

Hopkins (J. H.)

RELATIONS OF SCIENCE AND RELIGION.

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DISCOURSE

DELIVERED IN ALBANY DURING THE SESSION OF THE

AMERICAN ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE,

BY R. F. REV. J. H. HOPKINS, D. D., LL. D.



THE NATIONAL ACADEMY OF SCIENCES

DISCOFUSE

REPORT OF THE LEGAL COMMITTEE

AMERICAN ASSOCIATION

OF SCIENTISTS

AT THE ANNUAL MEETING

AT THE UNIVERSITY OF CALIFORNIA

BY JOHN H. HOPKINS, D. D.

ALBANY
AND BOSTON: PUBLISHED BY THE NATIONAL ACADEMY OF SCIENCES

THE RELATIONS OF SCIENCE AND RELIGION.

A

DISCOURSE

DELIVERED AT THE

REQUEST OF THE LOCAL COMMITTEE

OF THE

AMERICAN ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE,

IN

ST. PAUL'S CHURCH, ALBANY,

ON

SUNDAY, THE 14TH AFTER TRINITY, AUGUST 24TH, 1856.

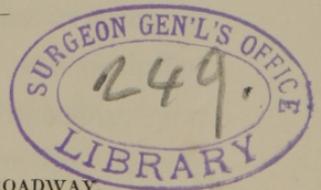


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ALBANY:

VAN BENTHUYSEN, PRINTER, 407 BROADWAY.
1856.



DISCOURSE.

I TIMOTHY VI, 20, 21.

OPPOSITIONS OF SCIENCE, FALSELY SO CALLED, WHICH SOME PROFESSING, HAVE ERRED
CONCERNING THE FAITH.

I come before you, my brethren, on the present occasion, by request of the Local Committee of the American Association for the Advancement of Science, which has commenced its sessions in your city. They have thought it right and good to avail themselves of this opportunity to mark their allegiance to the Gospel, by inviting several of its ministers to deliver appropriate discourses on the Relations of Science and Religion. And they have done me the unexpected honor of placing my humble name upon their list. I regret, however, that the letter of the Secretary, conveying the invitation, did not reach me until the evening of last Friday. The following day was occupied mainly by my journey. And, therefore, you will make allowance, I trust, for the defects arising from the necessity of a very hasty pre-



paration. I should have preferred to send an apology, if there had been time for the committee to provide a substitute. But as this was clearly impossible, I thought it my duty to give them the little that was in my power, rather than disappoint their kind wishes altogether.

My subject was marked out by the letter of the Secretary, namely, "The Relations of Science and Religion." And I was gratified, as you may well believe, to find in that letter the admirable declaration, that "Science worships at the shrine of religion, and places there her highest trophies." This statement is in perfect harmony with the words which I have chosen for my text. For here, St. Paul speaks of "Oppositions of science, falsely so called, which some professing, have erred concerning the faith." It is quite evident that if the science which opposes the faith be *false*, as the apostle plainly considers it, *true science* must be the friend and handmaid of faith, by necessary implication. And this is the just position of the whole matter. The God of nature is the God of grace, and between His Word and His Works there cannot be any real contrariety.

Such being the scope of my theme, I shall consider the relations of true science to religion, in the first place, and then point out the oppositions of science *falsely so called*, to the faith of the Gospel. But in order that my audience may be enabled to apprehend, rightly, the subject of discussion, it will be proper to premise an answer to the question, What are we to understand by the term, Science?

The word, Science, is derived from the Latin, and strictly signifies Knowledge. But although the word is very old, yet its received meaning in our language is modern, and much more limited than its etymology would seem to warrant, since it is confined to that kind of knowledge which is not only founded upon clear, certain, and self-evident principles, but is also reduced to a regular system, and is mainly conversant with those works of God which are the objects of the senses. I say *mainly*, because the science of Metaphysics treats on the mind and the soul, and the science of Mathematics goes deeply into abstract quantities, neither of which are the objects of the senses. As a general rule, however, the word is applied most currently in the way which I have stated. We are not in

the habit of calling any person a man of science, if he be only known as a metaphysician, or an algebraist. For the vast advance of what are termed the Natural Sciences, within the last century, has given them such a preponderating influence, that we rarely employ the word in any other relation.

During the middle ages, there were seven branches of knowledge taught in the schools of the highest character, which were called indifferently the Sciences, or the *Liberal Arts*, namely, Grammar, Logic, Rhetoric, Arithmetic, Geometry, Astronomy, and Music. Of these, however, there is only one, Astronomy, to which the term Science would now be applicable. Grammar, Logic, Rhetoric, and Music are *Arts*, not Sciences. While Arithmetic and Geometry are properly parts of Mathematics, which include the whole science of numbers and quantity. Since those ages have passed away, the list of the sciences has been largely increased, by discoveries of which the philosophers of the olden time knew comparatively nothing. And the range of Physics or Natural Philosophy has become so vast and extensive, that hardly any man pretends to be profoundly versed in the whole.

It may seem difficult, at first, however, to demonstrate this distinction satisfactorily, when we come to mark the precise line between the Liberal Arts and the Sciences. Thus Music, Poetry, Painting, Sculpture, Architecture, and even Medicine, are Arts. And Chemistry, Mineralogy, and Geology, with many others, are Sciences. It can hardly be said that the first five are not equally "founded upon clear, certain, and self-evident principles." Nor can it be denied that they are "reduced to as regular a system." Neither is it to be questioned that they comprehend a large share of knowledge. Why, then, are they not entitled to the name of Sciences, as well as the others?

The true reason, I presume to be, that the object of the Sciences is *theory*, while the object of the Arts is *practice*. It may be, indeed, that the Sciences do not always demand a higher exercise of the mental faculties, and are in no respect more systematic than the others. Nevertheless, if not more intellectual, they are *necessarily and exclusively* intellectual, whereas the Arts deal mainly in the work of *production*. A few special illustrations, perhaps, will make this difference sufficiently intelligible.

The musician, for example, produces very delightful strains from his instrument. It is a practical art, and he may attain the highest skill in it, without troubling his brain about the causes which account for the effect. But the man of Science comes, and unfolds the theory of Acoustics, and explains the vibrations of the air, the mathematical proportions of the strings, the structure of the ear, and the various relations of the fundamental chord, which is the natural basis of harmony. Now, it may be true that this philosopher cannot perform the simplest tune upon the instrument. But he knows far more than the musician about the theoretical principles which govern the art, and this knowledge is therefore called Science, with propriety.

So the poet produces his epics, his dramas, or his lyrics. This, too, is an art, which may be practised with eminent success, where there are no other qualities besides the natural gifts of a fine ear, a vigorous fancy, and a keen observation. But the metaphysician comes and analyzes the process, by investigating the intellectual faculties of memory, imagination, and judgment, the laws of human sym-

pathy which govern the affections, the social influence by which the emotions of one heart are communicated to others, and the harmonious power of rythm. And thus, although he may be unable, himself, to produce a single verse of poetry, yet he brings to the art the theory which explains its effects, and this again, is properly called Science.

The painter, in like manner, produces the beautiful results of his practical skill, without being at all obliged to investigate the hidden causes of its fascination. But the philosopher approaches, and opens before him the science of Optics. He unfolds the theory of light, the structure of the eye, the rules of perspective, the seven original colors separated by the prism, and the relative influence of their various combinations. He is no painter, and yet he can teach the artist the laws which control his art, and here also, Science appears in its true application.

The architect, following approved models, and faithfully adhering to the practical rules laid down in his books, produces an admirable building, without any necessity of knowing the real principles which lie at the basis of his art.

But the Mathematician comes, and explains to him the laws of gravitation, and the rules which proportion the strength of every part to the weight which it should bear. The Mineralogist comes, and shows him why one kind of stone or marble is fitter for his purpose than another. The Geologist comes, and tells him how far he may trust his foundation. The Electrician comes, and unfolds the mysteries of his lightning rods. The Botanist comes, and informs him about the comparative durability of the various woods, which are to compose the beams and the floors of the edifice. All these men may be quite unable to plan or to execute the work, but each can throw light upon the true theory on which it may be best performed. And this is the object of Science.

So, too, the Physician, although he may be, and often is, a man of profound and varied knowledge, yet, if he be well instructed in the practical part of his profession, a diligent observer of the symptoms of disease, a careful student of the books of cases, attentive, prudent, watchful, and humane, he may succeed and be eminently prosperous in his most honorable art, without troubling himself about theory. But

the Chemist comes, and shows him the reasons of his practice. He analyzes the medicines, and teaches how to detect their impurities. He decomposes the atmosphere, and points out the province of the oxygen, which keeps up the vitality of the frame through the lungs, in the act of respiration. He explains the effects of evaporation in carrying away heat, and so accounts for the use of Diaphoritics in the case of fever. He examines the various poisons, and shows why certain antidotes are beneficial. He unfolds the principles of electricity and galvanism, and assigns the grounds on which the diet should be regulated, in the use or the avoidance of certain kinds of food. Yet, with all this knowledge, the Chemist is no Physician. But he is able to assist the Physician by explaining the true theory of his art, and here the proper sphere of Science meets us again.

The same relation of Science, which I have thus exhibited in the liberal arts, occurs in all the useful arts, without exception. The Farmer plows and sows, but it is Science which explains the difference of soils, the choice of his manures, and the rotation of crops, which are best adapted for cultivation. The Founder

produces the metals from the ores, but Science furnishes the true reasons of the process. The Navigator guides the ship across the ocean, but Science constructs the tables of his logarithms, directs the making of his quadrant and his telescope, warns him of the variation of his compass, provides him with his charts, and gives him the barometer to admonish him of the approaching storm. And thus it is throughout the whole vast domain of human toil and labor.

Yet it ought to be remembered, in gratitude to the benevolence of God, that Art came first, and Science came long afterward. The most essential of the useful Arts, and the more important even of those which we call liberal, were brought to light in the earliest ages of antiquity. Adam was a tiller of the ground. Cain built a city. In the lifetime of the first man, Tubal Cain discovered the art of making brass and iron, and his brother Jubal invented the harp and organ. Noah and his sons were doubtless familiar with all the arts which were practised in their day, and from them it may be presumed that they descended to their posterity. At all events, we know that there have been few nations found so barbarous, that they

could not work the metals, make cloth, tan skins, build houses, construct boats, prepare a variety of food, and play on some sort of musical instruments. For these Arts were essential to human comfort, in its lowest forms. And, therefore, the Divine beneficence enabled our race to use them, with more or less skill, many ages before the birth of that higher knowledge which we now call Science.

Still, notwithstanding the Arts may exist and have existed all along, independently of Science, it is none the less certain that Science extends the sphere of Art, and gives it principles and dignity. For it is its special aim to elevate and enlarge the mind, and strengthen its powers of reflection and analysis. Hence, Science rises aloft, and scans the orbs of the firmament, and calculates the revolutions of the planets, and explains the natural cause and foretells the hour and the very moment of these eclipses, which, in former ages, never failed to terrify the nations. It descends into the deep, and brings up the soil, and recovers the lost treasures which lie hidden in the abyss of ocean. It sails far beyond the eagle's flight, into the upper regions of the atmosphere, and looks down upon the

earth, as if it were a map, from the giddy height. It climbs the loftiest mountains, ventures into the craters of volcanoes, explores the desert waste and the tangled forest, enters the gloomiest caverns, goes down into the darkest mines, and draws forth the objects which they contain, and gives to each its name and place in some regular system. It decomposes the earth, the minerals, the metals, the air, the vapors, the medicinal springs, the bones, the blood and the humors of the animal frame, and the products of vegetation. It magnifies the atoms invisible to the natural eye, and reveals the marvellous forms of life which inhabit a drop of water. It analyzes the light, and discovers the hidden laws of electricity and magnetism. It takes up the various arts, and reduces them to a fixed theory. In a word, it lays hold on all the objects of sense, investigates them with unceasing energy, and makes its vast treasury of knowledge subservient to the wants, the enjoyments, and the pleasures of mankind.

Here, then, is the first relation which Science bears to Religion. For all these things are the workmanship of the Almighty; and Science, in exploring the immense field which His creative

will has called into being, is naturally led to the highest admiration of His power and benevolence, and prepared to give Him the homage so beautifully expressed in the language of the Psalmist, "Lord, how manifold are thy works, in wisdom hast thou made them all. The earth is full of thy riches. The heavens declare the glory of God, and the firmament showeth His handy work, the wide sea also, the round world, and they that dwell therein." No wonder that old Hippocrates, the father of medicine, as he has been called, was converted from atheism by examining the exquisite formation of the human skeleton. No wonder that the poet should say, "An undevout Astronomer is mad." For devotion to the Deity is the effect which Science is adapted to produce on every well-regulated mind. And this, its first relation to religion, was therefore happily expressed by another poet, when he set forth the true result in the character of Sir Isaac Newton, "HE LOOKED THROUGH NATURE UP TO NATURE'S GOD!"

But Science, notwithstanding all its admirable achievements, has its limits. In every branch of its attainments it finds itself stopped at a point which admits of no other explanation

than this: "Such is the will of the Creator." Thus, for example, the common mind knows that the act of breathing is necessary to life. The man of Science explains the reason. The air contains Oxygen, and supplies it to the lungs, and through them to the blood. But what is Oxygen? And why is it necessary to life? He cannot tell any better than the most ignorant peasant. He only knows that it is so, by the will of God. Nature is filled with the same impenetrable mystery in all things, and the sentence is written on the whole, without exception: "Thus far shalt thou go and no farther." Here, then, we behold the second relation which Science bears to Religion, namely, to demonstrate, by her own acknowledged deficiency, the absolute necessity of a guidance which she is utterly unable to afford, and thus show herself prepared to be the friend and handmaid of revelation.

For Science, after enlarging, to the utmost, her own domain, is compelled to stand reverently waiting on the Sovereign Creator for that higher knowledge, which nothing but Divine revelation can supply. She knows that natural religion can do nothing for the *moral and spiri-*

tual wants of humanity. She knows that the so called science of Metaphysics has utterly failed in supplying those wants. She knows that all the old philosophers put forth their elaborate systems, and defended them with subtle ingenuity; while the result was a mass of jarring confusion, altogether unable to secure the interests of morality and virtue. She knows that the modern metaphysicians have succeeded no better, notwithstanding the aid which they have borrowed from the Scriptures. She knows that the wisdom and benevolence of God have made the most admirable provision for the wants of the lowest of His creatures, and that it would be a strange contradiction to suppose that He has not made an equal provision for the higher wants and immortal destiny of the human soul. And, therefore, Science, grateful on the one hand, for her vast acquisitions, and conscious, on the other, of her necessary limits, is ready to enter, as a docile learner, into that spiritual school, which the love of God has established through the Gospel. There, in His inspired Word, there is a loftier field of exercise for the moral guidance of the intellect, and of the heart. There we have revealed the glorious majesty and

power of the eternal Lawgiver, the creation of our race, the introduction of sin and death, the plan of the Divine mercy for the atonement and expiation of iniquity; the incarnation, doctrines, and example of the Redeemer; the government of His Providence, the pledges of His celestial grace, the assurance of everlasting life beyond the grave, and all that secures abiding glory and true happiness to mankind, in the midst of the trials and difficulties to which the most favored lot is exposed in this world of sorrow. There, Science can do nothing. The most profound philosopher is obliged to learn, like the little child, from the Word of God. And as he advances in that spiritual knowledge which is made accessible to all in its practical efficiency,—although, like the other works of the Creator, it presents mysteries too deep for any mortal intellect to fathom,—the man of science finds it overflowing with the same wisdom and benevolence, only manifested in a purer and a loftier form, moving in a far more exalted and sublime sphere, producing new feelings of peace and joy, and presenting, in new aspects of light and love, the character and attributes of its Divine Author.

Having thus shown, to some extent, the relations of true Science to Religion, I pass on to consider the "Oppositions of Science *falsely so called*." And here, I am sorry to say that we have quite as much to deplore as the apostle could have had in his contemplation, when he recorded the language of my text. Time will not allow me to notice more than a very few of those "oppositions," but they will be quite enough, I trust, to prove that the Science which has undertaken to publish them, was indeed "Science *falsely so called*,"—not true Science, but a vain, unreasonable, and presumptuous counterfeit.

The vice of many superior minds, vain of their philosophic powers, has been the same in every age, namely, to forget the real and just objects of Science, and to launch into the regions of speculation on matters which, in the very nature of things, were entirely beyond the possibility of human comprehension. And, strange enough to say, a favorite subject of their idle and mischievous efforts has been the *cosmogony*, or the creation of the world—a subject of which it is worse than vain to form any idea, beyond the brief but all-sufficient account given

to us in the page of revelation. For creation is the work of God alone, and the power demanded for it is absolutely incommunicable to the creature. All the philosophers on earth cannot, with their united Science, create the meanest insect, nor endow it with a single member or faculty which it did not possess already. And the mode and the order of creation are just as inscrutable. The Almighty alone is the possessor of the knowledge as well as the power, and Science can discover nothing by its elaborate guess-work, but must accept, in the simplicity of faith, what it pleases the Divine Architect to communicate. Yet false Science, in the folly of philosophers, has always been prone to meddle with this sublime and transcendent theme, and to undertake the absurd and idle task of improving the Bible. Some of the results I shall now proceed to place before my audience.

Thomas Burnet was the first, among the moderns, to set the mischievous example, by publishing what he was pleased to call "The Sacred Theory of the Earth," in 1681. According to this author, the globe at the beginning was a fluid mass, consisting of all the varieties of mat-

ter. The heaviest descended by their gravity to the centre, and there formed a solid nucleus, round which the waters became first united, and then the atmosphere. But between the water and air, there was formed an oily layer, which received by degrees all the earthy particles with which the atmosphere was still charged, and this became solid, uniform, and level, without mountains, valleys, seas, or rivers, but yet very fertile, and so continued for sixteen centuries from Adam to the deluge. At that period, however, the crust of clay, dried by the heat of the sun, cracked and fell into the great abyss of the waters. Hence came the universal deluge, the derangement of the axis of the globe, and the change of climate. And hence, also, the islands, the continents, and the mountains.

Woodward came next, and published his "Essay on the Natural History of the Earth," in 1702. According to this writer, all the strata of the earth are disposed horizontally, showing that they were deposited in the form of sediments by the action of water, for which reason they contain so many shells and remains of marine creatures. He also maintained that they were deposited according to their respec-

tive gravity, having been all dissolved and precipitated at the same time by the great deluge. But his speculations were thrown into the shade by the work of the astronomer Whiston, called the "New Theory of the Earth," and put forth in 1708. This author contended that our world was originally a comet. That it contains at the centre a solid burning nucleus, the residue of this comet, which is constantly sending its heat to the circumference. That around it is a concentric orb of heavy fluid, and above this, another of water, which serves as a foundation for the earth. That the deluge was occasioned by the tail of another comet passing near our globe, and that this produced all the changes which have taken place in the primitive surface and the interior.

The celebrated Leibnitz, in 1683, published his *Cosmogony*, under the title of *Protogœa*. Like the philosopher, Descartes, he maintained that our world was an extinguished sun; that when the light was separated from the darkness, the earth was in a state of fusion; that the external surface became in due time a vitrified crust; that when this crust was sufficiently cooled, the humid particles, which had gone off

in vapor, fell back and formed the sea, and the sea afterwards deposited the calcareous formations. But this sea at first covered all the surface of the globe, and hence were derived the shells and other marine substances which are found every where.

In 1744, the famous Buffon published his *Theory of the Earth*, in which he showed the errors of those who had preceded him, and had wisdom enough to avoid their absurd attempts to explain the creation, or to account for the miraculous deluge by natural causes. But in 1788, he published another work called "Epochs of Nature," and here he became the leader of that hypothetical geology which admits all the freaks of imagination. Thus, at the beginning, he supposed the existence of the stars, a sun, and a great comet; but does not say from whence they had their being. From some unaccountable cause, this comet struck the sun, and forced from it an immense amount of igneous matter, which divided into several distinct masses. One of these masses became our earth. By virtue of the laws of attraction, they all resulted in globes of different sizes and densities, which revolved round the sun, and thus

formed the planets. Therefore we inhabit a crust which originally consisted of melted matter. The cooling of this crust in an unequal manner formed the mountains. But it required the lapse of some thirty or thirty-five thousand years before it became cool enough to receive the waters of the ocean and the germs of vegetables. Such were the two first epochs of nature. In twenty thousand years more, the strata were gradually deposited, and the various creatures which are extinct were formed, being suited to a high temperature. This was the third epoch. The fourth was marked by the volcanoes, which produced new modifications, though as yet there were no organized beings except plants and marine animals. The cooling process went on for thousands of years longer, and then the fifth epoch produced the larger plants and terrestrial animals. The sixth epoch beheld the separation of the continents, and the seventh was distinguished by the appearance of man.

This work of Buffon enjoyed immense popularity for a season. He was followed by Deluc, who partly adopted the notions of his predecessor, especially by making the days of creation

signify vast indeterminate periods. He was succeeded by De Lametherie, with some others of less note, and finally by the eminent Cuvier, who became, in the earlier part of the present century, the founder of the school of palæontology. But the system of Cuvier was attacked by De Blainville, Prevost, Brogniart, Borié, Manfred, &c. And it is not easy to decide whether it counts more friends than opposers at the present day.

Herschel, the astronomer, Ampere, La Place, and many others, adopted the hypothesis that all the heavenly bodies were first created in a gaseous form, from which they passed successively through the condition of comets, stars, and finally planets. This notion was put to flight, however, by the use of more powerful telescopes, proving that the supposed *nebulae*, which these philosophers imagined to be gaseous bodies, were in reality clusters of stars. Here was a remarkable proof of the tendency of such men to vain speculation, since an important part of a system of Cosmogony was based upon nothing more than the imperfection of their instruments.

But my limits do not admit of any further notice of these "oppositions of science, falsely so called," and therefore I must pass over the other speculations of philosophers, intended to convince the world that the varieties of the human race could not have proceeded from one progenitor, that the general deluge could not have occurred, and that the resurrection from the grave is quite impossible, notwithstanding these points of religious truth are all taught in the sacred Scriptures. Indeed the subject, to do it full justice, would require volumes, which few men could be tempted to write, because so few would be likely to read them. The whole may be disposed of more satisfactorily by a simple recurrence to principles, which no candid reasoner can refuse to sanction.

1. First, then, let us remember that the term "Science" can never be justly applied to matters of which it is impossible for men in our age to know any thing, save what the original record of inspiration has communicated. For Science, as I have shown, signifies *knowledge*, and this knowledge, moreover, must be founded upon clear, certain, and self-evident principles, and be reduced to a regular system. But the

mode in which the Creator thought fit to do His wondrous work is totally beyond human conception. And therefore every attempt to imagine how He proceeded, which pretends to add to His own revelation, is so far from being Science, that it is in truth nothing better than a vain and irreverent presumption.

2. In the second place, these philosophers are wantonly travelling out of their proper track, and have no right to publish speculations which can do no possible good, but must, on the contrary, do more or less evil. The Bible was given for the moral and spiritual instruction of mankind. What can they gain by opposing its received interpretation? Suppose they succeed in shaking the faith of Christians, what substitute have they to offer? Religion is the only regulator of the conscience and the heart,—the only foundation of law, justice, order, and government. And no man who is a real philanthropist, and will pause to reflect upon the tendency of such assaults, can feel justified for a moment in encouraging them.

3. Thirdly, it should be remembered, by those who are addicted to such vain and worse than useless studies, that there is no thorough agree-

ment amongst the men of Science themselves, upon any of these speculative theories. Philosopher is opposed by philosopher. The ingenious romance of one is dissected and exposed by another. And thus, while there is a vast field belonging to the proper objects of Science still unexplored, they waste the finest talents and the most strenuous efforts in a struggle for mastery about abortive fancies, which, in their own nature, are not susceptible of proof, and, if they could be proved, are of no conceivable value.

But *true* Science avoids all these perilous oppositions to religious faith. Its votaries are content with the wide and inexhaustible range which belongs to the arts and the phenomena of nature, and they rely in faith on the Book of God, for that spiritual knowledge which belongs to the conscience and the heart. Hence there is no conflict between true Science and Christianity. Their relations are in perfect harmony and concord with each other, like the body and the soul. The intelligent disciple of the Saviour is always ready to do honor to the real philosopher. While the real follower of philosophy will never forget that the word signifies the

love of wisdom, and that he is specially bound to render his cordial homage to that HIGHEST WISDOM, which secures, at once, the peace and order of this present life, and the immortal happiness of the life to come.

NOTE.—I am aware that the examples which I have referred to, as illustrations of the “Oppositions of Science falsely so called,” may not be liable to this charge, in the judgment of the reader. The authors of these systems, it may be said, designed them to be in harmony with the Bible, and only sought to fill up the outline of Scripture by hypotheses which were not supposed to be at war with its authority. Hence their speculations were approved by many of the clergy themselves, just as we now find the fashionable system of the present day approved by such names as Buckland, Chalmers, Pye Smith, and several other respectable ministers of the Gospel.

This is partly true; but yet, in my own mind, it does not amount to a justification. It is of small importance, on the examination of any question, to show that a few of the clergy have espoused either side of the argument, because as much may be proved in the defence of every error, since the age of the Apostles. My appeal is made to that plain common sense, which all intelligent and candid men are able to exercise. Science signifies *knowledge*, reduced to a regular system. But ingenious conjectures about the order of creation, or the length of time which the Almighty chose to occupy, are not *knowledge*, but *speculation*. The Science employed may be true Science, so far as it deals with facts; but the result presented so confidently to the world is mere fancy; and therefore such result, however well intended, would be an example of “Science falsely so called.”

And that this false Science is in “opposition” to the faith, notwithstanding the endorsement of a few amongst the clergy, seems evident to common sense, because reverence for the Bible is the very basis of Christian authority, and this reverence rests upon our belief in it, as the Word of God. There we are told that in the beginning He created the heavens and the earth, and the inspired narrative proceeds to state the process of that one creation. Is there no opposition when the man of Science presumes to say, that there were several creations before, with myriads of ages between them? The Bible sets forth the work and order of each day, showing that it was a natural day by the

express mention of "the evening and the morning." Is there no opposition when the man of Science undertakes to prove that these days were long periods of thousands of years? The Bible declares the awful fact of a universal deluge. Is there no opposition when the man of Science pronounces such a deluge to have been impossible? The Bible asserts that God hath made of one blood all the nations of the earth, and traces up the whole to the single family of Noah. Is there no opposition when the man of Science proclaims the absolute necessity of several distinct progenitors?

These are a few of the "Oppositions" which "Science, falsely so called," presents to the inspired Scriptures, at the present day. And their true character is perfectly understood, not only by the prevailing sense of intelligent Christians, but by all that are inclined to lay hold of them, as an excuse for infidelity, notwithstanding their authors abstain from any gross and direct assault upon the system of the Gospel. It is well known that the effect of such works has been, and is, to strengthen the scorner, and to weaken the faith; although the more they are examined, the more plainly it will appear that these philosophers have perverted the facts of true Science to support a set of assumptions which are purely conjectural, without a particle of evidence or proof which deserves the name.



