

AN ADDRESS

DELIVERED AT THE

INAUGURATION OF THE PERKINS PROFESSOR

OF

Natural Science in Connection with Rebellation,

BEFORE THE

BOARD OF DIRECTORS OF THE THEOLOGICAL SEMINARY

OF THE

SYNOD OF SOUTH CAROLINA AND GEORGIA,

AT

MARIETTA, GEORGIA, NOVEMBER 22, 1861,

BY THE

REV. JAMES WOODROW, PH. D., M. D.

COLUMBIA, S. C.:

SOUTHERN GUARDIAN STEAM-POWER PRESS.

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INAUGURAL ADDRESS.

*Fathers and Brethren of the Board of Directors
of the Theological Seminary :*

On entering formally upon the discharge of the duties of the office into which I have just been inducted, I beg leave to express the deep feeling of responsibility which oppresses me, and of self-distrust, which would have prevented my listening to the call to it, had I believed that I was free to decide in accordance with my own opinion of my fitness. But without obtruding upon you an account of the many reasons which would have induced me to refuse it, clustering more or less closely around the one already presented, permit me to say that I did not dare to yield to them, because the Synod of Georgia, in appointing me to this office, did not act so hastily that I might have regarded their appointment as the result of accident. And hence, although I can not shake off the anxious fear that they have been mistaken in the estimate which led them to make the choice, I may not do otherwise than obey, and go forward in the path which has been set before me, trusting in the judgment of the Church Court which called me, rather than in my own; and above all, relying for wisdom and understanding upon the Infinite Source of light and knowledge.

The oppressive feeling of responsibility is greatly increased by the fact that I have been called, not to discharge the duties of an office already well known, in which the experience of many predecessors affords guidance, but to

organize an entirely new department of instruction, without a single similar chair in any theological school, either in America or Europe, to serve as a model. There is, it is true, a chair of Natural Science in the New (Theological) College of the Free Church of Scotland, at Edinburgh; but it is so different in its design from that which you have established, that it forms no exception. "The peculiar business of its course consists in an illustration of the three following branches, into which natural science may be divided: I. Synthology; II. Biology; III. Geology." And it is regarded as merely "destined to embrace a practical course of natural theology."* The task assigned me is all the more difficult on account of the various and even conflicting views which prevail respecting its nature, and the brief and somewhat indefinite instructions given in the resolutions of the Synods of South Carolina, Georgia, and Alabama, by which the chair was established. For these reasons, I wish to avail myself of this opportunity to present to you my own views as to what you have given me to do, and the mode and spirit in which it is to be done, in order that, if I have not mistaken your design, I may go forward the more confidently; and if I have misapprehended it, that I may have the benefit of your counsels and your instructions in changing, restricting, or extending my plans.

The need of some means of giving to our theological students a more thorough acquaintance with natural science, as far as it has any real or imaginary connexion with revelation, has long been felt; for it has been evident, especially during the last fifty years, that disbelief in the word of God has been relying for its support and its justification, before the reasoning world, more and more upon the several branches of natural science. The arguments

* Introductory Lecture: By John Fleming, D. D.

brought forward in defence of the truth, have often been characterized by such ignorance of the actual nature and force of the objections urged against it, that they have, not unfrequently, been injurious to the cause defended, and promotive of the scepticism attacked. This has always been the case to a painful extent, as well as at present, when perverted science furnishes infidelity with so large a proportion of its weapons. The most excellent works of many divines, in every age and every branch of the Church, have too often been marred by ineptitudes and fanciful absurdities, whenever they have touched the material works of God. But it has only comparatively recently become important that the connexion between the works and the word of God should be made the subject of special study in a theological course. It has become so now, by the increased number of points of supposed contact, and the wide prevalence of the opinion, in almost every community, and among all classes of people, that the relation subsisting is that of antagonism. Our ministers have by no means been behind the age in this field of knowledge, as has often been tauntingly said; but they have not all been sufficiently in advance of it. Here, as in every thing else which will fit them to understand fully the Word which they preach, to refute the sophisms of unbelievers, and to remove the doubts of those whose faith has been shaken, they should be, if possible, far beyond those whom they would teach.

It has been perceived, by all who can appreciate the amount of study and investigation involved, that the discussion of these topics embraces too wide a range to suffer it to be attached, without great detriment, to existing departments of instruction. It has been wisely thought that it would be better to leave it untouched, than to place it where it could not receive proper attention from either instructor or instructed; for it has been chiefly imperfect,

one-sided views that have given rise to the wide-spread belief that there is antagonism. It would only have aggravated the evil to have intrusted the new department to any one who was already fully occupied, as each professor should be, with the appropriate duties of his own chair.

The first step in our Church Courts, looking to the supply of the want so generally felt, which led to any definite result, was taken by the Presbytery of Tombeckbee, in the autumn of 1857; when the following preamble and resolutions, introduced and warmly supported by the Rev. Dr. James A. Lyon, of Columbus, Mississippi—to whom this chair owes so much, from its inception to its final establishment—and as warmly supported by the Rev. Richard S. Gladney, of Aberdeen, were unanimously adopted, viz.:

“Whereas, We live in an age in which the most insidious attacks are made upon revealed religion through the natural sciences; and as it behooves the Church, at all times, to have men capable of defending the faith once delivered to the saints, therefore,

“Resolved, That this Presbytery recommend the endowment of a professorship of the natural sciences as connected with revealed religion, in one or more of our theological seminaries, and would cheerfully recommend our churches to contribute their full proportion of funds for said endowment.

*“Resolved, That the same be brought before our Synod (of Mississippi) at its next meeting for consideration.”**

The Synod of Mississippi subsequently, at its meeting in 1858, unanimously approved this proceeding of the Presbytery, and “cordially recommended the same to the consideration of the next General Assembly.”

* Southern Presbyterian Review, Vol. XII., p. 182.

In the mean time, the attention of the Hon. Judge John Perkins, of "The Oaks," near Columbus, Mississippi, was directed to the subject, by frequent conversations with his friend and pastor, the Rev. Dr. Lyon. Already fully convinced of its importance, his purpose to coöperate must have been strengthened by the illustration before him, in the neighboring city of Columbus, of the use made of the natural sciences by sceptics, and of the great value of a studied acquaintance with these sciences, and their true relations to revealed religion, as evinced in the triumph of his pastor over all unbelieving assaults. Judge Perkins had previously determined to consecrate a princely sum to the purposes of theological education; and now his resolution was taken to devote a portion of it to the establishment of the proposed professorship. He munificently offered, first, the sum of thirty thousand dollars for its endowment in the Theological Seminary at Columbia; and subsequently, supplemented this amount with ten thousand dollars more, that the chair might be amply and generously sustained. The Board of Directors most gladly accepted the princely offer; and, on the 15th of January, 1859, the arrangements respecting the donation were consummated; the Seminary having been aided here, too, by the invaluable services of the same sterling friend to whom it had been so deeply indebted at every other step.

The written instrument of gift, of the above date, conveying the sum of fifty thousand dollars to the Seminary, of which twenty thousand dollars was for other purposes, "*Witnesseth*, That whereas the said John Perkins is anxious and desirous of making an investment of funds during his life, which will be a permanent source of good to his fellow-creatures after his death: and whereas he is fully satisfied that the greatest good in his power to bestow upon his fellow-men may be effected by and through the Board of Directors above mentioned, in the manner, way, and under

the restrictions hereinafter mentioned and stated: Now, for and in consideration of the premises, the said John Perkins hath given, granted, and donated, and doth by these presents give, grant, and donate, unto the said Board of Directors, and their successors in office, the sum of fifty thousand dollars;" * * * * "under the following conditions, purposes, objects, plans, restrictions, and stipulations; that is to say: First, as we live in an age in which the most insidious attacks are made upon revealed religion through the natural sciences; and as it becomes the Church, at all times, to have men capable of defending the faith once delivered to the Church, it is the object and design of the said John Perkins, and it is hereby ordered, and directed, and made, by these presents, one of the conditions, restrictions, and stipulations of said gift, that thirty thousand dollars of the same shall be vested, as a permanent fund, for the endowment of a professorship in said Theological Seminary, of the Natural Sciences as connected with Revealed Religion."* In October, November, and December, of the same year (1859), the Synods of South Carolina, Alabama, and Georgia, in accordance with your recommendation, adopted the following resolution:

"Resolved, That in accordance with the conditions annexed to the generous donation of Judge Perkins, there be added to the existing departments of instruction in the Seminary, a chair, to be entitled the Perkins Professorship of Natural Science in connexion with Revelation; the design of which shall be to evince the harmony of science with the records of our faith, and to refute the objections of infidel naturalists."

And thus the establishment of the chair was completed; and that, without trenching upon the ordinary resources of

* Minutes of Synod of South Carolina, 1859, p. 43.

the Church; but attended, rather, by such a consecration of wealth to the service of God as is well fitted to stimulate others to devote, in a similar manner, freely, and during their life-time, and while that which they give is still their own, the substance which they have received from the bountiful hand of God. To Mississippi, exclusively, is the Seminary indebted for it; inasmuch as it originated in the efforts of Dr. Lyon, in the Presbytery of Tombeckbee; it was cordially recommended by the Synod of Mississippi; and its ample pecuniary basis was provided by the distinguished citizen of Mississippi, whose honored name it bears. Thus, immediately after the Synod of Alabama had adopted the "Seminary as their own, to cherish and care for, support, help, and encourage it," the sister State on her western border made good her claim to it as her own, too, in an eminently practical and praiseworthy manner.

The Synod of Georgia, to which belonged the choice of the professor, postponed the election for a year, assigning as the reason, that the Synod "feels so deeply the responsibility of proceeding to an election which will be final, and which will involve so much the future character of our Theological Seminary," that it "decides that it is for the best interests of our Church to pause, and postpone an election to said professorship, until our next regular annual meeting, in 1860." At that meeting, they made their choice. And now, Fathers and Brethren of the Board of Directors, though with many misgivings, and with anxious solicitude lest I prove unable to occupy properly the position assigned me, I have obeyed the call, and have come to ask your further counsel for my direction, if I have in any respect failed to understand the designs of the Church.

The general design is evident enough: but there are at least three methods by which it may be executed; and hence arises the doubt: for it may be intended that each

shall receive equal attention, and the special objects of each be aimed at; or only one of them, to the exclusion of the others; or one chiefly, and the others subordinately. In the first place, the harmony in question may be evinced by showing that science proves the existence of God, and that He has attributes identical, as far as she reveals them, with such as are ascribed to Him in His word. From the observation, both of the "general order prevailing in the material world," and of the "special adaptations" of objects to the purposes which they are to serve, the being and the unity of God may be inferred, and also His wisdom, power, and goodness. If we proceed in this direction, the work will be to present the outlines of Natural Theology, as ordinarily understood, and to compare its doctrines with those of Revealed Theology: to develop the Apostle's declaration, that "the invisible things of God, from the creation of the world, are clearly seen, being understood by the things that are made, even His eternal power and Godhead"; to examine how the heavens, and all His other wonderful works, "declare the glory of God."

In the next place, the harmony may be evinced by observing the analogy which subsists between nature and revelation, in other respects than those which it belongs to natural theology to consider. From the analogy observed between them, from the "identity of their style," and from the similarity of the difficulties in each, it becomes evident that both have proceeded from the same hand. In pursuing this course, natural science is found to present much, which, while it might be presumptuous to say that it confirms the truths of revelation, at least illustrates them, and enables us to understand them more clearly, to grasp them more firmly, and to overcome objections which might otherwise be perplexing. When we have been habituated to contemplate the almost illimitable extent of creation, and its almost immeasurable past dura-

tion, which science makes known, the words, infinite and eternal, are of vastly grander significance to us, although we still utterly fail to comprehend them in their fullness. When we have been listening to the lessons of science concerning the care which the Creator takes of all his creatures, down to the minutest, and those which we so often proudly regard as beneath our notice, we must find it easier to understand the lessons of the Word concerning His constant provident watchfulness in our behalf. When we have become familiar with the numerous interruptions of absolute uniformity in the flow of events in the history of our earth, and with the beginnings of new orders of things, which science reveals to us, so entirely independent of the antecedent ordinary course of nature, the objections of the subtle sophist to the possibility of the miracles by which the Word is authenticated, can not give us any uneasiness; for they are too palpably inconsistent with what we thus come to know of other departments of God's government. We are, indeed, rather led to anticipate that there will be in the moral world extraordinary events, which we can not assign to ordinary causes, just as there have so often been in the material world. Science further illustrates, in numberless ways, many other truths of revelation; and when it fails to do this, when it fails to throw light upon the mysteries contained in the Word, it presents us with other mysteries of its own, which must, at least, effectually keep us back from the folly of rejecting the Word, because of its sayings dark and hard to be understood.

In the third place, it may be the design of the professorship to evince the harmony only where it has been doubted or denied, or where opinions prevailing among scientific men either are, or are supposed to be, inconsistent with our sacred records; in other words, to scrutinize the nature and the force of current and popular objections to

the Scriptures; to meet them, and to set them aside, by proving that they spring either from science falsely so called, or from incorrect interpretations of the words of the Holy Bible. This would involve a careful study of the fundamental principles of the various branches of science from which the objections are drawn, and of their details, carried far enough to enable one to judge correctly of the amount of truth in each objection. It would involve, further, the careful study of the principles of biblical interpretation, as far as these relate to the mode in which the works of God are spoken of. The comparison of the results obtained thus, if the processes have been properly conducted, must inevitably evince entire harmony, or, at least, the entire absence of discord.

Now, it is this last which I regard as constituting the field on which most labor is to be expended; not that the first two are to be wholly neglected: but this chiefly embraces the duties of the professorship.

If this view is the true one, it will be proper to look more closely at some of the details included in the plan. What, then, are some of the leading points of supposed antagonism between science and revelation?

It is affirmed, on the one hand, that the Sacred Scriptures explicitly teach that the heavens and the earth, embracing the whole material universe, were brought out of absolute non-existence not quite six thousand years ago; and that, from the time when matter began to exist, from the first beginning of creation, until the creation of the first human being, not quite six days elapsed; that the work of creating and preparing this earth to be the abode of man, and of creating all animals that have ever existed, with man at their head, was begun, carried on, and ended, within the first six days of time. On the other hand, it is maintained that we learn, from the investigation of the structure of the earth, and of the causes by which the peculiarities of

its structure have been produced, that, instead of six days, the whole period that has elapsed since the creation of man is an exceedingly minute portion of the time since the first animals, whose remains still exist, were created; and that the earth had been in existence during a period immeasurably beyond our power to measure, prior to the creation of the first living being that has left any trace of its having been an inhabitant of the earth; that the creation of man and contemporaneous animals is really one of the most recent events in the earth's history; that the world, during almost inconceivable periods of time, had been preparing for man's abode; during part of which time, it was apparently without life, and, during the rest, it was the dwelling place of successive races of organized beings, not one of which remained alive when man received it, perfectly fitted to be his home.

Intimately connected with many of the facts involved in the discussion of this point, is the question relating to the introduction of death into our world, and even into the universe. It is evident that those who maintain the views last presented, can not believe that there was no death in the world until after man had sinned. They further insist that we may be convinced that man's sin had nothing to do with the death of the lower animals, by an examination of the structure of the teeth, claws, organs of digestion, and other parts of existing carnivorous animals, which were created at the same time with man. They receive with incredulity the suggestion, that the untold myriads of animals, which they call pre-Adamic, perished in anticipation of man's sin; and they utterly reject, as equally inconsistent with natural history and the Scriptures, the supposition that the carnivorous structure may have been the result of a modification of that previously belonging to graminivorous animals. Opposed to this is the belief that the Scriptures teach that death was utterly unknown

before the fall of man; and that when we read that "by one man sin entered into the world, and death by sin," not man's death alone is spoken of, but all death; the death of the simplest and minutest animalcule, as well as of the sinning lord of creation.

Another instance of antagonism is furnished by the opposite views respecting the Noachian deluge. The Bible, we are told, teaches, most unequivocally, that the waters of that deluge spread over the whole earth, and that they stood not less than fifteen cubits above the highest summits of the Himalayas, the Andes, the Rocky Mountains, the Alps, and the loneliest desolations of the icy Arctic deserts, never seen by human eye, as well as the highest hills and mountains of Mesopotamia, and the adjoining regions, to which man's habitations may have extended: and that the whole earth, with all its distinct zoölogical regions obliterated for the time, was entirely destitute of every breathing thing, except those preserved with Noah, and his sons, and their wives, in the ark. Others find in nature reasons which absolutely forbid their belief of such propositions. They find that the number of animals which would need the ark's protection is far beyond its capacity; that if it were not, passing by the impossibility of all existing under the same climate for a whole year, without a constant miracle, they find the geographical distribution of animals to be such that their collection, from remote continents and islands of the sea, from the burning inter-tropical deserts, and the ice-bound fastnesses around the poles, and, still more, that their re-distribution to their present homes, involves an expenditure of miracle which is incredibly disproportionate to the end in view; the destruction of corrupt mankind by a flood of waters.

The question of the unity of the human race brings to view another point of direct antagonism between some votaries of science and all believers in the Bible. The

Bible is held to teach, with a clearness that can not be misunderstood, both directly and by implication, that the whole human family is descended from the single pair, Adam and Eve; the inspired Apostle's saying is quoted, "God, that made the world and all things therein * * * hath made of one blood all nations of men for to dwell on all the face of the earth:" and this oneness is necessarily implied in the doctrines of original sin, the federal headship of Adam, and the atonement of Christ. It is impossible to admit any doubt as to this unity, and at the same time believe in the truth of the most vital doctrines of our religion. And yet, it is most strenuously maintained by many, of no small repute in the scientific world, that numerous branches of knowledge conspire to prove this dogma false, and to demonstrate the diversity of human origin. The white, black, red, yellow, and brown races, with many intermediate, are held to be distinct species of animals, descended from different ancestors; closely allied to one another, it may be, but not more so than many species of the lower animals, universally admitted to be distinct. This is supposed to be demonstrated by the diversities in their anatomical and physiological characteristics, and by the difference in their mental constitution; by the constancy of these diversities, as proved by pictures on the monuments of Egypt; by the determination of "the bounds of their habitations" by natural laws, just as rigidly as the bounds of the habitations of any other animals. For similar reasons, it is further maintained, not merely that the human genus has descended from many pairs of ancestors, but, also, that these were distributed geographically at the time of their introduction, as we now find their descendants.

In support of these doctrines, and others which have some connexion with natural science, several other branches of knowledge are appealed to continually; and the considera-

tion of these, as far as they are supposed to affect such doctrines, and, therefore, the truth of the Bible, may be fairly regarded as coming within the confines of this department; all the more reasonably, since they are, as regards their connexion with revelation, always classed in the popular mind with the sciences which belong to it under a stricter definition of its terms. Of this nature is a knowledge of Egypt, and her monuments and their inscriptions, which are represented as teaching many a lesson totally irreconcilable with our sacred records; and a knowledge of the antiquities of the Chinese, the Hindoos, and other Eastern nations, whose established chronology, it is claimed, sets aside, by irrefragable proofs, that of the Hebrew Scriptures as entirely worthless, the fabrication of some modern sciolist. Indeed, the whole subject of chronology, as far as it is not included within the department of biblical exegesis, and every part of archæology, with a similar exception, would, if this extension be just, also claim investigation from this chair. It would involve too minute details, if the attempt were made to enumerate the points of opposition which are alleged to exist in this direction. I will mention but one, which clearly illustrates the necessity of embracing the subjects just specified. As before stated, it is held that the Bible teaches that man was created less than six thousand years ago. In opposition to this, we are told that, although man was introduced at a late period of the earth's history, he has been in existence not less than from thirty thousand to one hundred thousand years; and that this has been proved by the archæological monuments and the authentic chronology of many nations, no less than by geology and palæontology.

These are some of the questions, showing the nature of all, which I regard it as my chief duty to examine and to discuss before the classes in the Seminary. What is the method to be pursued in doing this: in what spirit are the

investigations to be carried on: and what results may be anticipated?

It is evident that it will be impossible to ascertain whether science and revelation agree or disagree, without an intimate acquaintance with both, as far as they are to be compared. To gain this, then, would seem to be the first thing to be done. While thus engaged, the most untrammelled freedom of inquiry must be allowed; and on both classes of subjects, our decisions must be regulated by their proper evidence. In this preliminary investigation, we must neither be governed in our views of natural science by what we may have believed to be taught in the Bible; nor, on the other hand, must we do violence to the words of the Bible, under the influence of our belief in any supposed teachings of science. There must be the most unbiassed readiness to accept as truth whatever is proved. And yet, at the same time that we advance with the fullest liberty, it should be with the profoundest humility and distrust of our own powers, joined with the deepest reverence for all that God makes known to us, both in His works and His word. Under the influence of such feelings, and proceeding with the firm conviction that truth, like its Author, is ONE, we can hardly fail to make progress in all attainable knowledge; while we will be kept from the folly of believing that there are real inconsistencies, demonstrating error on one side or other, merely because we have not succeeded in comprehending the actual mode in which the different sections of the truth are related to each other. Believing firmly and cordially that every part of the Bible is the very word of God, and that, therefore, every part of it is absolutely true, in the sense in which it was the design of its real Author, the Holy Spirit, that it should be understood, I also firmly believe that nothing will be found inconsistent with it in the established teachings of natural science: I do not say, of nature; for with my unwavering confidence in the truth of the Bible, I

would regard that as a mere truism, the utterance of which would be superfluous; but, of natural science, as it is expounded by its own votaries, and as its propositions are determined according to its own laws of investigation. Contradiction would necessarily imply a want of truth some where; but this, I think it may be made to appear, by the most rigorous reasoning, does not exist. And in all cases where there are still unadjusted apparent differences, which, it must be admitted, do exist, it can be shown that it is infinitely more probable that they result from imperfect understanding of the meaning of the Word, or of the bearing of the scientific truth, or both, than from any real inconsistency. There are independent propositions in intellectual and moral science, and even in theology, which are seemingly inconsistent, and almost contradictory; and yet we never think of abandoning our belief in any of them, if each stands on a firm basis of its own. In no case do the imperfectly understood relations under consideration present more serious difficulties than these, and very seldom as serious. I further believe that there is no seeming discrepancy, where the denial of the truth on either side would not involve vastly more perplexing embarrassment than its reception on both. We have nothing to fear for the records of our faith from the freest examination in every direction. Let antiquity be searched; let the created universe be scrutinized, as far as the human intellect, so gifted by its Creator, can reach: though in the process we will see many errors which have clung around our own minds, and which may have prevented our seeing the meaning of the Divine word, that Word will derive continually new lustre from every advance in knowledge, and unbelievers will at each step be more and more without excuse for their irrational doubts.

In seeking to obtain and to impart a suitable acquaintance with natural science, it will be proper, first of all, to examine the logical and philosophical basis upon which its

branches rest. In the analysis of every science, we come at last to certain principles on which the whole fabric is founded, and on whose truth the entire trustworthiness of the whole depends. These first principles can not, in any case, be established by ordinary reasoning; but must be such that they command the assent of every rational being, as soon as they are stated and understood. After having carefully scrutinized these first truths, and rejected all that can not endure the proper tests, and determined the limits of the applicability of such as are retained, it will be necessary to pass in review the doctrines of the several sciences concerned, and to weigh the evidence in favor of each, and the objections against each, so as to ascertain, as accurately as possible, the exact amount of confidence that is to be placed in them. We will, doubtless, in such an examination, find much that we must receive as certainly true; much that is certainly false, or, at least, wholly unproven; with much that presents such evidence as to leave us in doubt. Under the first head, I would place the teachings of geology respecting the antiquity of the earth, and the gradual nature of the processes by which the Creator brought it into its present condition: under the second, I would place the teachings of such ethnologists as deny the specific unity of the human family, and of those who maintain the extreme antiquity of man: under the third, I would place all that affects the character and extent of the Noachian deluge.

In all these preliminary discussions and investigations, only such evidence and arguments as strictly belong to science should be admitted; and these should be allowed to produce their legitimate effects, without regard to possible difficulties in which our conclusions may entangle us. Our cross-examination of the witness should be conducted with the design of learning exactly what he knows; of eliciting this knowledge from him unbiassed by any fear of evil to himself in consequence of his utterances, or of evil

to either of the parties, since we examine him as judges, and not as advocates. And we must not estimate the truthfulness of the witness himself by the correspondence of his testimony with our preconceived notions; but these we must change as his evidence requires, if his character for undoubted veracity has been previously established by the proper tests.

In the next stage of our inquiry, the absolute truth of the ascertained text of the Bible is assumed, as having been demonstrated in other departments of instruction; and the sole object here will be the determination of its meaning, by the application of judicious and established rules of interpretation. Here, as before, it will be grossly improper to attempt to make the language bear any construction inconsistent with these rules; to torture it into accordance with our preconceived opinions of its meaning, or with what we believe to be true in science. In all interpretation, we ought, assuredly, to have recourse to the fullest attainable knowledge of the subjects spoken of, derived from every source. And while it is true that we must interpret Scripture by its own laws, it is not less true that we can apply these more efficiently, and with less liability to error, in cases where we have some previous acquaintance with the topics introduced. We are clearly aided in understanding all that relates to the tribes and nations mentioned, by a knowledge of their manners and customs; by geography, in all geographical allusions; by astronomy, where the stars are concerned; by zoölogy and phytology, where animals and plants are alluded to; and so in other cases. We are not to try the truth of the Bible, certainly, by its supposed agreement or disagreement with the teachings of these sciences; but we may, and we must, accept all the aid that they can bring us. This is not denied, with regard to the subjects just mentioned; but when other sciences, equally well established, are added, there is sometimes immediate dissent. This

dissent would be quite justifiable, were the attempt made to force the Bible to speak in the language of science. To do this would be quite as unreasonable as the attempt, which is so frequently made, to force science to utter that which will accord with our views of the meaning of the Bible; and it should be strenuously resisted. But I see no reason why we should not accept this external assistance in doubtful cases; nor do I see why the assistance should be accepted, where some scientific principles are concerned; and rejected, when it is offered by others equally well proven. If it be objected to these views, that if science can be justified in its rejection of aid from the Bible, by the same reasoning it may be shown that the Bible should refuse all aid from science; it is replied that this would be just, were the question of the truth of the Bible on trial; that must be determined by rules of evidence with which natural science can have very little to do. But the objection is manifestly without foundation, when we remember that the natural sciences are based upon principles which it would be foreign to the design of the Bible to teach, and upon material phenomena which it would be unreasonable to expect to find recorded there in scientific form; while, on the other hand, the incidental allusions, throughout the sacred volume, to natural objects, whose very incidental character it is that renders them unavailable to science as formal descriptions of phenomena, presuppose some knowledge of that to which reference is made, and make necessary the application of that knowledge, before the allusions can be understood.

When we come, in the third stage, to compare the results of these two independent lines of inquiry, we ought to expect to find perfect accordance only in case we are perfectly certain that we have reached the absolute truth in science, and that the meaning which we attach to the language of the Bible is indubitably the true one. But how far are we from this position in both directions? As we

have seen, there is much that passes under the name of science that is only probable, at the best; and much that, while it seems possibly true, as long as it is viewed by itself, is shown to be wholly impossible as soon as the scope of vision becomes broader. And who will say that it is otherwise with our interpretations of the Bible? Not, certainly, that there is any doubt as to its meaning when it describes the relations of the Almighty Creator to the universe, His handiwork; or the ruined and miserable condition of man, the sinner; or the coming, and the life, the death, the resurrection, and the ascension of our blessed Divine Redeemer; or the way in which the gift of salvation is imparted to man, and the agency of the Holy Ghost, the third person of the Trinity, in sanctifying his soul; or the blessedness of the redeemed, in that presence where there is fullness of joy. In all that relates to these points, and to all the attributes of God, which He intended that we should know, the meaning of the Word is so clear that a wayfaring man, though a fool, need not err therein. But, whenever we turn aside from these broad tracks of light, we find that the diversity of view on every subject, among those who receive and love the saving truth, proves but too clearly how difficult it must be to reach the exact meaning of that which is revealed. How much more must this be the case with regard to material objects, to which the references are but casual, and without any direct bearing whatever upon the main subject of discourse? Who will venture to assert dogmatically that he has found the exact and full meaning of that which is thus casually introduced? And yet, such is the character of a large portion of the points by which revelation is supposed to be connected with science.

With regard to the record of creation, it may fairly be questioned whether it is possible to convey to us in human language an intelligible account of its mode and its details. To be intelligible, it must be conveyed in language whose

meaning has been previously determined by common use. This determination has been effected by the application of particular words and expressions to known objects and processes. Now, it may well be supposed that the work of creation is so entirely different, in every respect, from any thing which it is possible for us to observe, and thus become acquainted with, and from the ordinary course of change, and the relations in which material objects stand to each other and to intelligent beings, on all which language is founded, that a knowledge of its details can no more be communicated to us than a knowledge of the nature and properties of light can be communicated to the blind. But, however this may be, there is no difficulty in the way of imparting a knowledge of the fact of the creation, and of all its moral bearings, as far as they affect us. But when we seek to go farther, the state of the case may be analogous to our knowledge of the trinity of persons in the Godhead; the fact we know, and its moral import to us; but the exact nature of the personality, and the mode of the union, we do not know; and it is more than probable that these could not be made known to us by human language.

In view of these considerations; the imperfect character of science; the doubt which must hang around many of our interpretations of the Bible, on account of the brief, and therefore obscure, descriptions to be interpreted; and the probability that language may not be adequate to convey the ideas for which we may be looking, and which we may infer it is no part of the design of the Holy Spirit to present; we may expect to find many unadjusted differences, instead of perfectly established harmony. When the comparison is made in the manner described, our surprise will be to find that there are so few apparent discrepancies; and, further, that the number of points of certain connexion of any kind is so small. Complete success, in the work you have given me to do, would be attained, if the real

relationship were positively determined in every case, and this were to be shown to be perfect identity or visible harmony. Whether or not this will ever be attainable, I know not. I, at least, do not hope for it, and I will regard myself as having discharged my duty, and fulfilled all reasonable requirements, when I succeed in presenting one or more possible and probable views of the existing relations, compatible with belief of the truth of both; and have proved that the reception of these involves infinitely less difficulty than any doubt of the truth of the Bible: thus showing, with regard to each point in succession, that it furnishes no one with the slightest excuse for rejecting that which we love and confide in as the word of God.

In conducting such investigations, and in defending the word of God against attacks based upon natural science, we ought to be continually on our guard against a dogmatic adherence to opinions which may not be well founded, and the denunciation as infidel of whatever differs from our own; and, also, against a facile acceptance of every novel and attractive hypothesis which may spring up in the field of science. We are warned of the danger to which we are here exposed, by the history of past controversies, and of embittered contests between interpretations of the Scriptures and views of nature, all of which are now acknowledged to be erroneous. The chief danger seems to have arisen from a disposition which has manifested itself in every age, and which, unhappily, too often evinces its continued existence up to the present day, to regard every mention of material objects as couched in the current scientific language of the day; and from the groundless belief that the sacred volume, besides being fitted to accomplish its chief and highest ends, is also a text-book containing the whole body of scientific truth of every kind, as well as the most authentic and instructive history of human affairs, and the collection of the sublimest and sweetest strains of poetry in existence.

I confess myself unable to understand how a proposition can be theologically true and scientifically false, when both the theology and the science are accepted as true ; but this does not prevent my perceiving that the statement may be true, when understood in one sense, and false, when understood in another ; and the consequent impropriety of attributing the one meaning to it, when the other is designed. If any one tells us that the sun stands still for a certain period in the winter, and again in the summer, we would hardly be justifiable in replying that there is a gross mistake implied in the assertion ; that he must be ignorant of modern astronomy ; that it stands still all the time. And should we have reason to receive the statement as certainly true, we would not think of making it the basis of a new astronomy, of which one of the principles would be, that at certain periods of the year, called the solstices, the sun is in a state of absolute rest, and during the rest of the year, it is in constant motion. If, in a case like this, we are willing to ascertain the meaning intended, surely we should be equally careful in interpreting the word of God ; and should avoid taking as a formal scientific explanation of a phenomenon, that which is merely a description of it in ordinary language. Although this principle is so reasonable that no one would ever think of calling it in question, it has been in practice sadly neglected. Systems of natural science have been invented in direct violation of it ; for the support of which, not only have the allusions to nature in the narrative portions of the Bible been quoted by the inventors, but also the boldest figures of its most impassioned poetry.

The danger in question exhibits itself in two forms. In the one, there is an eager desire to bring, to force, if need be, the sacred text into accordance with the last doubtful utterance of science, and an impatient contempt towards all who will not at once accept as demonstrated the newly discovered harmony. In the other, although there is pro-

fessed a distrust of all natural science, there is a no less real accommodation of the interpretation to the somewhat antiquated and distorted form of science which has reached the less educated classes of mankind; and this is represented as interpreting the Word by its own light; assigning to it just such a meaning as it would seem fitted to convey to the unlettered, unbiassed mind of a plain, unsophisticated, honest inquirer after truth. In whatever form it may appear, we can not be too careful in guarding against its influence; whether it would lead us to commit the Word to new hypotheses on the outskirts of science, in the region of the undetermined, or to old guesses, which have long been exploded and abandoned. Profiting by the lessons of the past, we will require ample proof of the incorrectness of an interpretation which has long been sanctioned by devout men of learning, before we give it up; and we will scrutinize, with jealous care, the evidence by which all new theories are sustained, affirming new modes of connexion; and we will hesitate long before we adopt them, in the hope that we may avoid changes which may so easily be used to bring discredit upon that which we most highly prize. But, while thus cautious in the examination and admission of all professed friends, lest they be enemies in disguise, and lest they become an element of weakness, if not actual traitors, there should be equal care taken to avoid the other extreme, of rejecting, with scornful contempt, all proffers of alliance and coöperation, and thus doing what we can to drive those who may be friends, or at least neutrals, into the ranks of the enemy. This, too, has been done, to an unfortunate extent, in all ages of the Church. There has been too often a disposition to repress all freedom of inquiry, and to denounce its results, without any impartiality of examination, as opposed to the letter and spirit of revelation. The day when the instruments used in restraining such freedom were material, has passed away; but, unhappily, others are

still used, which sometimes inflict not less pain. There still exists too much of the old spirit in the purest branches of the Church of this day; a spirit that would crush all progress in science, if such progress disturb, in the least, cherished views which may be without real foundation in the Bible, by the employment, not now of material instruments of torture, but by that which has with too much truth been denominated "*odium theologicum*." This is utterly at variance with the spirit of Christianity and its divine charter. And it is at variance, also, with the general practice of believers in the Bible; for with regard to most subjects, the utmost encouragement is given to the seeker after increased knowledge; and very properly, since every new discovery is found to be an additional illustration of the glory of God. Such encouragement should be given to every inquiry after truth. Not merely should the inquirer be tolerated; but he should have reason to know that he is regarded with approbation, and that his results will be received with candor, while they are subjected to all becoming tests, before they are adopted as true; and that his name will not be cast out as evil, he will not find himself classed with unbelievers, because his views may at first sight seem to be inconsistent with received truth. Let the Church show herself the patroness of learning in every thing, as she has done already in most things; and let her never be subjected, by mistaken friends, to the charge that she fears the light, and can sustain her claims only where this is partially obstructed. Let her, through all her members, exhibit that love for the truth on every subject, which is some times directly forcibly inculcated in the Holy Scriptures, and which is so consonant with their spirit throughout.

This, then, in my opinion, is the spirit by which the incumbent of the professorship should be actuated; these are the objects to be sought, and the plan to be pursued, and the results to be expected. Direct confirmation of

the truth of revelation is not looked for; it is not needed. You can not hope to render more firm the foundation of the mountain of granite. But the fogs which hang around its base, and obscure its immovable nature, and distort, to the beholder, the symmetry of its acclivities, may be dispelled, and thus its solid foundation and true proportions be brought more clearly to view. This, I believe, the faithful discharge of the duties belonging to this chair will tend greatly to effect; success in this will constitute its triumph and its glory.

Complete success I dare not hope for at once; but I shall labor for it with at least faithful industry, and an honest desire to attain and set forth all the truth. And I look to you, and to the beloved Church which founded the Seminary of which you have been constituted Directors, and whose honor and purity should be so jealously guarded, to aid me by your counsels and your prayers, that I may be kept from teaching aught but the unadulterated and unperverted truth. And above all, I look to the Head of the Church, and to the Creator of the Universe, and to the Author of the Word, to the Triune God of truth, for that wisdom which cometh from Him alone, and by the aid of which alone need I hope to glorify Him in the position to which, I trust, He has been calling me by the voice of His Church.