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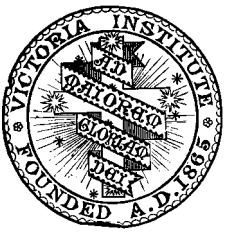

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ORDINARY MEETING, MAY 4TH, 1874.

H. CADMAN JONES, ESQ., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed, and the ollowing Elections announced :—

ASSOCIATE :—Rev. G. Lawless, A.M., Chaplain to Her Majesty's Forces, Curate of St. Bride's, 18, New Bridge-street.

Also the presentation of the following Works to the Library :—

"Proceedings of the Royal Society." Part 151.	*From the Society.*
"The Mosaic Deluge." By Rev. S. Lucas.	*From the Author.*
"The Biblical Antiquity of Man." By Rev. S. Lucas.	*From the Author.*
"On the Works of Dr. F. A. Treudelenburg." By Professor G. S. Morris.	*From the Author.*

The following Paper was then read by the Author :—

BIBLICAL INTERPRETATION IN CONNECTION WITH SCIENCE. By the Rev. A. I. McCAUL, M.A., Lecturer in Divinity at King's College, London.

TO the Biblical Student, in these days, it is a source of no small consolation to remember that there is no necessary connection between Science and Infidelity. There have been men, in past ages, of high scientific reputation, who have not only believed in a Supreme Governor of the world, but also received, with devout and simple faith, the Scripture teaching of Redemption. There have been men, in the various countries of the civilized world, of acknowledged learning and ability, of true philosophic mind, who have accepted the Scriptures as the Revelation of God, and who have confessed that Jesus Christ, the Founder of Christianity, was God manifest in the flesh.

So also in the present day, there are men as well known for their earnest Christian faith as for their scientific attainments, or for their grasp of the profound subjects of Philosophy. There are men, whose opinion is justly respected in questions of science and philosophy, to whom the Bible is precious, as the

teaching of Him in whom there is no deceit and no possibility of mistake, as the Revelation of Him from whom all wisdom and all knowledge proceed.

It does not seem fair, therefore, to assert that the study of philosophy, or the increased attention devoted to physical science, can be the explanation of the apparent increase of infidelity. Take the case of young men who go up to the Universities. Suppose the very possible case of their going up with a scanty knowledge of the Scriptures. Suppose that they are strangers to the coincidences and extraordinary harmonies which the various books of the Bible present. While studying in their colleges, they hear much of the difficulties which have to be reconciled, they hear much of the miraculous interventions which have to be accounted for, they hear much of the doubts with which unbelievers of every age have regarded everything that claims to be supernatural.

If they had any sufficient acquaintance with the other side of the question, if they had any adequate knowledge of the way in which the Scripture speaks for itself, they would be able to balance the difficulties. They would be in a position to retain their faith in spite of the skill and of the persistence with which apparent inconsistencies are presented to them. They would be competent to form some independent judgment for themselves.

But, as it is, infidelity has increased because, generally speaking, men are ignorant of the contents of the Scripture. As luxury and riches have increased, so also has carelessness with respect to religious matters. Parents, by their example, encourage their children to neglect the Bible. They do not study the Scriptures, and therefore, naturally and necessarily, they are ignorant of them. They have no weapons, therefore, wherewith to ward off the attacks of infidelity. They are beset with doubts, and they yield to them only too readily. They are not sorry to be persuaded that those writings, which they regard with indifference, if not with aversion, are really not worthy of the esteem in which they have so long been held.

The Scriptures appear to me to prepare us for the increase of infidelity, and to assign the explanation of this "falling away" from the ancient belief, which we already behold. It is to be attributed not to the increasing love of science or of philosophy, but to the fact that men are more and more haters of God and lovers of their own selves. The difficulty is, after all, far more moral than intellectual. It is due to the increased carelessness which prosperity and peace have gradually engendered. Science, if unprejudiced, will feel an interest; a strong and irresistible interest, in the teaching of that Book for which there is so

much overwhelming evidence. It will be glad to compare *its* teaching with the discoveries and progressive theories of modern research. It will be willing to suspend its judgment rather than, lightly, repudiate the conclusions of so venerable, and so sacred, a record.

The students of Science and the students of Scripture will thus have common ground. They will be glad to meet and to discuss their apparent differences. They will be anxious to hear what can be advanced in the way of defence of what is old or of accommodation of what is new. But there is one condition which, it is obvious, must be observed by both parties. There must be a fair statement of facts on both sides. There must be no partiality, there must be no concealment, there must be no distortion, out of deference to already-received opinion.

The student of Science has a right to demand that the biblical student shall present to him the simple and true meaning of the original records. And it is only on this understanding that healthy intercourse between them can continue. If there is any suspicion that the translation is tampered with in order to favour any special theory, all confidence is at an end. The duty of the biblical student, as such, is to give the meaning of the original narrative in its plainest terms, quite irrespective of what scientific consequences may ensue. Let him do this earnestly and diligently, and men of science will not be indifferent to his labours, however unpretentious they may be. But, if they cannot read the Scriptures for themselves, in the original languages, and have no guarantee that others, whose business it is to understand them, are dealing fairly with them; then it is, surely, no wonder if they altogether abandon the Scriptures as worthless for scientific purposes, or at any rate, as unintelligible.

Let us take for example the Mosaic record of Creation in the first chapter of Genesis. It is not for the biblical student to commence by asking whether modern science will allow of the first verse being introductory to the rest. It is immaterial to him, in his capacity of biblical interpreter, whether modern science allows of it or not. The question for him is, how far the Hebrew original necessitates it. If the matter is decided by the original, then let him honestly say so, and let him leave the scientific consequences to take care of themselves. There will be no lack of scientific men to discuss those consequences. And, in this case, it appears to me that there can be no reasonable doubt on the subject. It appears to me that the language of the second verse necessitates an interval of delay between the action of the first verse and that of the verses which follow. The earth had become without form and void (ἐγένετο)

or as Dathe renders it, "Terra facta erat,"—It had become waste and desolate. It had become, as the LXX. have it, invisible and unfurnished; *invisible* by reason of the water and darkness, and *unfurnished* by absence of the productions which formerly existed upon it; for this seems to be the intention of the Greek translators. But, of whatever character the change may have been, that there was a change is, I think, clearly indicated by the word in the second verse.* And not only

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* The word occurs again in the first verse of the third chapter, where, I think, it ought to be translated in a similar manner. "Now the serpent *had become* more subtil."—והנחש היה ערום.

To illustrate this meaning, let me quote the way in which the verb היה is rendered, in the versions, in a few passages taken from *Genesis* and elsewhere.

i. 3. 1. Let there be light—יהי אור—*γενηθήτω φῶς*—Fiat lux—Es werde Licht.

i. 6. 2. Let there be a firmament—יהי רקיע—*γενηθήτω στερέωμα*—Fiat firmamentum—Es werde eine Feste.

i. 6. 3. And it *was* so—ויהי כן—*καὶ ἐγένετο οὕτως*—Et factum est ita—Und es geschah also.

i. 14. 4. And God said, Let there *be* lights—יהי מארת—*γενηθήτωσαν φωστῆρες*—Fiant luminaria—Es werden Lichter.

ii. 5. 5. And every plant of the field before it *was* in the earth—טרם יהיה בארץ—*πρὸ τοῦ γενέσθαι ἐπὶ τῆς γῆς*—Antequam oriretur in terrâ.

ii. 7. 6. And man *became* a living soul—ויהי האדם לנפש חיה—*καὶ ἐγένετο ὁ ἄνθρωπος εἰς ψυχὴν ζῶσαν*—Et factus est homo in animam viventem—Und also ward der Mensch eine lebendige Seele.

iii. 22. 7. And the Lord God said, Behold the man is *become* as one of us—הן האדם היה כאחד ממנו—*Ἰδοὺ Ἀδὰμ γέγονεν ὡς εἷς ἐξ ἡμων*—Ecce Adam quasi unus ex nobis factus est—Siehe Adam ist worden als unser einer—Voici, l'homme est devenu comme un de nous.

v. 4. 8. And the days of Adam after he had begotten Seth, *were* eight hundred years—ויהיו ימי אדם—*ἐγένοντο δὲ αἱ ἡμέραι Ἀδὰμ*—Et facti sunt dies Adam.

vi. 1. 9. And it *came to pass*, when men began to multiply—ויהי כי החל האדם לרב—*καὶ ἐγένετο ἡνίκα ἤρξαντο οἱ ἄνθρωποι.*

xvii. 16. 10. And I will bless her, and give thee a son also of her; yea, I will bless her, and she shall *be* a mother of nations: kings of people shall be of her.

והיתה לגוים מלכי עמים ממנה יהיו.

ἔσται εἰς ἔθνη, καὶ βασιλεῖς ἐθνῶν ἐξ αὐτοῦ ἔσονται.

Eritque in nationes, et reges populorum orientur ex eo.

Völker sollen aus Ihr werden, und Könige über viel Völker.

Je la bénirai, et elle deviendra des nations. Des rois chefs de peuple sortiront d'elle.

so, but there is a further change of language in the third verse, and the verses which follow, as compared with the first verse, which has been noticed by Amyraldus, in Wagenseil, and which is worthy of attention. In the bringing the earth into order, we have again and again the curious formula, "And God said."

Amongst men, it is more significant of power to effect one's purpose without the intervention of words. To produce results, visible to others, by a simple nod, or by an exercise of will, unaccompanied by outward signs, is more imposing and impressive than to do so by an exercise of intermediate gestures or commands. And yet, in the case of God Almighty, although it would be difficult to say to whom the words were addressed, or for whose sake they were uttered, we are told that the commands were expressed, as we should say, aloud.

In the Gospels, we are told expressly that certain words, which Jesus Christ our Lord spoke, were uttered aloud for the benefit of those who heard. "I knew that Thou hearest Me always; but because of the people which stand by I said it, that they may believe that Thou hast sent Me." But, in the case

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Eccl. iii. 20.—All go unto one place; all *are* of the dust, and all turn to dust again.

הכל הלך אל מקום אחר הכל היה מן העפר והכל שב אל העפר.

τὰ πάντα εἰς τόπον ἕνα, τὰ πάντα ἐγένετο ἀπὸ τοῦ χοὸς, καὶ τὰ πάντα ἐπιστρέψει εἰς τὸν χοῦν.

Omnia pergunt ad unum locum; de terrâ facta sunt, et in terram pariter revertuntur.

Es fähret alles an einem Ort; es ist alles von Staub gemacht, und wird wieder zu Staub.

Tout va en un même lieu: tout a été tiré de la poudre, et tou retourne dans la poudre.

Jonah iv. 10.—Thou hast had pity on the gourd, for the which thou hast not laboured, neither madest it grow; which *came up* in a night, and perished in a night.

שבן לילה היה ובן לילה אבד.

ἢ ἐγενήθη ὑπὸ νύκτα καὶ ὑπὸ νύκτα ἀπώλετο.

Quæ sub unâ nocte nata est, et sub unâ nocte periit.

Welcher in einer Nacht ward, und in einer Nacht verdarb.

Car il est venu en une nuit, et en une nuit il est péri.

Compare also Dathe's note (*Gen.* i. 2).

"Vau ante הארץ non potest verti per *et*, nam refertur ad v. 1. ubi narratum fuit, terram æquè ac cœlum a Deo esse creatam. Jam pergit v. 2. de terrâ, eam, incertum quo tempore, insignem subiisse mutationem. Igitur Vau per *postea* et explicandum, uti sæpe, e.g. Numb. v. 23, Deut. i. 19."

now before us, there is no such explanation (so far as we can see) possible. We have to understand that the re-constitution of the earth was effected "by the word," and we are compelled to notice the difference, which is so marked, in the wording of the first verse. "In the beginning (ἐν ἀρχῇ) God created the heavens, and the earth."

I might have drawn attention to the Hebrew for "in the beginning" (ἐν ἀρχῇ), but that has been done elsewhere. It is however worthy of special attention that both in the Hebrew and in the Greek—both at the beginning of Genesis and at the beginnig of St. John—the word is without the article. It is not ἐν τῇ ἀρχῇ, but ἐν ἀρχῇ; and so in the Hebrew it is not a definite time but an indefinite time.

We conclude therefore (I think, necessarily) that the description which follows is a re-constitution, and not the original constitution of the earth upon which we dwell. There was an interval, it may be, of very long duration, before the action, which is represented in the third and following verses, commenced. There may for what we know, have been flora and fauna upon the earth, even in this pre-historic period; for, as St. Augustine points out (Ench. ad Laur.), the text "Death entered into the world through sin," may be understood of the human race, and may be taken to mean, simply, that death obtained its power over mankind through sin. This explanation certainly appears possible, and that is all that it concerns the Biblical interpreter to know. It is not his province to attribute any greater degree of certainty to scientific theories than is justified by the terms of the Scripture record.

With reference to the early inauguration of light, we remark that it is not said to be created, and that it is not dependent upon the sun, or any other heavenly body. With reference to the first point, the language, we are sure, is what already must approve itself to science, and with respect to the second, it has been shown (in "Aids to Faith") that the idea of light existing independently of the sun is not repugnant to scientific minds. So far from this being the case, Delitzch ("Comm. on Gen.," p. 97) quotes an American writer, to the effect that the Mosaic idea of light existing before the sun is "the corner-stone of creation." With reference to the separation of the waters, we remark again that the firmament or expanse is not said to be created. The words are "And God said, Let there be a firmament in the midst of the waters." And again, in the next verse, "And God made [or arranged] the firmament." The word in the original is not the one specially applied to creation.

The same remark applies to what follows with reference to the formation of the dry land, and the further centralization of

the waters, and especially the appearance of the flora. "And God said, Let the earth bring forth abundantly," &c. "And the earth caused to go forth," &c. If the earth already teemed with the germs of vegetable life, and only awaited the necessary conditions and the due proportions of light and dryness or warmth, in order to send forth its treasures, the wording of the Scripture narrative is fitted to represent such a consummation. By the word of the Almighty the necessary conditions were fulfilled and the due proportions secured, and by the same word the vegetable creation sprang at one united burst into existence.

With reference to the fourth day of creation, it is again remarkable that the narrative implies the further arrangement of existing material rather than the creation of new matter. "And God said, Let there be luminaries." "And God made [or arranged] the two great luminaries," &c. It is scarcely necessary to remind you that the Hebrew word for *lights* or luminaries is not here quite the same as that in the third verse. It is a derivative from it, indicating of itself the *localization* of light.

So far the narrative (commencing at the 3rd verse) has dealt, as it appears, simply with the organization of what already existed, or what was ready to become visible to the eye. It does not appear to me that, as the matter is here represented, the time would be any considerable difficulty. The action is represented as gradual, and culminating in increased heat through the operation of the sun. After the wet and extreme moisture, this would have an immediate tendency to hasten the growth of those vegetable existences which were already in the earth. The earth would appear covered, as in a moment, not only with grass, but with plants and trees, which by the sixth day would have attained a magnitude giving promise, at least, of their ultimate proportions. We now come to the special act of creation. And here again the consideration of time is immaterial. We are told that God *created* the inhabitants of the waters. At His word they sprang into existence. And so also with respect to the fowls. The original command stands thus—"And God said, Let the waters bring forth abundantly the moving creature that hath life, and let fowl fly upon the earth," &c. These are two *co*-ordinate clauses in the original, which the English version has unfortunately amalgamated, making one *sub*ordinate to the other. In the Hebrew it is not stated, it is not implied, that the fowl was produced from the waters. They were created at one and the same time, and that is all that the narrative records. On the sixth day we first have the formation of the cattle and various beasts of the earth: we then have the creation of man. And there is this distinc-

tion between the two. The proper word for creation is not applied to the lower animals. The words are—"And God said, Let the earth bring forth," &c. "And God made [or arranged] the beasts of the earth after his kind," &c. Whereas in the case of man, the words are—"And God said, Let us make man," &c. "And God *created* man in His own image."

Whether the days spoken of, in this record, are periods of twenty-four hours, or of still greater duration, it is impossible to determine. There are many who think that they may be understood as indefinite periods. But the language of the Fourth Commandment seems to others to be unfavourable to such an interpretation. Nor do they see any reason for its necessity. We have to deal, they argue, with the Scripture narrative, not with modern scientific theories. The narrative specifies certain distinct operations, and they do not see that the time specified is in any one case incommensurate with those operations. The subsidence of the waters is represented as God's act. The production of the verdure and the vegetable creation, is the result of God's command, after the necessary preparation. The localization of light is attributed immediately to the divine operation. And so with what follows. The wording of the fourteenth verse, and the verses which follow, is consistent with the idea that the *creation* of the heavenly bodies is included in the first verse. The work of creation, subsequently, is connected simply with man and his residence upon earth. The organization, the *re*decoration, of the earth is the subject of the narrative, and the author confines himself to that one topic. We have his plain testimony that God himself undertook this re-constitution. He, who was to be the Saviour of a fallen race, was the Being by whom all these effects were produced, and the time, which He would assign to such operations, was according to His own wise purpose. He tells us that in six days He completed the formation of the things which we see, and rested the seventh day and hallowed it. Be this as it may, we can in this case only wait for further information. The Biblical students watch, with intense interest, the progress of scientific inquiry. They listen, gladly, for the conclusions to which Science conducts her disciples. They join, heartily, in the gratulations with which each new stage, in her triumphant march, is hailed. But they cannot forget that the voice of Science has not always been the same. They cannot forget that, at different periods, different theories have been maintained (especially, for instance, with respect to the formation of geological strata), and that, at all these periods, the theories have been employed, by men who were so disposed,

in order to assail the Scripture records. They are not, therefore, in a hurry to receive the conclusions of scientific investigation as final; they are not disposed, at the will of the science of the day, to convict the sacred authors of inaccuracy, or of ignorance. They remember that the evidence in favour of the Scriptures is great and varied, and has survived the hostile criticism of a vast number of centuries. They remember that this evidence is altogether independent of modern science.

Not only were there various versions at an early period of the Church's history; not only was the Old Testament translated into Greek three hundred years before Christ; not only was the Pentateuch existing in the Samaritan language and character three or four hundred years earlier: but also men of learning and intellectual ability, in each successive age, have admitted that He, whose words are preserved for us in the New Testament, proved Himself indeed to be the Son of God. Christians believe that Jesus Christ, by Whom the truth of the Old Testament was ratified and confirmed, was God as well as man, and that His authority is final.

It appears to me very uncandid to ignore this feature when treating of the common subservience to *authority*, and of the mischievous tendency which it has to retard progress. If it be true that Jesus Christ is our God, the Creator of the universe, then weare not only bound to pay respect to His authority, but those who repudiate and reject it will certainly have to bear their guilt.

Nor is it more reasonable on similar scientific grounds to quarrel with the details of Christ's commands. If He tells His disciples that they are to pray, and that their prayers will be heard and answered by God, it appears captious and unreasonable (not to say blasphemous) to propose means of testing publicly the utility of prayer. To the biblical student, such tests will appear arbitrary and presumptuous. They will be counted like the signs which the Jews required from their Lord, while they rejected the evidence which was already within their reach. There is no sufficient evidence that unbelievers would be convinced by such additional proof, supposing it were vouchsafed to them, and to believers it is superfluous. For the spirit of Christianity, it is never to be forgotten, is docility and readiness to receive Christ's teaching. Doubt may be the proper attitude for philosophy as well as science, but it is not so in the case of those who wish to attain to the knowledge of God. Jesus Christ came into the world, we are told, in order to declare Him, and He assures us that, unless we become as little children, we shall not enter into the kingdom of God. The natural characteristic of children is a readiness to believe,

and not to doubt, the information which they receive from those in whom they have confidence.

We may remark, in conclusion, that St. Augustine has long ago drawn attention to this difference between the spirit of philosophy and the spirit of Christianity. In the "Ench. ad Laurentium," he notices how the Academics withheld their assent from things which other men believed, on the ground that truth and error were mixed up beyond the possibility of discrimination. But with us, he says (apud nos), faith is the essential condition. Nor is faith misplaced if it be reposed in the Lord of the Universe. When we say "*ipse* dixit," we do not mean Pythagoras, or men of like reputation in the present day: we mean Him in whom are hid all the treasures of wisdom and knowledge.

I have drawn attention, afresh, to the argument from authority, not because the statements of the Old Testament appear to me in themselves incredible, but because, "of late years infidelity has assumed an unprecedented tone of defiance to all authority, human and divine." It is not that there is any real opposition between Science and Revelation; but men at the present day sometimes speak and write as if, in the matter of religion, we could get rid, or ought to get rid, of authority. But this is not the case even with science. Scientific men may test the facts of science, and have their own experience for the corroboration of those facts. But the great bulk of mankind cannot do this. They have neither the leisure nor the training which might enable them to accomplish this confirmatory process. The consequence is, that they have to rest upon the authority of scientific men. If physical science is to be our guide, the exponents of its meaning will be those who have given most attention to that study. Those, therefore, who decry authority are re-asserting its validity. There may be a change of masters, but there must always be a reliance, more or less unquestioning, upon the word and authority of others. It is not the province of the biblical interpreter to deny or to suppress this truth out of compliment to unbelievers. It is not the duty of the Christian inquirer to leave the vantage-ground of authority, or to depreciate its value, because it is offensive to certain men by whom the Scripture is little valued. Undue concession is a thing for which we get no thanks, even from those whom we would conciliate, and is accepted only as a sign of weakness. I cannot forbear adding a few remarks which appeared on this subject some little while ago in a public print. They refer to the tone of a book assailing Christianity, and point out how, even by unbelievers, one authority is substituted for another, and how what is condemned in our case is

approved and practised by themselves. The reviewer says—"It is a curious return to the argument of *authority* after a long denunciation of that old and venerable mode of conducting controversy. We do not reason with you, say the new schools of disputants; we dislike interminable arguments. We only direct your attention to what is the actual case, that a large intellectual class has made up its mind on the question. The master has spoken; the intellectual class has judged; it is now decided that Christianity must be given up." At the same time, between Scripture rightly understood and Science accurately interpreted, there is, and there can be, no real opposition, because they are the gifts of one and the same Creator. By a false, or erroneous, interpretation, the Old Testament may be misrepresented, and both poetry and painting have, unfortunately, done much to foster and increase this misapprehension. By the poetical license, which they claim for their respective votaries, they have done much to obscure the scriptural subjects of which they have volunteered to treat.* But it is sad to think that science should offend in the same way. It is, to say the least, unfair to adopt an erroneous interpretation of certain passages, and then, because those erroneous interpretations are inconsistent with facts, to infer or to assert the falsity and the worthlessness of the whole record. But it is not only unfair, it is conduct utterly unworthy of professed lovers of truth. It must, in time, recoil upon the heads of those who so offend. The credit which has attached to their exposition of other subjects will be undermined. They will be looked upon, generally, as men whom party spirit has blinded, whose word is no longer reliable, whose judgment is affected by prejudice, whose real object is victory instead of truth.

The CHAIRMAN.—I am sure we shall all join in a vote of thanks to Mr. McCaul for his interesting paper.

The HONORARY SECRETARY.—I have received the following letters in regard to the paper just read.

The first is from one of our Vice-Presidents, the Rev. ROBINSON THORNTON, D.D.:—

"EPSOM, *April* 21, 1874.

"I HAVE read Mr. M'Caul's paper with interest. It brings before the Institute a point which must carefully be maintained, and which too many

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* Cf. *Erwin; or, Miscellaneous Essays*, p. 60. Nisbet, 1831. Cf. also Cic. *de Leg.* i. 1 (5).

of the orthodox are prone to forget; viz., that in discussing the Scriptures and comparing their statements with the conclusions of science, we must be extremely cautious lest we make the Scriptures say more than they were intended to say. The sceptical school sometimes try to saddle us with erroneous traditional interpretations of the Sacred Record. This is unfair enough, but it is trebly so when our own friends damage our cause by forcing upon the unwilling some exegesis which cannot be maintained. I believe that much harm has been done in this way.

"I think Mr. M'Caul has scarcely made the most of his materials. He has exemplified his principles by a reference to Genesis i. I wish he would go further, and give some more instances where a traditional exegesis (in some instances taken from Milton) has been substituted for the simple meaning of the original text. If he would also give the sceptics a few words on the practice I have already alluded to, of *forcing* on us some interpretation of Scripture, and rejecting the whole, because that one interpretation seems inconsistent with facts, he would improve the paper. Also, I should like him to wind up with a tirade against the expression, 'Opposition of Scripture and science.' The grand rational orthodox principle of the Institute is that there can be no possible opposition between Revelation, rightly understood, and scientific conclusions correctly drawn. If there is an opposition, it is between Scripture wrongly understood and science drawing wrong conclusions from misunderstood premises. Lastly, I think several of his allusions to our Lord *unnecessary*. Devout and admirable as they are in themselves, they seem to me a little out of keeping with the rest of the paper. We are, as Christians, defenders of revealed religion; and if we begin to touch upon the *special* doctrines of Christianity, we shall get into the Creeds, and then to Theology, which is exactly what I (as a Theologian by profession) want to keep the Institute out of."

The other is from the Rev. J. McCann, D.D.:—

"Glasgow, *April* 10, 1874.

"By reason of the hasty glance I have been enabled to take at Mr. M'Caul's paper, I am not sure as to the chief point he wishes to establish, but hope he will forgive me if I make a remark or two in detail.

"He attributes the apparent increase in infidelity to a superficial knowledge of the Scriptures, caused by the increasing luxury, and consequent idleness and selfishness of the age. This is, doubtless, true; but I cannot help thinking that he has not stated the most efficient cause of that superficiality. Are not those preachers most to blame whose teachings never compel research, or stimulate earnest examination of the whole Word of God,—who by continually supplying only milk, make their churches into nurseries, and keep their congregations as babes? How can we expect dwarfs to grow into giants, on a diet that would starve giants into dwarfs? Let the clergy lead the way in going on unto perfection of doctrine,—other people will soon follow out of their present most deplorable superficiality. Mr. M'Caul deserves our thanks not only for calling attention to the evil, but also for doing so much to provide a remedy.

"But I would go further than he, and say that many of the teachers of theology are profoundly ignorant of philosophy. But as philosophy is the science of that human nature which the Bible was given to rectify and ennoble, how can the man treat the latter adequately, or even consistently, who does not know the former? What is the result? That many teachings called Scriptural are in direct antagonism to the facts of consciousness, and so *cannot* be intelligently believed by thoughtful men. Formerly, when education was more generally elementary, and men did not read much science,

these passed muster with only an occasional challenge; but now a more thorough mental training is exposing the error, and students are consequently becoming more sceptical, as it is called, than they were before. But is it really scepticism?—that is, is it really doubt about the truth of the Bible itself? In many cases,—far too many,—no doubt it is; but in the great majority, I have found it to be unbelief in the teachings of men, far more than in the Revelation from God. While, therefore, we meet infidelity by showing that the interpretation of the Bible and of physical science are in unison, we must go further, and show that the interpretation of the Bible and mental science are also in unison; or that between a true theology and a true humanity there is no discord. Again, Mr. M'Caul says,—'The duty of the Biblical student, as such, is to give the meaning of the original narrative in its plainest terms, quite irrespective of what scientific consequences may ensue.' This is wise advice when possible to be followed. When the text of the original is determined, and the meaning is so clear that there can be no reasonable doubt on the subject, then assuredly it is the duty of the student to state the meaning, be the consequences what they may. But when there are possible two or more different interpretations, I think it is our duty to obtain assistance from every available source, scientific or otherwise; so that, while at one time we might interpret the first verse of the Bible in one way, we might, if science showed us to be mistaken, interpret the same verse in another way, more in harmony with the discoveries of the period; always distinguishing, however, between the truth of the text in itself, and the possible error of our ideas regarding it. I think Mr. McCaul will not deny that science has aided him greatly in his interpretation of the first chapter of Genesis. The Word and the world being brethren, should, whenever possible, give each other a helping hand.

"The able writer of the paper has also done well in calling our attention to the abuse of 'Authority.' Scientific men are continually speaking as though Christians rested altogether on the authority of churches, creeds, or dogmas, while they rejected authority of every kind, as such. Now what is the fact? That the number of those who *verify* experiments in science for themselves are very few comparatively, and consequently all the remainder rest solely on '*authority*' for their scientific creed; indeed, are often compelled to do so because they have not the opportunity of experimenting for themselves. The overwhelming majority of scientific believers *end* in authority. But what of Christians? They indeed *begin* with it in church and creed, but only as a means to an end. The end of Christianity is Christliness of character; this, however, is a matter of personal consciousness, called the *knowledge* of Christ. It is, in a word, the Christian theory experimentally confirmed. Consequently, every Christian must, to be such, verify for himself, and so leave behind the region of mere authority.

"The case therefore stands thus,—the believer in science may rest in authority only, never passing beyond it; but the believer in Christ, while starting in authority, must in every case pass beyond it, into the higher ground of personal verification."

Mr. C. R. MacClymont.—At the commencement of Mr. McCaul's paper, reference is made to the case of young men affected by the current scepticism of the day. Perhaps I may be permitted to suggest some thoughts which a perusal of the paper have brought up in my mind. I trust the learned author will excuse me if I venture to say that the chief thought which

occurred to me in reading the paper was one of disappointment, when I considered that so much critical and literary ability should have been directed to what I think, in a meeting of this sort, is not particularly required,—I mean the establishment among ourselves, who are the members of an avowed Christian Association, of the objections to the doctrines of those who challenge or attack the Scriptures.* It seems to me that less than justice is often done to the interpretation of that with which the science of modern times has undertaken to deal. The learned author himself could scarcely have framed his criticism of Genesis i., if he had not had before him most of the results of advanced modern science. It is true we find that the account of creation given in Genesis is not necessarily inconsistent with the proved results of modern science; but those who have been brought up in what I may call the old-fashioned method of Christian dogma, or those who are acquainted with the literature of the Church of a few years back, know that the conclusions which Mr. McCaul puts before us now, would, twenty or thirty years ago, have excited surprise, to say the least of it, in the minds of most of the professed Christian apologists. If it be true that science has done something to widen our own ideas—I mean the ideas of those whose faith is fixed in orthodox dogma, and who, therefore, can deal both with philosophy and with science, without fear of having their faith disturbed, or their belief in religion endangered,—should it not, I ask, be the object of those who now try to reconcile science with religion, not to content themselves with merely showing that they are not in antagonism, but that they should also show how they can be changed by the Gospel, and made themselves the greatest instruments and the best means of spreading religion to those who have no religion, and of making the doubts engendered by science the best conditions of proving the truth of the Gospel? Take one example. Mr. McCaul has been very severe upon those who endeavoured, by what he calls high art, to set forth the nobility and grandeur of sacred themes. But is it not true that he has himself transgressed the bounds he imposes, and that he has been compelled to do so by the limitations of the language which he is forced to employ? Take the first illustration we have, where he talks of God speaking the word. Surely this is true only as a metaphor, to give it form to the sense of man. It is not meant to say that we should venture to conceive to our own mind that the actual using of words by God was among the physical conditions necessary for the expression of His command before the heavens and the earth took form? Is it not the necessary condition of all progress of human thought that we are required to grope to things unseen by things that are seen, and in the effort to approach a higher truth we have often to be content with a narrower expression? Mr. McCaul speaks of light being

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* Mr. MacClymont appears to have momentarily forgotten that the Institute's organization exists in a great measure for the purpose of restoring, and, perhaps, in some cases, even creating, a sound public opinion as to the true relations of religion and science.—Ed.

existent before creation. Let me ask him respectfully what it is he means by that? What do we mean by "light" before an eye was created? What do we mean by "light," apart from the communication between the seeing eye and the sun? The Deity does not see in the sense in which we see, and does not speak in the sense in which we speak, limited as we are by space and time. These limitations are necessary and proper for us; but if Mr. M'Caul admits, in these days, when science has laid bare the sources of language, and all her resources are spread before us, that he is forced to express himself within such narrow limits, we cannot blame a doctor of the sixteenth century because sometimes he fell short of the dignity of the materials he was using, and in endeavouring to put his opinions strongly, sometimes put them in a way which make them rub roughly against our wider notions now. Then, again, about prayer. No doubt it is a blasphemous thing for anybody to propose a test of prayer; but is it not true that the supporters of the Christian doctrine of prayer, in these modern times,—and I say it in the presence of authorities in theology, who will correct me if I am wrong,—adopt an argument in reference to prayer which is something quite new in the history of theology? Is their doctrine of prayer the same as that which was accepted by the older Puritans and divines? I think I am right in saying that the warning against dictatorial prayer is probably one of the most frequent subjects of warning among the older divines, and I do not know that there is any authority among any of the orthodox theologians of our Church, or of any other Reformed Church, for holding that the mere expression of a wish, by the creature, is sufficient to change the supreme will of the Creator. If we once admitted that, we see plenty of opportunities for philosophical and scientific infidels to scoff, for the assertion that the expression of such a wish would necessarily change the plan of the Creator is full of difficulties, both metaphysical and physical, which are too numerous and obvious to need pointing out. Let us take one case; suppose a young man who is an object of deep regard to a whole nation is lying at the point of death, prayer is publicly offered up, and that young man recovers; and we say that but for these prayers the Almighty would have struck him with death, and bereaved the people. Do we mean that? Suppose it were cruel to take him: do we mean to say that but for the accidental upraising of the people's voice the Deity would have been cruel? Suppose it were kind and wise to take him, because the people were impatient and rebelled, the Lord repented! What is the orthodox notion of prayer? Is it not that a blessing is given to those who humble themselves before the Throne? Not that their human desires and imperfect conceptions are realized; but that they are enabled to trust where they cannot trace, and grace is given to them, in the mean time, to bear the dispensation in resignation, with the hope that by-and-by they will perchance have light given to them to see how even this was love,—not an evil, but a good in disguise. Yet I have never seen this view stated in any of the recent controversies that have arisen on this subject, though it is the most obvious teaching of Calvinism. I said I was disappointed in this

paper. May I suggest to the author that it is not enough to defend young men from scepticism? The scepticism current now in the universities is not the priggish insolent thing it was years ago; but there are men who are seeking earnestly and anxiously for the light, and, if they could see their way, anxious to do good work, and to help each other. There is no one to tell them the way, for wisdom is no longer crying in the streets to them. The results that we see around us, then, are not so much the fault of the ignorant young men or of the infidels; for these so-called infidels have done a great good and exercised a mighty power for truth. If it had not been for Darwin and Herbert Spencer, how could theology cope with that heavy dark materialism which has been settling down upon us ever since the day of Locke, and which takes us back to the metaphysical difficulties concerning the nature of matter? It is something to recognize in the Darwinism and utilitarianism of the age a power by which we can take to task the materialism which now clogs the general mind of England, and which can prepare us for a broader theology and for a fuller expression of the truth which we learn from the Bible. If there is one thing needed, it is, perhaps, that which the learned author of the letter which has been read to us refers to. It is not fair and right that a man should not be allowed to change a dogma which he cannot reconcile with reason, without being compelled to take up his abode in the camp of those whom he dislikes as infidels. It seems to me that the Church ought to go out and find what there is in science that is true; and not only what is true, but what is applicable to the solution of the difficulties in the Bible. There is another thing, also, that ought to be done. We ought to have a more clear, distinct, and precise formulary of faith, fully expressed and more strongly insisted on, so that if a young man did meet with dear friends not like himself, having had the opportunity of an early and careful Christian education, he might have in that precise education a sure refuge from difficulty, and a wider opportunity of putting himself into a position of sympathizing with his unenlightened friends. It is a poor thing when the Church confines herself to her own battlements and her own friends, and does not adopt the missionary spirit and the higher duties of the missionary life—going out to seek and save. (Cheers.)

Mr. Charles Dibdin.—I should like to draw the author of the paper's attention to a point, a minor one, perhaps, contained in the 12th paragraph, where I find the following sentences :—

"There may, for what we know, have been flora and fauna upon the earth, even in this pre-historic period; for, as St. Augustine points out (Ench. ad Laur.), the text 'Death entered into the world through sin,' may be understood of the human race, and may be taken to mean, simply, that death obtained its power over mankind through sin. This explanation certainly appears possible."

To me this "possible" explanation appears impossible. It is based on the passage in the 5th chapter of the Epistle to the Romans (where it says, "For as by one man sin entered into the world, and death by sin,

so death passed upon all men, for that all have sinned." Now, it seems to me that the passage alluded to, and the context in which it stands, are directed to this: that the consequence of Adam's fall was the death, in *trespasses and sins*, of himself and all his descendants, and not *natural* death. I may justifiably claim, in support of this interpretation, the words, "in the *day* thou eatest thereof, thou shalt surely *die*." Adam *did* eat, and he is said to have *died* that very day. I ask Mr. McCaul, did Adam when he fell die naturally or spiritually? I say spiritually. The words, "Thou shalt surely *die*," &c., thus understood are plain, and in my opinion will hardly admit of any other interpretation. In addition to this, will natural "death pass on all men, for that (*i.e.* because) all have sinned"? It has not, for Enoch and Elijah did not die; and it will not, for millions will be alive at our Lord's second advent, who will not *die*, when the words of St. Paul will be fulfilled, "we shall *not* all sleep." I would be glad if Mr. McCaul would enter somewhat more fully into this point in his reply.

A Member of the Institute.—I sincerely thank Mr. McCaul for his paper; but in taking the line of argument which he has adopted, he is endeavouring to establish the accounts of the Book of Genesis: and I think he must either take his stand firmly on that and abide by it, or else he must abandon it. He says in his sixteenth paragraph, in speaking of the various changes that came about with the creation:—

"The earth would appear covered, as in a moment, not only with grass, but with plants and trees, which by the sixth day would have attained a magnitude giving promise, at least, of their ultimate proportions. We now come, again, to the special act of creation. And here again the consideration of time is immaterial."

I cannot understand, if the account is literally true, how it is that time is immaterial. Either time is time, or it is not time; it appears to me that in endeavouring to fix an absolutely simple and literal interpretation of these matters, we are endeavouring to fix in the words a character which they will not bear. The Bible was not written as a scientific book, and the theologians who endeavour to prove that it was, in my opinion force an antagonism between science and religion.

Rev. T. M. Gorman.—I have listened with interest to the observations of the first speaker. It is refreshing to hear so clear and bold a statement of old-fashioned doctrine, in combination with such breadth of view, in relation to science: but I am unable to agree entirely with the opinion that the school to which Mr. Darwin and his disciples belong has done good service to the cause of truth: such may be the case; but if so, the service has been of a negative rather than of a positive character. Much of what passes in these days for science and philosophy is such as to warn us of dangers ahead, which it is our duty to employ every means in our power to avoid or avert. I wish to speak of principles, and not of persons. Take, for example, the verbose speculations of Mr. Herbert Spencer. To those who look upon the created universe as the work of an Infinite Being, who

has personally revealed Himself to His creatures, the chimerical hypotheses put forward by that ingenious writer necessitate the conclusion that the world is an inexplicable riddle; that everything great and noble in human life is a dream; and that, for man, there is but one creed, with one fundamental article,—*nil certum* here or hereafter. Such a state of mind as this seems to me to be the precursor of intellectual suicide. Possibly some good may arise from such dreary speculations, for Divine Providence is ever educing from evil the good that is hidden in it. It may be necessary thus to arouse from their indolence and sleep the mere routine teachers of hereditary opinions. As remarked by Dr. McCann, religious teachers in these days of free thought too often minister to their hearers as if they were addressing boys instead of men. The way to a solution of the main difficulties which cluster around the first chapters of Genesis, lies in obtaining a true idea of the peculiar style in which they are written. Into this subject it is impossible to enter. To indicate the difficulties which beset attempts to explain these portions of Scripture, let us take, for example, the apparently simple words, "God said." Now this is an historical fact, but the problem is to grasp the true meaning of the phrase, and to conceive how speech can be really, and not figuratively, attributed to Deity. On this point St. Augustine has written profoundly and beautifully in his *Genesis ad litteram;* but his sublime speculations are not satisfactory. Before I sit down, permit me to refer to an article which appeared a few years ago in *Fraser's Magazine*, from the pen of Professor Owen. It deserves the special attention of the clergy who are members of this Society. The design of the article is to show that physiological science is in direct antagonism to certain statements made in the Book of Genesis, as commonly understood. Here is an instance, if ever there was one, in which this Society ought to feel itself bound to come forward with a "reconciliation." The Professor, writing in refutation of an assertion made by a living Anglican bishop, demonstrates that no human being ever did or could live on this earth 969 years, the age assigned in Genesis to Methuselah. An utterly futile attempt at reply was made in a succeeding number of the same *Magazine*. Swedenborg, to my mind, has given a good explanation; but here is an alleged incompatibility between the definite conclusions of science and a clear statement of Holy Scripture. An unmistakable issue is raised on a matter of fact, the consideration of which falls fairly within the range of those objects which this Society was instituted to promote.

Dr. E. HAUGHTON.—I should be very sorry to prevent any educated man from studying any work which was written with a good purpose, however erroneously,—not even excepting those from which I most emphatically dissent,—as I do from the writings of Swedenborg. They will find much to interest them in the writings of that philosopher; but at the same time (as Mr. McCaul has said), with regard to authority, we have to choose who is to be our authority. Some scientific men, holding a high position in the world of science, wish to diminish the weight of the Word of God, as being a thing of no authority; and some of them desire to substitute in its place their own authority. In the

minds of such people it seems to be considered sufficient to compel our assent to a proposition, that a certain number of leading scientific men have agreed to adopt a certain view; and therefore that we are to receive it as though it were Gospel. I demur to that kind of authority; because, whatever weight it may bear when a judgment is formed, those of us who have been accustomed to the meetings of this Society know how many of these notions have been exploded within the short period of time within which we have existed as an Institute. I will recall a remark which was made by Lord Shaftesbury at one of our meetings,—"he remembered no less than eighty different theories, all current, in science—all opposed to the Word of God, and all set up as reasons for doubting the Word of God,—yet that those eighty theories had all vanished and clean gone out of sight; while the Word of God, which they were supposed to upset, still remained in all its stability." I hope that, as regards any other writings but the word of God, we shall read them as Lord Bacon advised us to read,—"not to take for granted, or to confute, but to weigh and consider."

Rev. Professor McAll.—Shall I be travelling out of the record if I suggest a few considerations that seem to deserve attention in connection with this subject? Without presuming for a moment to put aside what Mr. McCaul has given us, or pretending a competition with his views, there are some thoughts which have occurred to me which go very near the ground taken by some of the gentlemen who have spoken. In the first place, without undermining the authority of the Pentateuch, may we not regard the earlier part of Genesis as a compilation from pre-Mosaic records? Such records must, of course, be sacred in themselves, and they are sufficiently authenticated for us by the use which is here made of them. Then, when God is said to have created the heavens and the earth, may we not understand an act differing in its very nature, and widely distant in point of time, from that series of acts afterwards described,—the first act being the origination, and the others the mere arrangement and disposal of things already existing? My third point is,—may not the first act of creation refer to a period which would leave scope for many alterations and developments, through which the world has passed,—a period possibly comprising myriads and even millions of years? Fourthly, I would ask, is it difficult to believe that in the earlier conditions of the globe death existed not merely by natural decay, but because the different orders of creatures preyed upon each other? Fifthly, does a proper faith in Revelation forbid the notion that among the various pre-Adamite tenants of the earth in the unrecorded past, there may have been creatures nearly resembling man in form, and endowed with intelligence? The question need not be viewed with any alarm, as a doctrine of natural religion. Revelation being silent on the subject, it might perhaps be inferred that some such connecting link always existed between the Creator and the various irrational tribes. These inquiries point to a consideration of great importance, viz., that the Mosaic account is largely poetic, rhetorical, and figurative. The key to that account seems to be found in the fact that the writer describes things not as they were, but as

they would have appeared to a human spectator; or, as has been otherwise stated, it narrates only those things which are necessary to the development of a religious system. Consistently with this idea, the moon, though absolutely the smallest light in the planetary system, is described as second only to the very greatest, the sun.* It is not then the planet as it is, but the planet as man would see it, that is described. There must always have been a danger lest erroneous physical ideas should intrude into the domain of theology, and it was probably to prevent this that the doctrine of the true God—His omnipotence and beneficence—was put before the world, not in abstract propositions, but embodied and illustrated in the attractive form in which the sacred historian presents it. So long as the general object and tendency of the account are not misapprehended, it is of little importance how far that account is taken literally. Some persons are indeed impatient of any, even the least, divergence from the strict letter of the narrative, as if it must undermine revelation itself; but the great majority of Christians are content with a less rigid theory of interpretation. Humble-minded and devout readers of the Bible yield very willingly to the impression made on the mind by the account *primâ facie* and as it stands, and yet, deep in their hearts is the conviction that the narrative is largely figurative and poetic.† They believe in Divine purposes and acts, but in their calm judgment they would question whether in literal fact the Almighty gave express names to the light and the darkness; and whether in articulate words God commanded the separation of earth and water. It produces in the minds of such persons the effect of poetry rather than of unadorned narration, when it is said that the Almighty breathed into the nostrils of man the breath of life, and he became a living soul. Lastly, when we are told that God said, as if in soliloquy,—"It is not good for man to be alone; I will make a help meet for him," we have a representation not of the speech, but of the will of God, and that in a manner fitted to produce a just and natural impression upon the mind. It has been the object of the author of the sacred account, in dealing with the facts on which that account is based, to treat them as if he were giving an exact and literal description of the process of creation. It is customary for a man to frame a deliberate purpose in words, and in

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* I think not. The original narrative says that God made the two great—not planets—not heavenly bodies—but lights or *luminaries*. They are called *great*, not in reference to their size, real or apparent, but in reference to the amount of light which the earth receives from them. The literal translation of the Hebrew (Gen. i. 16) is, "And God made the two great luminaries: the great luminary to rule the day, and the little luminary to rule the night, and the stars." And so we find it in the German translation which was made by eminent Jewish scholars (Amheim, Fürst, Sachs), and edited by the late Dr. Zung (Berlin, 1873). "Und Gott machte die beiden grossen Lichter; das grosse Licht zur Herrschaft des Tages, und das kleine Licht zur Herrschaft der Nacht, und die Sterne.—A. I. M'C.

† I think not; although occasionally figurative, there are no data for saying that the narrative is poetic.—A. I. M'C.

important cases to announce his attention beforehand. Hence the general effect of the Mosaic account is to represent God as being as truly the originator and framer of all things, as if He had conceived and expressed His purposes after this human fashion. A correct philosophical account of these things would have been in the early ages of the world unintelligible, if not incongruous and contradictory, and therefore it would not have conveyed a true picture. Let us imagine a patriarch of the olden time, told that this earth, instead of being, as it seemed, one vast immovable plane, is a globular body of comparatively insignificant size, whirling through space round the sun, and completing that revolution in the course of a year, while it goes daily round on its own axis. Before the discoveries had been made which enabled men to understand, in some degree, the solar system, such a description would only have created confusion; it would have conveyed no useful information, and would not have been believed; but when science is sufficiently advanced to comprehend the facts, men are able to appreciate the motive which dictated the earlier and simpler account. It was wise, therefore, to accommodate the teaching given to the imperfect knowledge of the infancy of our race. In future ages the Mosaic account may come to be taken less and less literally as physical science advances; * but had revelation anticipated modern discoveries, it would only have unsettled man's belief in higher things. The sphere of our duties and our hopes lies beyond all this. Still, as we imagine, we have in this account facts, not myths; a central mass of reality, although invested with poetic drapery,—reality such as God only could have made known. This account guided thought and imagination, when knowledge was in its infancy, and it is not surprising if, in regard to its physical aspects, modern science compels some change in the interpretation of its terms. That a cosmogony, dating some 3,300 years ago, should be deemed in this day worthy of any attention might seem sufficiently wonderful, but that in its substance it should have successfully borne every class of scrutiny is more surprising still, and we may safely allow it to make its natural impression on the mind as conveying moral and spiritual lessons which will never be obsolete.

A Member of the Institute.—May I ask one question of the speaker who has just addressed us in so interesting a manner. Does he consider that there was a pre-Adamite man, or some one before Adam in human shape? I do not ask this question for the purpose of carping; but only to ascertain what is his ground for the suggestion.

Mr. McAll.—I simply say that if it were proved that there were 10,000 such men, I should not give up the Bible.

A Member of the Institute.—I understand you to say that there may have been such a thing?

Mr. McAll.—I think it is possible.

Mr. T. W. Masterman. — I think that all the speakers hitherto

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* So far from any necessity existing for such anticipation, my own belief is, that the more physical science advances, the more will the literal sense and accuracy of the Mosaic account be indicated.—A. I. M'C.

have omitted to notice what is to my mind one of the most important features of the paper, namely, that Mr. McCaul makes so strong a point of the world being created in six days, and assumes that the first verse of the book of Genesis is descriptive of an earlier creation. At one time of geological research it was thought that there had been immense convulsions which shook the earth, and that after each convulsion there was a fresh creation of plants and animals; but now it is believed and proved, so far as we can prove anything in the ancient history of our planet, that there was a succession of animals and plants from the very earliest discoveries in the very deepest deposits of the Silurian strata to the superficial gravel-beds of the Tertiary. This being so, I think the idea that the first verse of the first chapter of Genesis describes an earlier creation, and that the six following verses described the creation of the animal and vegetable world which is now existing, can scarcely be maintained. Then Mr. McCaul, speaking of the fourth commandment, says:—

"Whether the days spoken of, in this record, are periods of twenty-four hours, or of still greater duration, it is impossible to determine. There are many who think that they may be understood as indefinite periods. But the language of the Fourth Commandment seems to others to be unfavourable to such an interpretation."

Now, it seems to me very favourable to it. The Fourth Commandment tells us that God rested on the seventh day, and is not this just the seventh day on which God is still resting from the six periods of work and creation? I cannot certainly see that we should gain anything in the eyes of the scientific world by cutting off that first verse, and saying, "there are certain other theories about creation in that first verse: here, in the following verses lies our belief." By taking up the idea that the six days represent six periods of time, one after another, in which the world was created and brought forth everything, and that the seventh day was a period of rest which has not yet come to a close, we have a better solution of the difficulties, which I admit are very great, and a solution which I think ought to be satisfactory to the Christian. There is one other thing I will mention about prayer. I was sorry to hear the remarks made upon that subject, to the effect that it is not to be expected that we should receive an answer to our prayers. It seems to me that every one who prays truly and earnestly in the true spirit of a Christian may expect to receive an answer to his prayers.

Rev. Sir T. M. Lushington-Tilson, Bart.—The speaker to whom you refer did not say that, I think: you are going beyond what he really did say.

Mr. McClymont.—I would draw a distinction between the *τὸ κατ' ἀλήθειαν, ἀγαθὸν*, and *τὸ φαινόμενον ἀγαθὸν*, the real wish of a good man which may be answered, and the wish which was not really good and which would not be answered. (*Vide* Aristotle, Ethics, Bk. 3, cap. iv. sec. 1–4.)

Mr. Masterman.—Perhaps there may not be so much difference between us as I anticipated.

Sir T. M. Lushington-Tilson.—Mr. McCaul has touched on a great variety of points, and there may be a difference of opinion as to the minor ones, but on the major, all who are old-fashioned orthodox believers will agree with

him. We are not ashamed of the conclusions to which we come when we find ourselves in company with such men as Lord Bacon, Locke, Sir Isaac Newton, and others. They felt as we feel, that it is the first axiom either in nature or in written revelation, that there is a moral Governor of the universe—an Almighty Being; and that, therefore, it is utterly impossible that there can be any real contradiction between the two books—the book of Nature and the book of Revelation. The book of Nature is not yet perfectly understood, nor the book of Revelation; and we must wait until the former has been made much more plain to us by the vast induction of facts, not yet gathered by scientific men, who are too hasty in leaping to their conclusions; for it is impossible for them to say that the theories they form to-day may not, like others previously, be found untrue to-morrow. Hence, in regard to nature, we must wait; and so also in regard to written revelation. The Church, perhaps, has not arrived at the amount of knowledge she might have arrived at in the last 1,860 years or more. She has not thoroughly understood the Bible as a whole. We see great divergencies of opinion even in our own age among theologians. Let us look, for instance, at many of the words of prophecy, which could not have been made plain before, but which are being interpreted by the events of our own day. Yet the Bible cannot be thoroughly understood until the whole prophetical period comes to an end. Hence, as Christians, we must not dogmatize too much, but must wait and see: events will unravel the wisdom of God; and when these events have occurred, we shall see that the book of Nature speaks exactly the same language as the book of Revelation. As to Genesis i., I fully agree with Mr. McCaul, that we must take up the account after the first verse; and it seems to me also that in all probability the first verse includes many changes in the eternity of the past. "In the beginning God created the heaven and the earth," and then there is a pause. It is said the earth was without form and void; and we do not know how long the interval may have been. The world may have passed through many changes, and the first verse is open to this interpretation, that it includes the whole period of these changes up to the time of chaos, and after that followed the period referred to in the subsequent parts of that first chapter of Genesis, during which there was a fresh creation. Then came the fall; and with it entered anguish and sorrow into the world of man; for man, as we know, is not now in a perfect state; he fell; and his redemption can only be provided for through the God-man who came down and took our nature.

Mr. W. N. West.—I agree more with Sir Lushington-Tilson than with Mr. McCaul. In Genesis, it is said, that "In the beginning God created the heaven and the earth"; but, though commonly understood so, it is not stated that He *created* the earth without form and void, but it *was* without form and void; in other words (and I believe this is the force of the original), it *became* without form and void.* I cannot conceive that God could have

* This point is also taken up in the "Transactions," Vol. IV. p. 237.

created the universe in a chaotic state; on the contrary, like all His other works, it must have been perfect: doubtless, it afterwards became, through some catastrophe, without form and void; in fact, the description is that of a superinduced state of ruin. And this view is strikingly confirmed by a remarkable passage in Isaiah xlv., where, in reference to the creation of the earth, it is expressly said, "He created it *not* in vain," words which, in the original, are the same as those in Genesis i. 2, rendered, "without form and void." Out of this state of ruin, then, I submit, the world was created as it is at present. Between the "beginning," and the period when the earth lay in this chaotic state, infinite ages, for anything I know, may have intervened, sufficient to account for all geological discoveries.* I do very much complain of our scientific men jumping at conclusions, and putting aside the good old Bible, for theories which have to be given up almost as fast as they are formed. Speaking for myself, I would say that all the arguments in the world, philosophical or scientific, will not convince me that there can, by any possibility, be divergence between the revealed Word and works of God, coming, as they do, from the same hand. (Cheers.)†

Mr. McCaul.—I beg to tender my best thanks to those gentlemen who have discussed my paper, and to assure them that my principal wish in

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* The fifth essay in "Aids to Faith" (Murray) deals very fully with this question.—Ed.

† The President of the British Association, at its Bristol meeting in 1869 (Professor G. E. Stokes, Cambridge, secretary to the Royal Society), concluded his address upon that occasion with the following words :—

"Truth we know must be self-consistent, nor can one truth contradict another, even though the two may have been arrived at by totally different processes; in the one case, suppose, obtained by sound scientific investigation, in the other case taken on trust from duly authenticated witnesses. Misinterpretations of course there may be on the one side or on the other, causing *apparent* contradictions. Every mathematician knows that in his private work he will occasionally by two different trains of reasoning arrive at discordant conclusions. He is at once aware that there must be a slip somewhere, and sets himself to detect and correct it. When conclusions rest on probable evidence, the reconciling of apparent contradictions is not so simple and certain. It requires the exercise of a calm, unbiassed judgment, capable of looking at both sides of the question; and oftentimes we have long to suspend our decision, and seek for further evidence. None need fear the effect of scientific inquiry carried on in an honest, truth-loving, humble spirit, which makes us no less ready frankly to avow our ignorance of what we cannot explain than to accept conclusions based on sound evidence. The slow but sure path of induction is open to us. Let us frame hypotheses if we will: most useful are they when kept in their proper place, as stimulating inquiry. Let us seek to confront them with observation and experiment, thereby confirming or upsetting them as the result may prove; but let us beware of placing them prematurely in the rank of *ascertained truths*, and building further conclusions on them as if they were."

The importance of the foregoing remarks by one who is justly called "a true scientific man," and, "one of the intellectual parents of the present splendid School of Natural Philosophers" (see "Scientific Worthies in Nature," 15th July, 1875), warrants their insertion here.—Ed.

reading it was to promote discussion and in no way to dogmatize. I wished to point out that the original seems to indicate certain conclusions, and where this is the case it is not the part of a Biblical interpreter to suppress or deny them out of compliment to science. There are one or two points which I should wish to notice very briefly; and first as to the letter read from Dr. McCann, which seemed to say that the fault of the present state of things in reference to the increase of infidelity was to be attributed to the clergy. I am ready to admit, that there is probably in the present day, as there has been at all times, ignorance among the clergy, not merely of philosophy and of science generally, but of the meaning of the original records of Scripture. But I would remind you that the clergy are still the children of the laity, and I do not think it is fair to say it is the fault of the clergy. The course of a man's reading and the bent of his mind will depend almost entirely on his early education. If a young man has a reverence for the Scriptures, if he has been taught to regard the Bible as a sacred volume, and to consider himself bound to study it while young, he will be likely to carry on that study afterwards; but if you bring up children with very little regard for the Scriptures, you have no right to be displeased at the result; and I maintain that that result is the fault not so much of the children as of the parents. If it is different now to what it has been in the past I am thankful for it, but I have my doubts as to whether there is much improvement in this respect. I should be sorry to be misunderstood as to the benefits of science; I do not wish to disparage science at all, and I admit most cheerfully the enormous debt of gratitude which we owe to it. With respect to painting and poetry, I do not depreciate them, but I say it is a thousand pities if they venture to "idealize" on Scriptural subjects: this is what I complain of. When subjects are treated of, that are taken from the Scriptures, great care I think ought to be taken to deal with them *correctly*. As to light existing before men, I thought I could not have heard correctly what Mr. McClymont said: I was greatly interested in his speech, but he said light could not exist without a seeing eye. But surely a seeing eye does not make light. Light existed before the speaker was born and will do so after he is dead. Light is a very material fact in reference to vegetation. If you put plants into a cellar they will force their way through the interstices in the flags in order to get to the light. With respect to prayer, I would advert for a moment to one instance which Mr. McClymont gave us: although I should be most ready, as we all *were*, heartily and earnestly to thank God for the recovery of the Prince of Wales, I should not consider that I had a right to say positively, that his recovery was *ipso facto* due to the prayers which were offered up in his behalf, for we have no absolute data to go upon.

Mr. McClymont.—I rather tried to help out the theory of the paper that some prayers were unanswered.

Mr. McCaul.—Yes, I know, but you put an opinion into our mouths which I for one did not at all relish. There are two other points to which I should like to draw special attention, and the first is in reference to spiritual death. I admit that there is spiritual death, and that the Scripture

records it as a very terrible thing; but I maintain that we have no data for saying that Adam was overtaken by spiritual death. The death in his case is physical death, not spiritual. If you draw an inference from the passage, "in the day that thou eatest thereof thou shalt surely die," I say that that only means, "thou shalt enter into a new condition of life, the end of which is and will be death." As to time being "immaterial," in the same page you will find that I put it rather differently. I meant to say that if we believe a certain operation proceeds from God, it does not rest upon time,—it exists in time, but it does not matter to me whether it took twenty-four hours, or years, or centuries; if it is His immediate creation, and His work, the question of time does not so much matter: this is all that I meant when I said it was immaterial. With respect to the age of the patriarchs, a gentleman made some interesting remarks with reference to the age of Methuselah. Some years ago there was a little notice copied into the *Times* from the *Lancet*. I, at the time, read a copy of it, and have it still. It gives an account of certain great ages, and the medical writer argues that after a man has attained a certain age, and has passed certain epochs, the wonder is not that he should go on living, but that he should ever die. I never felt any difficulty about the matter, but I was very much struck with that medical confirmation of the Mosaic writings. As to pre-Mosaic documents, I should concede that there probably were documents before the time of Moses. As to pre-historic man, it is not necessary now to enter upon that subject. Is the Mosaic account poetic? I think not; it is perhaps figurative, but not poetical. Lastly, with respect to the seventh day, I still adhere to my opinion. The difficulty to my mind is that there is a practical command to men to keep holy the seventh day, because God rested on the seventh day; and it appeared to me, *primâ facie*, unlikely therefore, that that should represent a period and not a day. But I am quite aware that it is often held to be a period, and I am aware that Bacon, in his essays, takes it in that sense, speaking of the ages that exist now as the *day* on which the Lord rested. I thank you again for the very kind way in which you have received my paper. (Cheers.)

The meeting was then adjourned.

REMARKS UPON THE PAPERS BY THE REV. J. H. TITCOMB AND THE REV. A. I. McCAUL.

By J. W. Dawson, Esq., LL.D., F.R.S., *Principal of McGill College, Montreal.**

I have received the proof copies of the papers recently read before the Institute by the Rev. J. H. Titcomb and Rev. A. I. McCaul; and having been invited to do so, I shall frankly give my opinions upon the subjects discussed, limiting myself, however, to a few principal points.

It would, I think, have been well had the writers more carefully considered two of the elements which enter into the discussion of the relations of the Bible to Science. I refer, first, to the essential distinction in character between the history of creation in Genesis, and other references to Nature in the Hebrew Scriptures; and, secondly, to the internal evidence with reference to the length of the days of creation.

First. The Bible abounds in illustrative references to natural objects and phenomena. I think it is the conclusion of all competent naturalists who have carefully studied these, that they are remarkable for their precise truth to Nature, and for the absence of all theoretical or hypothetical views. In these points of view, the Bible stands pre-eminent, even in its poetical books, over all other literature, ancient and modern. One can scarcely read a page of any modern poem, or literary work, without finding incorrect statements of natural facts and false hypothetical views. The Bible is wonderfully free from such blemishes. But we do not need to consider this as an evidence of inspiration. The accurate observation of men highly gifted in this respect, and living in the midst of natural objects, and the religious reverence for Nature as the work of God, sufficiently account for it, —at least, in most instances.

But with reference to the work of creation, as detailed in Genesis i., the case is far different. Here we have an attempt to reveal facts and processes anterior to the advent of man upon the earth. In dealing with such a record, we have to consider that, like Prophecy, it is either a product of Inspiration or it is of no authority; and, on the other hand, that we can compare it not so much with facts open to our senses, as with the deductions of science from these facts, and which are to be received with due caution and discrimination. In making such a comparison, it will serve no useful purpose to take low views as to the value either of Scripture or Science; nor will it serve any useful purpose to say that the Bible was not intended to teach science, because it need not in that case have committed itself to any state-

* Honorary Foreign Correspondent of the Victoria Institute.

ments on the subject; neither can it satisfy any doubt to assert, that the days of creation were intended to justify the weekly Sabbath, since that merely gives them the character of a pious fraud. Fortunately, there is no necessity to have recourse to such explanations, since it is obvious that some account of creation was required as an introduction to the monotheistic theology of the Bible. It was necessary, for example, to affirm that nothing is fortuitous or eternal, but all the work of God; also to include in this statement all the materials of ancient idolatry, whether in the heavens or the earth, and to show that the universe is a work of order and design. It was also important that any such statemants should be so accurate and guarded as not to commit themselves to any existing hypothetical views, or to be contradicted by subsequent discoveries which might be made by scientific investigation. These are the conditions which should be fulfilled by the first chapter of Genesis, and which all fair investigation of the subject tends to show have actually been fulfilled, as I endeavoured many years ago to show in my work on this subject.*

Secondly. The question whether the days of creation are intended to designate long periods of time is one which, independently of the testimony of Augustine and other writers before the rise of geology, seems to be settled by the internal evidence of the book as investigated by modern scholars. On this point I would merely mention the following considerations:—

(1.) The Hebrew *yom* does not necessarily mean a natural day. In Genesis i. the word is obviously used in two senses, designating the creative days and the alternations of light and darkness within such days. The earlier creative days could not, in consistency with the terms of the narrative, have been natural days. In Genesis ii. 4, the whole creative week is called a day.

(2.) The expression "one day," used for the first creative day, has been held, on the analogy of other Scriptural expressions, to imply a peculiar kind of day.

(3.) Many internal difficulties occur in the natural day theory; one of these arises from the interval between the creation of the man and the woman as stated in chapter ii.

(4.) In Psalm xc., attributed to Moses, and which in its style resembles his poetry as reported in Deuteronomy, one day of God relatively to human history is said to be a thousand years, and relatively to creation it may be still longer; and in this Psalm these days of God appear to be designated by the term "Olam," age (rendered "everlasting" in our translation). "From Olam to Olam thou art, O mighty EL."

(5.) The seventh day is not stated, like the others, to have had a beginning and an end; nor is God said to have recommenced His work on any eighth day. It is fair, therefore, to infer that the seventh day at least is a long period, and still continues. Our Saviour himself seems to have referred to this when He said, "My Father worketh hitherto, and I work."

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* "Archaia." Sampson Low & Co., London.

(6.) The reason given for the Fourth Commandment requires the supposition of long creative days. It cannot be meant that God works six natural days, and rests on the seventh, as we do; but it may mean that on God's seventh day we should have entered on His rest, and that our weekly Sabbath is a memorial of this rest, lost by the Fall, but to be restored in the future.

(7.) This explanation has the support of the author of the Epistle to the Hebrews, whose argument in his fourth chapter has no force unless on the supposition that God entered into a rest, or Sabbath, of indefinite duration, which man failed to enter into owing to the Fall, retaining only the weekly Sabbath as a shadow of it; but which is to be restored in Christ, who has already entered into His rest, of which the Lord's Day is in like manner a foreshadowing to us. There is also good reason to believe that the term *αἰῶνες* used with reference to the creation, in Hebrews i. 2, and in Ephesians iii. 11, refers to the creative days as long periods; and these passages, so obscure otherwise, become plain when this is taken into consideration.

Further discussion of these points will be found in the work to which I have already referred, and in Macdonald's admirable treatise on "Creation and the Fall," * probably the best book on this subject accessible to the English reader; and it may be considered as established by an overwhelming amount of evidence that Moses himself, our Lord, and the Apostle Paul, have recognized the days of creation as long periods. If so, there can surely be no advantage in adhering any longer to a mediæval literalism, which besides depriving us of the advantage of explaining the origin and true religious significance of the Sabbath and the Lord's Day, and the relation of both to God's rest and to the rest which remains for His people, places the Bible in unnecessary conflict with truths which the stones themselves have, in these days, opened their mouths to declare.

It is high time that clear and Scriptural views of these subjects were given in all our schools and pulpits, by all grades of religious teachers. If this were properly done, there would be less reason to complain that young people, when they go out into the world, find what they have been taught in the name of religion to be in conflict with what all intelligent people believe on the evidence of their senses and their reason. The blame of the resulting infidelity may not lie at the door of even infidel men of science so much as of those who should have known the Word of God more perfectly before attempting to instruct others. There are enough of errors promulgated in our day in the name of science and philosophy, to engage the attention of theologians, without placing the Bible in apparent hostility to truths which are in harmony with its own teachings.

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* Hamilton, Adams, & Co., London. See also Lewis's Introduction to Lange's "Genesis" (pp. 131 et seq.): Clark, Edinburgh.