, thus incontestably disclosed to us by the existing monuments of past ages of terrestrial existence, and the entire character and scope of the descriptive narrative of the Creation in the Hebrew Scriptures. We referred to certain interpretations of that narrative which have, in truth, been framed expressly with the view of attempting to reconcile the contradiction. After all we have before said, we shall not think it necessary here to press the matter much further on the notice of our

readers: they have before them the materials for forming their own judgment. We will merely say for our own parts that we fail to perceive how those interpretations can be supported on any rational basis so as really to explain the discrepancy, or effectually to defend the cause to whose aid they are summoned, since the main points of the discrepancy still remain untouched, viz., that there are no traces of any such catastrophe as must be supposed, even over a limited portion of the earth's surface, subsequent to the latest tertiary formation; and any of the other interpretations are absolutely contradicted by the whole tenor of the facts in reference to the suddenness and universality implied in the description, if natural days are maintained, and in long periods the total want of correspondence between those periods and any order of succession which can be made out from geological evidence.

With regard to the nature and extent of the discrepancy thus disclosed, we would observe, that it is not a case merely involving the question of the literal acceptation of a word or a phrase—it is *not* a parallel case (*e. g.*) with that of the incidental scriptural expressions, implying, in their letter, the motion of the sun, or the existence of a solid firmament—nor is the difficulty of the same nature with any sceptical objections to a supernatural narration: but it is the contradiction of existing monuments of past events with the *obvious* sense of what is recorded as a part of Divine revelation, in the form of a circumstantial narrative of the same events. And the discrepancy is not one with any theory, or partial discovery of science, which is not yet thoroughly made out, and which future investigations may modify or set aside; but with broad primary facts which involve nothing hypothetical, and which are in reality identified with the first principles of all inductive truth. It is also a circumstance which, taken any way, involves a train of consequences. It is not an isolated difficulty like that attaching to some single detached point, which we can pass over and not allow to weigh against the evidence preponderating on the other side; but it essentially involves a broad principle and must affect, in its consequences, the entire view we take of the authority and application of the Old Testament.

That the existence of a discrepancy or difficulty of this kind, especially at the first announcement of those discoveries which disclosed it, should have been viewed by many with astonishment and alarm, is no more than might have been expected. That in the first instance the whole weight of censure should have been directed against the science of geology, is what numerous and somewhat parallel cases in former times would have led us to anticipate. It would be improper in this place to advert even remotely to topics of dispute or irritation. We shall merely observe that, at the present day, a happier spirit seems beginning to prevail. There are few now who venture upon open expressions of hostility; and this is no doubt from the simple cause that earnest attention and diligent examination have been called forth: the subject is beginning to be generally understood; misconception and acrimony, alarm and suspicion, have been gradually set to rest; and those who feel most forcibly the amount and nature of the contradiction are more

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ready to confess the unsatisfactory character of those solutions of it to which we have adverted, and which rather gloss over and elude the real difficulty than fairly meet it. The main source of objection and offence has doubtless been the prevalence of certain views of the tenor and design of the Old Testament, which have by long custom passed current, among certain classes of Christians more especially, and in virtue of which the particular points involved in the narrative of the creation have come to bear a meaning and application connected directly with the existing institutions of religion. On the other hand, a more careful view of the actual design of the Hebrew Scriptures may do much towards removing this source of embarrassment.

In speaking of the Scripture narrative we have already remarked its striking characteristics as a *composition*—this of course applies in detail to the narrative in Genesis; but the brief statement in the Decalogue preserves also, as far as it goes, the same features. No reader of the Scriptures, especially of the Old Testament, can be otherwise than aware of the entire system which pervades all its representations, more or less, of *adaptation* in the manner of expression, form of imagery, and the like, to the apprehensions, the prejudices, and previous belief of the Jewish people; nay, the whole dispensation, in all its parts and institutions, is but one grand exemplification of the same thing. And this character in it we find expressly recognised and dwelt upon by our Lord and his apostles, in addressing that people, as the very ground of argument for introducing to those who were then living under the law a better and more spiritual religion: 'Moses, because of the hardness of your hearts,' gave you this precept (Matt. xix. 8); 'The law was a schoolmaster to bring them to Christ' (Gal. iii. 24)—a scheme of instruction and education (as it were) suited to their capacities and accommodated to their apprehensions. And not to dwell on instances which can only be accounted for as *adaptations* of this kind, such as the various sanguinary enactments, the visitation of sin on the posterity of the offender, the toleration of polygamy, the extreme facility of divorce, and the like, we cannot but recognise a similar object, as well in the general anthropopathism of the Old Testament, as in more special instances of many parts of those compositions in which poetic imagery, parable, and apologue were employed; and it is therefore nothing at variance with the nature or design of that revelation, but rather eminently conformable to it, to suppose that in other instances similar forms of narrative may have been adopted in like manner as the vehicles of religious instruction: still less to admit that they may have long been mistaken for historical matter-of-fact statements.

In the present instance the adaptation to the people of Israel was manifestly of the greatest importance, in order to secure their attention to points of vital moment in connection with the worship of the one true God, and their renunciation of idolatrous superstition. With this end, the first great truth with which they were to be impressed was the unity, omnipotence, and beneficence of the Creator: but these great doctrines were not put before them as abstract philosophical propositions, which their narrow and uncultivated minds would have been wholly incapable of

comprehending: they were therefore embodied and illustrated in a narrative, proceeding step by step, in a minute detail, to assert, in each individual instance, the power and goodness which they were thus led to recognise in every familiar detail of the natural world, and which could thus alone be effectually impressed upon their minds.

Another very material object was to remind them, in like manner, that those very beings, the animals which formed the objects of the idolatry of the Egyptians, to which they were so prone, were in truth but the creatures of the true God: hence the importance of dwelling, with minute particularity, on their creation and subordination to man; as well as the express prohibition of worshipping even the images of them, or so much as making such images. In all this we cannot but trace the same wise system of exact accommodation to the peculiar capacity and condition of this people, so little advanced at that time in moral or intellectual cultivation, and even exhibiting at all times a considerable national and constitutional incapacity for higher views, as the tenor of their after-history abundantly testifies. To this 'hard-hearted and stiff-necked generation,' then, so necessary was the utmost condescension and adaptation of all institutions (especially of a religious nature), and of the language and illustrations in which the communication of religious truths and precepts was to be made, that we find a reference to this principle perpetually pressed upon us to interpret much which otherwise seems singular in their sacred books, and which, unless so considered, is almost inevitably liable to be greatly misunderstood; and which from want of attention to this distinction has been, and continually is, misapplied, and even made a ground of sceptical objection.

These remarks refer yet more directly to what doubtless was the third and chief object in this representation of the creation—the institution of the Sabbath. This remarkable observance—the peculiar badge of the chosen people, to distinguish them from all other nations (Exod. xxxi. 13; Ezek. xx. 12)—was appointed them before the delivery of the rest of the law (Exod. xvi. 25); and as the work of creation, with reference to the different classes of beings, was associated in their minds with each of the six days, so the Seventh was identified, in the order of the narrative, with the entire completion of the work, the Divine rest and cessation from it, and the solemn sanctification of it pronounced, to consist in a precise abstinence from any kind of labour by themselves, their household, and even cattle. They were thus led to adhere to this duty by reflections connected with the highest truths impressed under the most awful sanctions; and the wisdom of the injunction, not less than the means thus taken to promote and secure its fulfilment, cannot but the more fully appear the more we examine the character and genius of this singular people, for whom it was ordained, and to whose peculiar condition it was in every way so remarkably adapted.

The narrative, then, of six periods of creation, followed by a seventh similar period of rest and blessing, was clearly designed, by adaptation to their conceptions, to enforce upon the Israelites the institution of the Sabbath: and in whatever way its details may be interpreted, it clearly can-

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not be regarded as an *historical* statement of a *primeval* institution of a sabbath: a supposition which is, indeed, on other grounds, sufficiently improbable, though often adopted. But on this subject we refer the reader to our article 'SABBATH.'

If, then, we would avoid the alternative (otherwise inevitable) of being compelled to admit what must amount to impugning the truth of these portions, at least, of the Old Testament, we surely are bound to give fair consideration to the only suggestion which can set us entirely free from all the difficulties arising from the geological contradiction which does and must exist against any conceivable interpretation which retains the assertion of the *historical* character of the details of the narrative, as referring to the distinct transactions of each of the seven periods.

The one grand fact, couched in the general assertion that all things were created by the sole power of one Supreme Being, is the whole of the representation to which an historical character can be assigned. As to the particular form in which the descriptive narrative is conveyed, we merely affirm that it *cannot* be *history*—it may be *poetry*.

But there is one consideration further, to which we must advert in connection with this topic, viz. that in the repetition which Moses gives of the Decalogue (Deut. v. 14, 15), the latter part of the fourth commandment relative to the Creation is omitted, and a different reason for the observance of the sabbath inserted. This has led some commentators to suppose that in *neither* case is that latter clause to be considered as having really formed a portion of the commandment as delivered from Mount Sinai; but that it was in both cases added as a sort of comment by Moses himself. This, if it be so, will manifestly on reflection be seen to remove some portion of the difficulty of conceiving the *poetical* nature of the description. The Divine command may have been given *simply* to the Israelites; and Moses may have been authorized to recommend and impress it further by the addition of such topics as would best coincide with the preconceptions of popular belief, where it was not at variance with any real truth of religion.

In regard both to this and many other difficulties of the Old Testament, there has been too great a proneness to overlook the consideration of its original exclusive design of adaptation to the purposes of a limited dispensation addressed to one people only. When we bear this more distinctly in mind, many of those difficulties are in a very great degree removed. And this is surely the true view to be taken of it by *Gentile* Christians, to whom it is *only* a guide and instructor *second* and *subordinate* to the *New Testament*—a dead letter without it; but 'able to make us wise unto salvation "ONLY" through faith which is in Christ Jesus' (2 Tim. iii. 15).

Another objection of a very different kind has been started with reference to this subject, which it certainly would not have occurred to us to notice, had it not really been entertained as a serious difficulty by many; and so much so as to have called forth a printed discourse from a distinguished person as Dr. Buckland—the alleged objection, that the existence of *death* in the animal world (of which certainly the whole

series of organic remains furnishes uninterrupted evidence through all epochs) is at variance with the Scripture doctrine that death was first introduced as the penalty attached to sin in the instance of Adam's transgression. We can only say that to us it was a new idea that the inferior animals were in any way involved in the consequences of man's obedience or disobedience. To those who really feel any degree of difficulty on the subject we can only recommend a perusal of what Dr. Pye Smith has remarked upon it in his work before referred to (p. 286, &c.).

We must also add a brief remark on one further point which has sometimes formed a topic of controversy, closely connected with the subject of *Creation*—the origin of the human race from a single primeval pair.

Viewed as a question of natural history simply, all the different races of men are but *varieties* of one *species*; since the physiological distinction of a *species* is that any of its *varieties* are capable of producing a *mixed* offspring which shall be itself *prolific*; with the mixture of *species* it is not so. A *species*, therefore, however widely spread, and however distinct its subordinate varieties, may *in theory* have originated from a single pair. Physiology, then, thus far shows nothing at variance with the belief that the human species *did* thus derive its origin.

There may, however, obviously be questions of another kind, such as the existence of local obstacles, the probable rate of increase, and the like, which must influence our belief as to the *fact*. These apparent difficulties, such as the peopling of America, and of the multitudes of islands especially in the midst of the Pacific Ocean, together with the length of time necessary for the spread and growth of such immense populations as even at very remote epochs must have inhabited many large districts, where we trace remains of high civilization of unknown antiquity, have induced many to adopt the idea that there must have been original creations of man in many different parts of the globe; and this, too, subsequently to the Mosaic deluge, if we are to understand it in a strictly universal sense [DELUGE].

It seems also incumbent on those who adhere so strictly to the letter of the Scriptural narrative to bear in mind that the existence of other races besides the family of Adam seems to be almost unavoidably implied in several particulars of that narrative. Thus in Gen. iv. 14, Cain complains that when he wanders forth on the earth, 'every one that findeth me shall slay me,' and accordingly a mark is set upon him, 'lest any finding him should kill him.' Again (ver. 17), Cain going forth with his wife and child only, 'built a city,' which at least must imply some collected number of persons. When Cain's wife is mentioned (ver. 17), it is without the slightest allusion to her origin; and the extraordinary nature of the vulgar belief on that subject ought certainly (on all grounds) to be fairly balanced along with the alleged religious necessity for imagining only one descent for the human race. To these may be added the consideration of the very obscure passage (Gen. vi. 2, 4) respecting the progeny of 'the sons of God' and 'the daughters of men.'

These and other topics, though we can do no more than thus briefly allude to them, must

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nevertheless be carefully taken into consideration in whatever opinion we form on the subject. It is doubtless a question of great difficulty, in whatever light we view it; but more particularly so from the connection which it holds in the minds of many with the doctrine of original sin as connected with the fall of Adam. But for a discussion of so very wide and important a point we must refer the reader to other heads.—B. P.

CRESCENS (*Κρησκης*), an assistant of St. Paul's, and generally supposed to have been one of the seventy disciples of Christ. It is alleged in the *Apostolical Constitutions* (vii. 46), and by the fathers of the church, that he preached the Gospel in Galatia, a fact probably deduced conjecturally from the only text (2 Tim. iv. 10) in which his name occurs. There is a less ancient tradition (in Sophronius), according to which Crescens preached, went into Gaul, and became the founder of the church in Vienne; but it deserves no notice, having probably no other foundation than the resemblance of the names Galatia and Gallia.

CRETE (*Κρήτη*), one of the largest islands in the Mediterranean, now called Candia, and by the Turks, Kirid. It is 160 miles long, but of very unequal width—varying from thirty-five to six miles. It is situated at the entrance of the Archipelago, having the coast of the Morea to the south-west, that of Asia Minor to the north-east, and that of Libya to the south. Great antiquity was affected by the inhabitants, and it has been supposed by some that the island was originally peopled from Egypt; but this is founded on the confusion that Crete was the Caphthor of Deut. ii. 23, &c., and the country of the Philistines, which seems more than doubtful (*ΚΑΡΗΤΗΝ*). Surrounded on all sides by the sea, the Cretans were excellent sailors, and their vessels visited all the neighbouring coasts. The island was highly prosperous and full of people in very ancient times: this is indicated by its 'hundred cities' alluded to in the epithet *ἑκατόμητος*, applied to it by Homer (*Il.* ii. 649). The chief glory of the island, however, lay in its having produced the legislator Minos, whose institutions had such important influence in softening the manners of a barbarous age, not in Greece, but also in Greece, where these institutions were imitated. The natives were celebrated as archers. Their character was not of the most favourable description; the Cretans or Kretans being, in fact, one of the three K's against whose unfaithfulness the Greek proverb was intended as a caution—Kappadokia, Krete, and Kilikia (*τρία κάππα κάκιανα, Καππαδοκία, και Κρήτη, και Κιλικία*). In short, the ancient notices of their character fully agree with the quotation which St. Paul produces from 'one of their own poets,' in his Epistle to Titus (i. 12), who had been left in charge of the Christian church in the island:—'The Cretans are always liars (*ψεύδοι*, eternal liars), evil beasts (*κακά θηρία*, Angl. 'brutes'), slow bellies' (*γαστέρες ἀργαί*, gorbellies, bellies which take long to fill). The quotation is usually supposed to have been from Callimachus's *Hymn on Jove*, 8; but Callimachus was not a Cretan, and he has only the first words of the verse, which Jerome says he borrowed from Epimenides, who was of Crete. Ample corroboration

of the description which it gives may be seen in the commentators.

Crete is named in 1 Macc. x. 67. But it derives its strongest scriptural interest from the circumstances connected with St. Paul's voyage to Italy. The vessel in which he sailed, being forced out of her course by contrary winds, was driven round the island, instead of keeping the direct course to the north of it. In doing this, the ship first made the promontory of Salmone on the eastern side of the island, which they passed with difficulty, and took shelter at a place called Fair-Havens, near to which was the city Lasea. But after spending some time at this place, and not finding it, as they supposed, sufficiently secure to winter in, they resolved, contrary to the advice of St. Paul (the season being far advanced), to make for Phœnice, a more commodious harbour on the western part of the island; in attempting which they were driven far out of their course by a furious east wind called Euroclydon, and wrecked on the island of Melita (*Acts* xxvii.).

CRIMSON. [PURPLE; SCARLET.]

CRISPUS (*Κρίσπος*), chief of the Jewish Synagogue at Corinth (*Acts* xviii. 8), converted by St. Paul (1 Cor. i. 14). According to tradition (*Constitut. Apost.* vii. 46) he was afterwards bishop of Ægina.

CRITICISM, BIBLICAL. This phrase is employed in two senses. Some take it to signify not only the restoration of the text of Scripture to its original state, but the principles of interpretation. This is an extensive and improper application. The science is strictly occupied with the *text* of the Bible. It is limited to those principles and operations which enable the reader to detect and remove corruptions, to decide upon the genuineness of disputed readings, and to obtain as nearly as possible the original words of inspiration. Its legitimate object is to ascertain the purity or corruption of the text. It judges whether an alteration has been made in a passage; and when it discovers any change, it labours to restore the primitive readings that have been displaced. There are three sources from which Biblical criticism derives all its aid, both in detecting the changes made upon the original text, and in restoring genuine readings.

1st. MSS. or written copies of the Bible.

2nd. Ancient translations into various languages.

3rd. The writings and remains of those early ecclesiastical writers who have quoted the Scriptures.

Some add a fourth, viz., *critical conjecture*, but the authority of this we are disinclined for the most part to allow.

Criticism employs the ample materials furnished by these sources. To attain its end it must work upon them with skill and discrimination. They afford wide scope for acuteness, sobriety, and learning; and long experience is necessary in order that they may be used with efficiency and success.

The present article will contain a brief historical sketch of Biblical criticism, or a history of the texts of the Old and New Testaments; the condition in which they have been at different periods; the evidences on which our knowledge of their purity or corruption rests, and the