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I. IDEALISTIC MONISM.

I do not care to prefix a rubric of titles of idealistic authors to this criticism, as could be very easily done after the pretentious and pedantic fashion of some review writers. I could cite quite a list, beginning with Fichte, Schelling and Hegel, down to Herbert Spencer, Kuno Fischer, of Heidelberg, and Paul Deussen, of Kiel, and could profess to give outlines of their several phases of Monism from histories of philosophy. But my object is to instruct students who are guided by common sense and their Bibles in the central doctrines of this pretended philosophy which are common to all its phases, and to expose their common errors. No two idealists are consistent with each other, nor even with themselves; hence the attempt to particularize their different schemes would be tedious and hopeless, and would disappoint my practical aim.

Idealism is, in plain terms, that doctrine which tells us that the whole universe, including ourselves, consists of ideas only, and contains no other perdurable substantive beings, material or spiritual, distinguishable from mere trains of ideas or actions. Monism is the doctrine which insists that there is no distinction of mind and matter, that both are one and that there is no true philosophy until all things are traced to one single principle of being. The monism of idealists is, that the universe exists for me only as my representation in thought. Thought and real being are identical. To think a thing is to give it existence, the only kind of existence which anything has. There is not, and cannot be, any creation *ex nihilo*, even if there were an almighty

### III. INSPIRED ANTICIPATIONS OF SOME CONCLUSIONS OF MODERN SCIENCE AND PHILOSOPHY.\*

- "The grass withereth and the flower fadeth; but the word of our God shall stand forever."—ISAIAH xl. 8.

"Dried is the grass, faded the flower, and the word of our God shall stand forever."—J. A. ALEXANDER.

THE imperishableness of the word of God is emphasized by contrast with such frail and perishable objects as grass and flowers. In its original connection and import, this passage of Scripture had distinct reference to the mission of John the Baptist as heralding the appearance of our Lord. The historic occurrences, therefore, seven centuries afterwards verified the declaration to that extent and in that particular aspect of it. But all limitations are absent and must therefore be cast aside. The word of our God is not merely to stand for seven centuries of time, but "forever."

Moreover, the word has, and admits of, no adventitious limitation to history, or to poetry, to promise or to prophecy, or even to the gospel message, but must be understood as denoting "every word that proceedeth out of the mouth of God." (Deut. viii. 3; Matt. iv. 4.) What is true of every word, *i. e.*, of all the parts, is true of the collected whole; and hence it is a legitimate extension of this language of Isaiah when it is made to embrace the entire canon of inspired Scripture. This is not the proclamation of a finite mortal, of a monarch, however exalted, nor the equivocal oracle of a heathen divinity, but the sure word of "our God," who speaks from the calm and comprehensive depths of omniscience to which omnipotence is always subservient, and for the execution and complete fulfilment of whose "immutable counsel" his veracity is bound by the solemnities of an oath for our encouragement to lay hold upon the hope set before us, which we have as an anchor to the soul. (Heb. vi. 13-20.)

None who hold that the Bible is the word of God question that nature is the work of God. Indeed, *we* reveal ourselves in word

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\* The Inaugural of Samuel Spahr Laws, A. M., M. D., LL. D., D. D., as "Perkins Professor of Natural Science in Connection with Revelation and Christian Apologetics," in the Presbyterian Theological Seminary, at Columbia, South Carolina. Delivered May 10, 1894. Repeated as a Baccalaureate discourse before Davidson College, North Carolina, June 10, 1894.

and also in action. These are the only two ways in which an intelligent being can manifest his existence and character. It is, presumably, just as natural that God should reveal himself in these two ways as that we should. It would be most unnatural and incomprehensible that God should have limited himself to either one of these modes of revelation. If he exist at all, these are the only ways to show it. In the account of creation, there are indications that God spake, or used language, antecedent to creative acts, as in the creation of man, but relative to man the work of creation stands prior to the revelation by word. Hence nature is, properly viewed, relative to ourselves, as the older of the two volumes of revelation.

It is an easy-going presumption that, if nature and the Bible are from the same Author, they must not only be in harmony but coincident to the extent that they cover the same ground. If one of these volumes is more extended in its disclosures than the other, then we reasonably expect that to the extent that they move along the same paths or deal with the same features of their Author's character and doings their teachings would be the same. Hence, we find, in fact, that nature teaches the same truths as to the efficient power, controlling intelligence, tempering justice, goodness and truthfulness of God, its Author, as does the Bible. In the natural order, this harmony of sameness, or coincidence, is in no manner disturbed by the transcendent, supernatural disclosure of the gospel. The individual voice may coincide with the grand organ in the utterance of certain notes, but fail of touching the full depth and height of its transcendent scales. The notes sounded in common are the same notes, and the transcendent notes agree or harmonize with them. The harmony is properly within and between that and what lies without and invests the identity.

May it not be practicable to trace the coincidences of biblical and scientific teaching beyond what has hitherto been done or attempted? Would it not be a pardonable and commendable use of the present occasion to venture on something of that kind?

The teachings of nature and of the Bible rest primarily in facts, and the student of each must reach his views either by intelligent apprehension or by inferences and conclusions gained inductively

and verified deductively. The combination of these three methods—the intuitive, the inductive and the deductive—constitutes the complete method which dominates the inquiries of the present in all departments of research. This is preëminently a scientific and a critical age. I make bold to assert as my thesis, that *the leading valid conclusions of modern science and philosophy have been anticipated by the writers of the sacred Scriptures.*

Let us draw down this general statement to the sphere of particulars and single out such topics in verification of it as are pregnant with human interests. Please notice this practical limitation, and consider, 1, the Sphere of Science; and 2, that of Philosophy. *First*, then, the domain of science claims attention; and from it eight topics will be singled out for brief consideration:

1. The first of these is, *The Unity of the Origin of the Human Race.* Please notice that our point is not the unity of the race. Professor Agassiz held this view, but stoutly denied the unity of the origin of our race. He recognized all varieties of the human family as sufficiently alike to be grouped as one species, but held to diverse origins and centres of development, and that the Bible gave only an account of the origin of the white races, with special reference to the Israelites—a view which even some of the Israelites of our day are so progressive as to deny. (*Christian Examiner*, July, 1850, pp. 135–137.)

But when we take the Old and the New Testaments together, the doctrine of the book, that all mankind have descended from a single pair, is indisputably set forth in explicit utterances and embodied in its whole texture. In the gospel scheme every human being is viewed as sustaining a filial relation to Adam; and Paul, at Athens, taught the Greeks that their origin was the same as that of the barbarians: that God “made of one blood every nation of men for to dwell on all the face of the earth.” (Rom. v. 12; Acts xvii. 26.)

But what say our scientists? There are two theories of speculative ethnology devised to explain the facts respecting the resemblances, differences, and distributions of mankind. The polygenists hold that men sprang originally from many stocks. But

Professor Huxley, in his essay on ethnology, says that "they (the polygenists) have as yet completely failed to adduce satisfactory, positive proof of the specific diversity of mankind." (*Critiques and Addresses*, page 162.) He also says: "The assumption of more than one primitive stock for all is altogether superfluous"; and in the same connection adds: "The chief philosophical objection to Adam being, not his oneness, but the hypothesis of his special creation." (Page 163.) And again, as showing that the polygenist conclusion is a *non sequitur*, he says: "Granting the polygenist premises . . . you may yet, with perfect consistency, be the strictest of monogenists, and even believe in Adam and Eve as the primeval parents of all mankind." (*Idem*, page 163.)

After combating the Bible doctrine for centuries upon centuries, local and sectional prejudices and imagined interests sometimes adding fuel to the flames, at last the most extreme scientists have become the devout advocates of this scouted doctrine of the unity of the origin of the human race.

Of course it should be noted that this conclusion of the scientists is in the interest of evolution. In the arbitration of the Behring Sea Seal Fisheries' dispute between the United States and England, Sir Charles Russell somewhat caustically reviewed the positions taken by the commissioners from the United States, but announced that, in certain of their conclusions, he quite agreed with them for the reason that they had drawn true conclusions from false premises.

The application of the same dialectical principle is, I respectfully submit, allowable in the present case.

2. *The Dual Constitution of Man.* This is the second position to be considered at present as held in the firm grasp of modern science, which has been anticipated by the sacred writers. Man is not a mere material organism, nor is he purely a spirit. He consists of body and soul. This is as certain a determination of philosophic science as that materialism, on the one hand, or idealism, on the other, is false. Of these extremes Professor Tait remarks: "They are both attributed to that credulity which is characteristic alike of ignorance and of incapacity. Unfortunately there is no cure . . . whether it show itself in the

comparatively harmless folly of the spiritualist or in the pernicious nonsense of the materialist. Alike condemned and contemned, we leave these to their fate—oblivion." (*Recent Ad. in Phys. Sci.*, page 25.)

Oliver Wendell Holmes, M. D., for more than thirty years Professor of Anatomy in the Medical Department of Harvard University, thus writes: "For a certain period, then, the permanent human being is to use the temporary fabric made up of these shifting materials. So long as they are held together in human shape they manifest certain properties which fit them for the use of a self-conscious and self-determining existence. But it is as absurd to suppose any identification of this existence with the materials which it puts on and off as to suppose the hand identified with the glove it wears, or the sponge with the various fluids which may in succession fill its pores."

"The doctrine of an immortal spirit will never come from the dissecting-room nor the laboratory, unless it is first carried thither from a higher sphere. Yet there is nothing in these workshops that can efface it, any more than their gases and exhalations can blot out the stars from heaven." (*The Mechanism of Vital Actions.*)

Even the ancient Greeks distinguished between the soul and the body as between the harper and his harp, but the refinements of modern science place the doctrine, not on a rhetorical basis, but on a clean-cut pedestal of scientific discrimination.

In the Bible narrative of man's creation, it is said: "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life." (Gen. ii. 7.) In 1 Cor. xv. 47, Paul comments on this history, and says: "The first man is of the earth, earthy: the second man is of heaven." The Bible knows of no other constituents of man than his body and his soul. The prayer of Paul (1 Thess. v. 23): "May your spirit and soul and body be preserved entire, without blame, at the coming of our Lord Jesus Christ," does not teach the doctrine of three components in man's make-up, but simply uses two words, spirit and soul, for diverse functions of the same immaterial part which is often designated by the one word soul. This doctrine of man's

dual constitution is an important doctrine of the Bible in its relation to the incarnation, to the resurrection and to the future life, as well as to the duties of the present life, for we are not our own, having been bought with a price, and are bound, therefore, to glorify God in both body and soul, which are God's.

Pascal is an acute Bible student, and his view of man is expressed thus: "Man is to himself the mightiest prodigy of nature; for he is unable to conceive what is body, still less what is mind, but least of all is he able to conceive how a body can be united to a mind; yet this is his proper being."

3. *The Blood is the Life of the Animal.* It was not till within the first quarter of the seventeenth century, A. D., that Harvey, the court physician of Charles I., of England, discovered, taught, and published the doctrine of the circulation of the blood. Servetus had, in the preceding century, discovered the pulmonary circulation, and Harvey completed the doctrine by the discovery of the systemic circulation. This was the birth of modern physiology and of scientific medicine. There is an operation, extremely delicate and not of frequent occurrence, now very well known to the profession as that of transfusion. It consists of the transference of the blood of a living animal directly into the blood vessels of a human being. But if a single bubble of air enters, it churns the blood into a froth and is certain death. Dr. Brickel, of New Orleans, died a few years ago, deservedly eminent in his profession. Soon after he went to New Orleans, a young man, to engage in practice, a consultation was held by some of the most eminent physicians of that city over a young lady whose case was judged to be so desperate that the only hope of saving her life was transfusion. But no one of the distinguished gentlemen cared individually to risk it. It was suggested that this young man should be called in as he had no reputation to lose. Very well, young Brickel had the courage and the skill, notwithstanding the crudeness of his instruments, to successfully transfuse the blood of a living lamb into the system of that young lady. She revived, and when, twenty years afterwards, he related the incident to his medical class in Bellevue Hospital Medical College, New York city, she was still living.

This incident is given as illustrating and enforcing the idea that the blood is the life of the animal as a comparatively recent and most valuable scientific discovery. Some growler might suggest that perhaps the girl would have recovered without the operation. But it is unreasonable to question the united judgment of these competent men in the line of their own profession. The abstraction of the blood from the system gives an equally conclusive negative proof.

Now, I ask special attention to the anticipation of this remarkable scientific discovery contained in "the word of our God." In the seventeenth chapter of Leviticus, beginning at the tenth verse, we read as follows, to-wit: "And whatsoever man there be of the house of Israel, or of the strangers that sojourn among them, that eateth any manner of blood; I will set my face against that soul that eateth blood, and will cut him off from among his people. For *the life of the flesh is in the blood*: and I have given it to you upon the altar to make atonement for your souls: for it is the blood that maketh atonement by reason of the life. Therefore I said unto the children of Israel, No soul of you shall eat blood, neither shall any stranger that sojourneth among you eat blood." (Lev. xvii. 10-12.)

"Ye shall eat the blood of no manner of flesh; for *the life of all flesh is the blood thereof*; whosoever eateth it shall be cut off." (Verse 14.)

Here is a fundamental physiological fact wrought into the whole sacrificial system of the Old Testament dispensation, extending from the blood of the sacrifice offered by our first parents at the threshold of Eden down through the centuries to the bloody sacrifice on Calvary. The significance of the patriarchal and of the Mosaic ceremonials centred in the blood, which impressively proclaimed that the soul that sinneth it shall die; and the substitution of life for life; and that without the shedding of blood there is no remission. "But Christ having come a high priest of the good things to come . . . through his own blood entered in once for all into the holy place, having obtained eternal redemption. And for this cause he is the mediator of a new covenant." (Heb. ix. 11, 12, 15.)



This anticipation of the physiological significance of the blood plainly entered into and predetermined its ceremonial significance which has vitalized the whole scheme of redemption in all the ages. This vital character of the blood is as central a fact to the physical existence of the human race as gravitation to the system of astronomy or atonement to the salvation of man. This is no chance nor fanciful matter.

4. *Creation.* This word *creation* has two entirely distinct meanings: (1), In its primary and highest sense it means to bring into existence what prior to the creative act had no actual existence whatever; and (2), In its secondary sense it means to bring what already exists into a new state. This house is a creation in the secondary sense, but not in the primary sense, as not a particle of matter was brought into existence in its production, whereas pre-existent matter was in all its parts merely brought into new forms and relations. Man's body was originally and is still a mediate or secondary creation, being formed from preëxisting material; but his soul is an immediate or primary creation. The scientists, A. Russell Wallace and St. George Mivart, stepped out of the ranks of thorough-going evolutionists to give in their adhesion to the doctrine of the primary creation of the human soul. (Gen. i. 27, 28.) The English word creation is used in both these senses in the Bible, and hence the need of discrimination to avoid confusion. "In the beginning God created the heavens and the earth." Hebrew scholarship has settled the meaning of the word ברא, here translated created. The verb ברא, in the *kal* species as found here, "has acquired," says Delitzsch in his *Commentary on Genesis* (page 91), "the idiomatic meaning of a divine creating, which, whether in the kingdom of nature, or of history, or of the spirit, calls into being that which hitherto had no existence. It never appears as the word for human creations, differing in this from עשה, יצר, ילד, which are used both of men and of God." (Delitzsch, Gesenius, Aben Ezra, Mühlau and Volck, Dillman and Ewald.)

The heavens and the earth, as we know them, are not in their primary state of formless waste and emptiness. There are about sixty-six varieties of ultimate atoms, by the combinations of which

all material bodies known to us are formed. Given these elements, as the product of the act of primary creation in the first verse of Genesis, and the entire material cosmos naturally and easily works out as the consequence of their secondary combinations. The word (*yom*) translated day, which is used to mark the first stage of progress from the elemental state, primarily means heat or temperature, and not, as subsequently, an interval of time. The supposition that these atoms, the original stuff out of which the material universe is made, were in a heated state as at first produced, commends itself to our physical conceptions. In his essay on the "Chemistry of the Primeval Earth," Dr. T. Sterry Hunt observes that "heat, under ordinary conditions, is favorable to chemical combination, but a higher temperature reverses all affinities." (*Essays*, page 36.) In such an initial state of indifference of the various elemental atoms one for another, relative to human vision, the physical conditions of darkness would first prevail. But at a lower stage the chemical affinities would assert themselves and general luminosity would result from the combinations, as we see it illustrated on a small scale in the reactions of the laboratory. That there should be light during the first so-called day prior to the allotted service of the sun on the fourth day, was, therefore, both natural and inevitable; and there is also seen a logical ground for the order: "There was evening and there was morning, one day."

It was felt important to accompany with some expository and confirmatory evidence the view that the exact idea or doctrine of the first verse of Genesis, of the Bible, is the clean-cut production, by immediate creation of the ultimate atoms or elements, out of which the entire physical universe has been built. This is not simply the doctrine of a passage, but of the entire book, confirmed by an induction of a multitude of details.

But is there herein any valid anticipation of the sure conclusions of modern physical science? The question fairly and legitimately turns on the evidence that science has led up to the same doctrine of the creation of these atoms. I will cite some witnesses. And, first, from *A Preliminary Discourse on the Study of Natural Philosophy* by Sir John Frederick William Herschel

(paragraphs 28, 29), a passage to which vague reference is sometimes made, to-wit:

“The discoveries of modern chemistry have gone far to establish the truth of an opinion entertained by some of the ancients, that the universe consists of distinct, separate, indivisible *atoms*, or individual beings so minute as to escape our senses, except when united by millions, and by this aggregation making up bodies of even the smallest visible bulk; and we have strongest evidence that, although there exist great and essential differences in individuals among these atoms, they may yet all be arranged in a very limited number of groups or classes, all the individuals of each of which are to all intents and purposes *exactly alike* in all their properties. Now, when we see a great number of things precisely alike, we do not believe this similarity to have originated except from a common principle independent of them; and that we recognize this likeness, chiefly by the identity of their deportment under similar circumstances, strengthens rather than weakens the conclusion. A line of spinning-jennies, or a regiment of soldiers dressed exactly alike, and going through precisely the same evolutions, gives us no idea of independent existence; we must see them act out of concert before we can believe them to have independent wills and properties, not impressed on them from without. And this conclusion, which would be strong even were there only two individuals precisely alike in all respects and *for ever*, acquires irresistible force when their number is multiplied beyond the power of the imagination to conceive. If we mistake not, then, the discoveries alluded to effectually destroy the idea of an *eternal self-existent matter*, by giving to each of its atoms the essential characters, at once, of a *manufactured article*, and a *subordinate agent*.

“But to ascend to the origin of things, and speculate on the creation, is not the business of the natural philosopher.”

It should be observed that the distinguished astronomer does not use the word “manufactured” in the sense of a secondary creation of atoms out of preëxistent stuff, but in the primary sense of being “originated” from a common source without and “independent of them.” The idea is that of an immediate super-

natural creation. The argument is an enthymeme of the third order, where the premises are indisputably laid down by him strictly as a scientist, and the conclusion is only indicated and not formally drawn, as that would, in strictness, transcend the technical boundaries between science and philosophy.

It is now proposed to place by the side of this testimony that of the late J. Clerk Maxwell, one of the most distinguished mathematical physicists in the history of science, professor of experimental physics in the University of Cambridge, England; "a philosopher as remarkable for the subtlety of his intellect as for his vast knowledge," says Professor Huxley, in expressing his reluctance to dispute any dictum of his. (*Adv. of Sci.*, page 32.) These brief extracts are taken from his article on the "Atom" in the 9th ed. *Brit. Encyclopedia*.

After noting by means of the subtlest mathematical processes, that physical molecules of various kinds all have identically the same time and space constants in their vibrations, and that, while untold variations are possible, yet, nevertheless, none of these variations have ever arisen in any of the processes of nature, he then proceeds thus :

"The formation of the molecule is, therefore, an event not belonging to that order of nature under which we live. It is an operation of a kind which is not, so far as we are aware, going on on earth, or in the sun, or the stars, either now or since these bodies began to be formed. It must be referred to the epoch, not of the formation of the earth or of the solar system, but of the establishment of the existing order of nature; and till not only these worlds and systems, but the order of nature itself is dissolved, we have no reason to expect the occurrence of any operation of a similar kind."

He continues: "Whether or not the conception of a multitude of beings existing from all eternity is in itself self-contradictory, the conception becomes palpably absurd when we attribute a relation of quantitative equality to all these beings. We are then forced to look beyond them to a common cause or common origin to explain why this singular relation of equality exists, rather than any one of the infinite number of possible relations of inequality."

Then we have this telling conclusion, to-wit: "Science is incompetent to reason upon the creation of matter itself out of nothing. We have reached the utmost limit of our thinking faculties when we have admitted that, because matter cannot be eternal and self-existent, it must have been created."

These passages from Herschel and Maxwell are like scientific comments on the first verse of the Bible in defence of its doctrine of the creation of matter—of all matter—of the material universe.

But it is not forgotten that there is now under discussion a new and novel hypothesis of the intimate constitution of ordinary matter, as consisting of vortex-atoms of æther, which promises to revolutionize all previous hypotheses and theories. The question arises at once: What is the bearing of this new speculation as to the vortex-atoms upon the question of creation? Does it threaten to subvert or to supplant it? I will take the answer from Prof. P. G. Tait, who says: "Sir William Thomson's splendid suggestion of vortex-atoms, if it be correct, will enable us thoroughly to understand matter, and mathematically to investigate all its properties. Yet its very basis implies the *absolute necessity* of an intervention of CREATIVE POWER to form or to destroy one atom even of dead matter." (*Ad. Mod. Sci.*, page 24.)

And thus, turn which way we may, we see the physical science of the present led up to the footstool of the Creator by its most powerful expounders. In the setting forth of this doctrine of creation, in the morning twilight of the history of our race, as from the lips of the Creator himself, it was not a prophecy, but equally wonderful in anticipation of what was possible to and might be accomplished by discovery in the freest and fullest exercise of those powers of the human mind which are in the image of the Creator and which are godlike.

The origination of the constitutive elements of the physical world, the origination of vegetable life, of animal life, and of the human life of man as a moral agent, are the only acts of primary creation in the Mosaic cosmogony; and it should be observed that special secondary creations of the organisms of new species, it may be, in no manner impinge on the postulate of the fixed

quantum of matter in existence, determined by the primary creation of the elements; and also that these vital forces, brought into play in special animate creations, in no manner impinge on the postulate of a fixed quantum of mechanical energy, which doctrine does not apply to mind and life forces. The truth is, that the doctrine of creation read aright is a profound forecasting and anticipation of these latest and boldest generalizations which, properly understood, are thoroughly accepted and defended by adherents of the word of God.

But there are other topics claiming our attention.

5. *The End of the World.* This is the fifth topic to be noticed on which we find the dual teachings of science and the Bible. Creation declares the beginning, but we also have to do with the end, of this world. Has our advanced knowledge discredited or supplanted Bible teaching on this point?

Our present science has ascertained with mathematical certainty that our bodily system is continually running down because of waste. Every beat of the heart, every step in walking, every adjustment of the organs of speech in uttering words, every motion of the hand or expression of face, causes more or less waste of tissue. All the movements of our world transform and waste its energies. Every tick of the watch is a step towards the end of the series which will exhaust the force deposited in its mainspring. Says Dr. C. A. Young in his work on *The Sun*: "The whole course and tendency of nature, so far as science now makes out, points backward to a beginning and forward to an end. The present order of things seems to be bounded, both in the past and in the future, by terminal catastrophes, which are veiled in clouds as yet impenetrable." (*The Sun*, page 277.) Again, "We are inexorably shut up to the conclusion that the total life of the solar system, from its birth to its death, is included in some such space of time as thirty millions of years." (Page 277.) But only one-third of that time remains to us. "Newcomb's conclusion, therefore, is, that it is hardly likely that the sun can continue to give sufficient heat to support life on the earth—such life as we now are acquainted with, at least—for ten million years from the present time." Let me assure the reader that in calling his atten-

tion to this bounding and cheerless outlook of the sciences into the future, I have no thought of dampening the zeal or discouraging the enterprising and laudable ambition of the hopeful youth of either sex. After all, ten millions of years are "a right smart time," and a great deal can be done in it if we are diligent.

There is a very current system of philosophy, however, which professes to ground itself on the present inductions of science, and then confidently projects such appalling and pernicious deductions into the future that it seems to demand a passing notice. Those acquainted with the evolution of Herbert Spencer—and there is no other properly deserving the name of evolution—are aware that in the twenty-third chapter of his *First Principles* he sets forth the culmination of his universal evolution and life in universal dissolution and death. As the race of men, including every individual member of it, is the product of evolution, it is to be entirely swept away out of existence. The whole evolved universe, and all its parts, is to fall into such a catastrophe of dissolution as to be completely resolved back into a heated, attenuated, lifeless, mindless, soulless star-dust such as that from which it all evolved; and then automatically enter on some sort of another evolution which may be like or unlike the present. This succession of evolutions and dissolutions is to be repeated in endless, recurring cycles to all eternity, and that, too, not only in a godless universe, but in a universe in no manner under the guiding influence or control of intelligence, goodness, justice, or truth, but solely the sport of an unknown and unknowable, absolutely naked and unqualified Force. There is in this horrid fatalism, which has been so extensively foisted on our youth, no immortality, no spirituality, no substantial reality of mind or of matter, both being but the empty phenomenal phases of Force. It is godless, religionless, soulless, hopeless, without even the remotest prospect of ending in the perpetual sunshine of hope but in the unrelieved blackness of despair, its consummation being a more absolute annihilation than the Nirvana of Buddhism.

But the fundamental principle and assumption of the self-sufficient autonomy of the physical system to begin, complete, and

quantum of matter in existence, determined by the primary creation of the elements; and also that these vital forces, brought into play in special animate creations, in no manner impinge on the postulate of a fixed quantum of mechanical energy, which doctrine does not apply to mind and life forces. The truth is, that the doctrine of creation read aright is a profound forecasting and anticipation of these latest and boldest generalizations which, properly understood, are thoroughly accepted and defended by adherents of the word of God.

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Our present science has ascertained with mathematical certainty that our bodily system is continually running down because of waste. Every beat of the heart, every step in walking, every adjustment of the organs of speech in uttering words, every motion of the hand or expression of face, causes more or less waste of tissue. All the movements of our world transform and waste its energies. Every tick of the watch is a step towards the end of the series which will exhaust the force deposited in its main-spring. Says Dr. C. A. Young in his work on *The Sun*: "The whole course and tendency of nature, so far as science now makes out, points backward to a beginning and forward to an end. The present order of things seems to be bounded, both in the past and in the future, by terminal catastrophes, which are veiled in clouds as yet impenetrable." (*The Sun*, page 277.) Again, "We are inexorably shut up to the conclusion that the total life of the solar system, from its birth to its death, is included in some such space of time as thirty millions of years." (Page 277.) But only one-third of that time remains to us. "Newcomb's conclusion, therefore, is, that it is hardly likely that the sun can continue to give sufficient heat to support life on the earth—such life as we now are acquainted with, at least—for ten million years from the present time." Let me assure the reader that in calling his atten-



tion to this bounding and cheerless outlook of the sciences into the future, I have no thought of dampening the zeal or discouraging the enterprising and laudable ambition of the hopeful youth of either sex. After all, ten millions of years are "a right smart time," and a great deal can be done in it if we are diligent.

There is a very current system of philosophy, however, which professes to ground itself on the present inductions of science, and then confidently projects such appalling and pernicious deductions into the future that it seems to demand a passing notice. Those acquainted with the evolution of Herbert Spencer—and there is no other properly deserving the name of evolution—are aware that in the twenty-third chapter of his *First Principles* he sets forth the culmination of his universal evolution and life in universal dissolution and death. As the race of men, including every individual member of it, is the product of evolution, it is to be entirely swept away out of existence. The whole evolved universe, and all its parts, is to fall into such a catastrophe of dissolution as to be completely resolved back into a heated, attenuated, lifeless, mindless, soulless star-dust such as that from which it all evolved; and then automatically enter on some sort of another evolution which may be like or unlike the present. This succession of evolutions and dissolutions is to be repeated in endless, recurring cycles to all eternity, and that, too, not only in a godless universe, but in a universe in no manner under the guiding influence or control of intelligence, goodness, justice, or truth, but solely the sport of an unknown and unknowable, absolutely naked and unqualified Force. There is in this horrid fatalism, which has been so extensively foisted on our youth, no immortality, no spirituality, no substantial reality of mind or of matter, both being but the empty phenomenal phases of Force. It is godless, religionless, soulless, hopeless, without even the remotest prospect of ending in the perpetual sunshine of hope but in the unrelieved blackness of despair, its consummation being a more absolute annihilation than the Nirvana of Buddhism.

But the fundamental principle and assumption of the self-sufficient autonomy of the physical system to begin, complete, and

again begin and complete successive series of movements, which is pervasive of this system of Spencer, cannot go unchallenged. In refutation of it I will quote some counter propositions from Sir W. Thomson, a man of the highest authority and of gigantic endowments, who is not a speculator but a profound and practical philosophic scientist, entitled to incomparably superior regard, especially in the case in question, as it falls within the legitimate purview of his professional lines of investigation. He says:

“(1.) There is at present, in the material world, a universal tendency to dissipation of energy.

“(2.) Any *restoration* of mechanical energy, without more than equivalent dissipation, is *impossible to inanimate material processes*, and is probably never effected by means of organized matter, either endowed with vegetable life or subjected to the will of an animated creature.

“(3.) Within a finite period of time past the earth must have been, and within a finite period of time to come the earth must again be, unfit for habitation of man, as at present constituted, unless operations have been, or are to be, performed which are *impossible* under the laws to which the known operations going on at present in the material world are subject.”

According to this teaching, nature, as known by us, is not self-sufficient but dependent, so that the automatic restoration of nature from a catastrophe into which it may run from the waste of energy is “impossible” to the existing constitution of things. In a word, nature is like this watch: When it has expended the energy deposited in its mainspring, it is dependent on some *ab extra* source of supply of force to wind it up and set it going again.

Now, this sounder position is exactly the teaching of the Bible. There are therein four events held forth as destined to occur at the same time in the future: the second coming of Christ, the general resurrection, the general judgment, and *the end of the world*. “But forget not this one thing, beloved, that one day is with the Lord as a thousand years, and a thousand years as one day. The Lord is not slack concerning his promise, as some men count slackness. . . . Seeing that these things are thus all to be dissolved, what manner of persons ought ye to be in all holy liv-

ing and godliness, looking for and earnestly desiring the coming of the day of God, by reason of which the heavens being on fire shall be dissolved, and the elements shall melt with fervent heat? But, according to his promise, *we look for new heavens and a new earth, wherein dwelleth righteousness.*" (2 Peter iii. 8, 9, 11-13.)

In this, as in other cases, we see how the Bible teaches the same and all that is contained in the lesson of science, and then transcends it in rationalness and completeness. Our destiny is not left to the unguided and uncontrolled autonomy of nature, but as Miriam watched the little ark "in the flags by the river's brink," so God watches his children, and for their sakes and for his own glory, which shall be revealed to usward, "the creation itself also shall be delivered from corruption." Indeed, God awaits the destined catastrophe as a special occasion for the manifestation of his recreative power and love in our full fruition of his promises. And then a new and more glorious abode than that of Eden shall arise out of the ruins of the present groaning earth as by divine enchantment, this earth itself becoming, it may be in part, our heaven. (Rom. viii. 18-25.)

6. *Æther.* The sixth topic noted for consideration in this line of thought claiming our attention is æther. Perhaps the most mysteriously wonderful aspect of our present physical science is its hold on this subtle, intangible, invisible, and incomprehensible element. It eludes every one of the bodily senses which place us in relation with the ordinary matter of the gross, material world. Although so elusive, yet one of our ablest scientists is reported as declaring that we are now better acquainted with it than we are with our atmosphere or with water. But this is hardly true of the average citizen. We have long known that our vision of light is due to the vibrations of this invisible æther. That single circumstance indicates how widely it is diffused through the stellar spaces. Within a few years (1888)—what was previously conjectured—it has been proved by beautiful experiments that light, heat, electricity, and magnetism are closely related phenomena of a single group of forces, and depend on transverse vibrations of æther. (Heinrich Wertz was the experimenter.) This had been conjectured by Faraday. However perfectly a

glass receiver is exhausted of such gross matter as our atmosphere by an air-pump, yet the phenomena of light remain as before. This is seen in the Crook's vacuum tubes.

Here, then, we have an inconceivably subtle substance which pervades our bodies, our houses, all material objects, as light shines through glass or the atmosphere. The atoms of all ponderable matter are separated by this homogeneous cosmic æther that fills all space, so that there is no known nor knowable space empty of it.

We stand, then, in the presence and in the midst of an invisible universe in which the visible universe is immersed, and by which it is pervaded and enveloped, like fishes in the sea. Has the Bible any intimations and anticipations of such a discovery; of such a state of fact as this new-born knowledge contemplates? The interest of the Bible lies preëminently in the invisible world, but it is the invisible world of spirits. Of this world of spirits we cannot possibly know by scientific processes. It is beyond the domain of the senses much more completely than is the partially-discovered ocean of æther. The processes of reason cannot disprove it, but on the contrary point confidently to it and hand it over to our faith; and sporadic human experiences confirm the testimony of Scripture. We are able now to assert, as a matter of scientific conquest, that "the visible, gross universe cannot comprehend the whole material works of God. It had its beginning in time and will also come to an end. Perhaps, indeed, it forms only an infinitesimal portion of that stupendous whole which is alone entitled to be called *the material universe*." (*The Unseen U.*, p. 96.) It may be that the invisible universe of æther is only an intermediary between the gross universe of our bodily senses and the universe of spirits, good and bad, which "walk the earth both when we wake and when we sleep." These finite intelligences are familiarly named and known by us as angels. In Bishop Whately's work, *Scriptural Revelations Respecting Good and Evil Angels*, he calls special attention to "the circumstance that the notices there occurring of angels are few and very brief and scanty." (Page 11.) He must mean "few" as compared with what curiosity would have suggested or writers of fiction

would have given. Their number is very great, and yet the names of only two are given, Gabriel and Michael. Michael is alone spoken of as "the Archangel." Notwithstanding the circumspect and dignified reserve of the sacred writers, the references to the ministrations of angels are not infrequent—in fact, they are too frequent for us to attempt even the briefest summary of them in this connection. In general it may be noted that, "while the angels mentioned in the New Testament seem always to have been personal agents," yet in the Old Testament it has been observed that the so-called angels are, for the most part, the sensible manifestations of Jehovah himself through the medium of some impersonal emblem, such as flame or the human form or some other visible semblance, such as the pillar of cloud and fire that led the wandering Israelites in the desert by day and by night, which is named the Angel of Jehovah. It was none other than Jehovah thus veiled in a transient, human form who was one of the "three men" who appeared unto Abraham by the oaks of Mamre as he sat in the tent door in the heat of the day (Genesis xviii.), and was the one who unfolded to the patriarch the covenant counsels of God to be realized in his own family and descendants, and made known the doom of the cities of the plain.<sup>1</sup> In like manner did he appear with the three Hebrew youths in the fiery furnace. Again: "Then Nebuchadnezzar the king was astounded and rose up in haste; he spake and said unto his counsellors, Did not we cast three men bound into the midst of the

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<sup>1</sup> 2 Kings vi. 8-23.

The kings of Syria and of Israel were at war, and the king of Syria becoming satisfied that the insight of Elisha was of such service to the king of Israel as to thwart all his movements, sent a strong force to surround Dothan, where the prophet lived, and to capture him. When the Syrian host had surrounded the place, "his (Elisha's) servant said unto him, Alas, my master! what shall we do? And he answered, Fear not: for they that be with us are more than they that be with them. And Elisha prayed and said, Lord, I pray thee, open his eyes that he may see. And the Lord opened the eyes of the young man, and he saw; and, behold, the mountain was full of horses and chariots of fire round about Elisha."

To say the least, this passage forcibly suggests that creatures invisible to the gross bodily vision walk the earth both when we wake and when we sleep, whose ethereal corporeities are not the shadows of departed ghosts, but veritable realities. It is when this passage is grouped with others that its ethereal significance is suggested.

fire? They answered and said unto the king, True, O king. He answered and said, Lo, I see four men loose, walking in the midst of the fire, and they have no hurt." (Daniel iii. 24, 25.) The angel through which the Son of God manifested his presence and saving power in this as in the former instance given was the impersonal human form. In like manner various temporary and transient epiphanies of the Jehovah occurred during the Old Testament dispensation and prior to his permanent incarnation, when he was born of a woman and dwelt among us. There is strong reason for believing, as some think, that it was no doubt in this human form that Adam had frequent and probably protracted intercourse with Jehovah in the garden, and from whose presence the offending pair vainly attempted to hide themselves amongst the trees of the garden. There was, of course, no permanence nor personality in these passive and instrumental forms or media of communication. Fichte, one of the leaders of modern pantheism, used the following language: "Who educated the first human pair? A spirit interested himself in them, as is laid down by an old, venerable, primeval document, which, taken altogether, contains the profoundest, sublimest wisdom, and discloses results to which all philosophy must at last come."

When the angels appeared as finite personalities in the old or in the new dispensation under human form and garb, it was always by divine authorization, and never in their individual discretion. And the door is now open for rational and sober conjecture, whether these forms were miraculously or supernaturally provided for them, or whether they naturally possess a refined ethereal embodiment or corporeity susceptible or capable of manifested resemblance to our gross bodies but very different from them. With Jacob an angel wrestled; in the garden an angel strengthened the wrestling Saviour. "And, behold, there was a great earthquake: for the angel of the Lord descended from heaven, and came and rolled back the stone from the door and sat upon it. His countenance was like lightning, and his raiment white as snow. And for fear of him the keepers did shake, and became as dead men." There is a suggestion here of the presence of something more sublimated than the ordinary human body. It

must also be considered that the persons thus dazed were coarse, hardened, brutalised Roman soldiers. When the disciples entered the tomb, "behold, two men stood by them in shining garments." Likewise on the occasion of the ascension, not to multiply suggestive instances, "While the disciples looked steadfastly toward heaven as he went up, behold, two men stood by them in white apparel; which also said, Ye men of Galilee, why stand ye gazing up into heaven? This same Jesus which is taken up from you into heaven, shall so come in like manner as ye have seen him go into heaven." (Acts i. 10-11.) These apparitions were evidently supernatural appearances of personal messengers from the spirit world sent to render a specific and important service.

It is also evident that their bodily functions were such as are not possible to our gross bodies. They seem to be quite like the spiritual body of the resurrection spoken of by Paul (1 Cor. xv.) as differing so greatly from our present bodies; and in 2 Cor. v. 1, he says: "That, if our earthly house of this tabernacle were dissolved, we *have* a building of God, a house not made with hands, eternal in the heavens." Butler, in the first chapter of his *Analogy*, seems to catch a floating glimpse of the bearings of the invisible ethereal world on the destiny of our gross bodies.

Conjectures must not be mistaken for dogmatism; and it is fair to say that if the indications or anticipations of Scripture in this case are filmy, nevertheless they are quite as substantial as are the present gropings of science, and open up suggested extensions of ethereal science into the domains of ethereal theology quite unexplored and as yet undreamed of in the laboratory. "While we look not at the things which are seen, but at the things which are not seen: for the things which are seen are temporal; but the things which are not seen are eternal." (2 Cor. iv. 18.) (*Huxley's Fifty Years' Sci.*, page 45.)

It should be remarked, before leaving this topic, that, about twenty years ago, a little book by Professors B. Stewart and P. G. Tait was published anonymously under the title, *The Unseen Universe*, which, under the guidance of the postulate of continuity, extravagantly elaborated æther into a thorough-going system of refined pantheistic materialism. I undertake to say

that that postulate is a *delusion* and inevitably works out, wherever applied, a system of monism or philosophic Unitarianism, whether dynamic as by Spencer, idealistic as by Bowne, or materialistic as by Haeckel, to stay by some living representatives of different systems. But all are alike vitiated by the principle of continuity, for this world is built on the discreet scale of natural dualism, of the equally substantial reality of both mind and matter, which do not glide or transform into each other, neither being continuous of the other.

As we have seen, these professors, however, in the latest edition of this book concede, that "in the production of the vortex-atom from a perfect fluid, *i. e.*, from æther, we are driven at once to the unconditioned, to the great first cause; it is, in fine, an act of creation and not of development. But from our point of view," say these authors, *i. e.*, from the postulate of continuity or of evolution (Art. 86), "creation belongs to eternity." (Page 156.) In another connection they "regard the whole universe as eternal, and so in like manner," they say, "are we led to surmise that evil is eternal." (Page 268.) As the theory of vortex-atoms necessarily implies creation in time, they dissent in favor of the absurdity of an eternal creation, which is simply an euphemistic denial of creation. It would be better to accept creation than to plunge into absurdity in the vain attempt to escape from it.

These extravagant deductions from æther carry their own corrective, for an eternal creation is a palpable absurdity, and eternal evil is subversive of the character and existence of a holy God. The recognition of æther, as the stuff or original element from which ordinary matter was formed, therefore, gives promise of simplifying our biblical theology and of elucidating especially the doctrines of the ministry of spirits of creation and of the resurrection.

7. There remain two additional topics which lie in the subjective domain of psychology in its relations to Bible doctrine: The first of these, which is the seventh of our list, is the analogy of the relations of the Spirit of God to Christ's spiritual body and the relations of the spirit of man to man's physical body. That portion of the human body which is in proximate relation to consciousness is the nervous system which puts us in immediate rela-



tion with the external world. But this nervous matter is so minutely and thoroughly distributed to all parts of the organism that the omnipresence of the soul throughout the body is thereby abundantly provided for. Hence every operation and every pain, in the several individual organs of the body, are known and noted by the spirit. It is the same individual spirit of the human being that is conscious of it all.

It looks like a fair presumption that this solid fact, embedded in our individual experience and scarcely yet developed fully into practical and scientific recognition, was thoroughly anticipated and presupposed by the scriptural teachings respecting the spiritual body of Christ: "For as the body is one, and hath many members, and all the members of the body, being many, are one body; so also is Christ. For in one Spirit were we all baptized into one body, whether Jews or Greeks, whether bond or free; and were all made to drink of one Spirit. For the body is not one member but many. . . And whether one member suffereth, all the members suffer with it; or one member is honored, all the members rejoice with it. Now ye are the body of Christ, and severally members thereof." (1 Cor. xii. 12-14, 26, 27.) As it is the same conscious spirit that animates the head and all the members and organs of the natural body, so the same Holy Spirit that dwells in and animates Christ, the Head, resides in and vitalizes, with new life, every member of the church, which is his spiritual body. Our life is hid with Christ in God, and this is the true communion of saints.

The fact of the natural body being so fully used in illustration of the spiritual body was a præintimation and anticipation of this catholic doctrine of our psychology as illumined by modern science. The spirit that dictated the Scriptures apprehended the same truth that modern science has discovered and upholds.

8. The eighth and last point of scriptural and scientific significance noted for present consideration is the relative bearing of *subconscious states*. The fact of subconscious or unconscious states of both body and soul is not to be argued here. Since the days of Leibnitz, who died one hundred and seventy-eight years ago, the attention of the students of psychology has been steadily and

firmly fixed on this point; and to some of us it seems strange that it does not yet command unquestioned assent. But there is, perhaps, no truth touching the workings of the human mind more capable of thorough vindication on strictly scientific grounds. There are certain teachings of "the word of our God" which stand among its deep things, that seem to point to it and to unequivocally imply and anticipate it: "Jesus answered and said unto him (Nicodemus), Verily, verily I say unto thee, Except a man be born anew, he cannot see the kingdom of God. . . The wind bloweth where it listeth, and thou hearest the voice thereof, but knowest not whence it cometh and whither it goeth: so is every one that is born of the Spirit." How many are conscious of the new birth at the moment of its occurrence? It is true that some claim to have such knowledge. Dr. Finney tells us the day, and the time of the day, and the log on which he was sitting in the woods when he experienced regeneration. Without disputing such experiences, it must be confessed that they are exceptional. We do not question the reality of natural birth because of its occurrence not being distinctly recorded on the tablets of conscious memory. The experiences of life presuppose and certify it. And as to the new spiritual life, "We speak that we do know, and bear witness of that we have seen: and ye receive not our witness. If I told you earthly things and ye believe not, how shall ye believe if I tell you heavenly things?" (John iii. 3, 8, 11, 12.) The only rational explanation of the divine touch that changed and reversed the whole current of life must be found in the latency of the change produced till developed into experience. We are not conscious of our native and latent powers till in action. Life asserts itself in growth and action.

By virtue of these subconscious states, God's influence may be most positively and constrainingly exerted in harmony with and in confirmation of the freedom of the creature. The will is perfectly free when it acts in accord with the dispositions which are as strictly subconscious states as are our latent powers of body and soul. This is the deep depth of the soul where efficient grace so certainly and irresistibly accomplishes the work of regeneration and sanctification and providence. It is here that divine sov-

ereignty and human liberty embrace each other. The fact of everyone being the subject and also the agent of unconscious influence is a matter of actual experience and of observation. "The kingdom of heaven is likened unto a man that sowed good seed in his field; but while men slept his enemy came and sowed tares also among the wheat and went away. But when the blade sprang up and brought forth fruit, then appeared the tares also." The man did not know just when the evil influences were planted, and the same may be true of good seed. This sword turns every way.

Having passed under rapid review the scientific aspects of our subject, it remains to take some note of philosophy from the same point of view. There is an elementary and radical distinction between these two departments of knowledge. All the sciences without exception fall within the definition that *Technical science is the systematic classification of the laws of phenomena*. Merely classified knowledge is not technical science. It is only when the laws of phenomena, or *the established modes* of their concurrence and succession, have been discovered and reduced to systematic order that we have attained to science in any case. Wherever such knowledge of laws and their classification is absent there is no science.

On the other hand, philosophy penetrates beneath the surface of phenomena and back of laws, and searches into the causes and nature of things. After all, the sciences, strictly considered, are superficial and shallow, and hence all thoughtful scientists are impelled to give in their adhesion to some system or to some principles of philosophy. They are not mere scientists but are philosophic scientists. Philosophers are not mere philosophers, but, in their best form, they are scientific philosophers. Physics, chemistry, and biology necessarily sink their shafts down to the deep fountains of metaphysics. Hence, the attempt, in this day, to eliminate metaphysics or philosophy from academic curricula has proved to be a foredoomed failure. The bonds of union between the natural sciences of matter and of mind and between science and philosophy are indissoluble. Therefore, if the light of anticipation shines from the pages of the sacred writers on the ma-

turest and most advanced conclusions of the sciences of the present, a like illumination might rationally and soberly be expected to fall on the salient problems of philosophy. Such a realization may be confidently asserted as an interesting matter of fact. Only a glance at this matter can now be given.

There are five leading topics handled, with more or less fulness, in every known system of philosophy. These topics are: (1), Mind; (2), Matter; (3), God; (4), Duty; (5), Immortality. These subjects constitute the very foundation of existence, of light, of activity, and of destiny. From first to last they are questions of fact. Our ignorance or misconception of them does not change them. Our conception of them does not make nor unmake them. We conceive but do not constitute them. It is truth that pervades them and gives them stability and knowableness and utility. Speculative truth consists in the conformity of our convictions to the reality of things; just as our practical truthfulness, or veracity, consists in the conformity of our expressions by word and act to our convictions. We cannot always be absolutely sure of the conformity of our convictions to realities, but we can always be sure of honorably maintaining our veracity by conforming our expressions by word and act to our convictions. However, no such weakness and imperfection, and consequent liability to vacillation, can be allowed to attach to the word of an omniscient and holy God, touching even the abstrusest issues and subjects.

Now, the circumstance to be especially noted at this time, and in this general connection, is that, while there is not a technically scientific statement, nor a single formal philosophical proposition, in the Bible, from Genesis to the Apocalypse, inclusive, yet more satisfying light is shed, upon the five fundamental topics of philosophy named, from the pages of this one book than from the pages of all other books known in the world—ancient, mediæval, or modern. Of course, such a broad statement has to be made according to one's best knowledge and belief. It is certainly *veracious* and is believed to be absolutely truthful.

The Bible speaks with no uncertain sound of matter and of mind as the components of man's complex constitution. The soul is set forth as a self-conscious personality, having a real sub-

stantial existence and as destined to a deathless immortality in an exalted and glorified state. And the body is set forth as having equally substantial reality of existence, with possibilities of refined exaltation, to be finally realized in an everlasting and befitting re-union with the soul. Man, thus transformed to his best estate, does not in any manner lose, but fully retains, his individual, conscious personality and identity, and in the highest sense images forth or manifests the attributes of his Creator. Hope, then, becomes fruition, faith becomes sight, and knowledge, love, and obedience blend in one spontaneous flowing stream of activity, equally dutiful and joyous. The conditions of happiness, which consist in the conscious unimpeded activity of all our powers of soul and body, being fully in possession, the consequent stream of bliss must flow without a ripple.

This is not a piece of gushing exuberance, but a sober, prosaic, and concise summary of the salient points of philosophy as bathed in the light of didactic and prophetic biblical teachings and anticipations.

From the philosophic point of view the transcendence, as well as the sober reality of the anticipations of the highest attainments of human genius, is perhaps more remarkable and impressive than from the strictly scientific point of view.

But as human patience has its limitations, these reflections must now be hurried to a conclusion. In doing so, however, there are two corollaries or inferences which must be briefly mentioned, as they are too important to be omitted:

1. The *first* is that the marks and characteristics which have been held up to view, with sobriety and without fanciful exaggeration, plainly indicate that *these sacred writings have proceeded from superhuman intelligence*. The writers did not have, and in the ages when they wrote could not have had, the knowledge which is impressed on and shines from their pages. In no one of the cases considered is it set down as prophecy, but as an insight into and comprehension of a then present state of fact. It is just such a discernment and penetration as one, thoroughly familiar with a subject, unconsciously reveals in speaking or writing on it. How could Moses, or, for that matter, any one else of limited finite

intelligence, have had such a knowledge of the intimate nature of matter in those early ages, even conceding the most extravagant claims of the neologists as to date of composition, as to deny its eternity and assert for it a positively derived existence, both the denial and the assertion being now found, after the intervention of an interval of thousands of years, in accord with the latest and best conclusions of philosophic science? How did he dare assert the existence of light, in contrast with darkness, before the ordination of the sun? How use a transitive verb in a species or conjugation where it is never used of human actions, and that without any direct object as the material on which its action should be expended, as must have been the case in creating, in the secondary sense, out of some preëxistent stuff? How use this same verb for the creation of animal life and the soul of man in complete abnegation of abiogenesis? How is it that vegetable life is on record as created prior to animal life, whereas it has only become known by the scientists of these later ages that vegetables alone can manufacture protoplasm from the elements, and yet animals are dependent on it for food, and hence their very existence on our planet presupposes and is dependent on the prior existence of plants? It is, nevertheless, only of late that the scientific geologist has found imbedded in the earth's crust the anticipated evidence that plants in the natural order preceded animals. How is it that the simple narrative of man's creation, on which myth-mongers have broken their teeth, is such as to meet the requirements of our present scientific physiology and psychology as to the dual constitution of man? and also by anticipation to settle rationally the controversy among ethnologists as to the unity of the human species and of the origin of that species? Where did the information come from, millenniums before Harvey, as to the vital character of blood, in such sense that, on the very threshold of Eden, and in the first sacrifice, it should be singled out and sanctified with such portentous moral significance? Where did the unlettered fisherman, Peter, become so wise as to the winding up of this world's affairs, and the indispensableness of an *ab extra* ground on which to base a rational hope of a new heavens and a new earth wherein should dwell righteousness, as to stand in accord with the highest mathe-

matical physicists of this age in repudiation of nature's automatic self-sufficiency?—a wisdom which his contemporaries scoffed at, saying, "from the day that the fathers fell asleep, all things continue as they were from the creation." How absurd, then, to be prating about a day of destruction and the end of the world and a day of judgment! Did Paul learn in the schools of Cilicia, or from the lips of Gamaliel, the unique structure and functions of the nervous system and of the omnipresence of the consciousness of the human soul in all the members of the bodily organism, so that he could so intelligently and faithfully use this means (in 1 Cor. xii. and elsewhere) for conveying with precision the profound doctrine of the omnipresence of the same conscious Holy Spirit in Christ the head, and in all the members of his spiritual body, the Church? Where did the unlettered fisherman, John, learn the doctrine of the subconscious modifications of the human soul, so intimately underlying his teachings and those of other apostles, on regeneration and sanctification, human freedom and divine sovereignty?

It is remarked by the venerated Dr. Charles Hodge, one of our ablest theologians, my venerated teacher, that "there is nothing more characteristic of the Scripture, and there are few things which more clearly prove its divine origin, than that it takes for granted and authenticates all the facts of consciousness."

When, passing beyond the sciences, we reflect that it is required of every system of philosophy, come whence or from whom it may, that it shall explain everything known, whether finite or infinite, human or divine, we can understand why the history of philosophy is a history of disappointed hopes and of wrecked pretensions. When, therefore, the student of the Bible finds so many of the great philosophic problems of life satisfactorily solved by its simple, non-technical teachings, how natural the thought and the inquiry, as he reads the sacred writers severally: "Whence hath this man this wisdom?" (Matt. xiii. 54.) And when, in its unconscious and unpretentious simplicity, he finds this teaching so suggestive and helpful touching problems and questions of legitimate and unavoidable natural inquiry, in even the most advanced and tangled walks of investigation and specu-

lation, the demand becomes imperative and must be met. Is it antecedently reasonable and probable that these writers, in the age and under the circumstances of their writing, had personally and severally the knowledge and intelligence embodied in their writings? Such a proposition staggers our belief. But we must believe they spoke in their own wisdom or in the wisdom of another. The entire consistency and organic unity of these implications stamp them as having unity of origin from God.

Although briefly indicated on this occasion, it is evidently a case of cumulative evidence. A single isolated instance might be passed by as a happy guess or an accidental hit, however extraordinary. But the number, variety and profundity of the disclosures and anticipations seem plainly to exclude the hypothesis of the guessing of finite individual impulse and intelligence, or of chance coincidence. There is unity, comprehensiveness and consistency, which point to the sameness of the superhuman source. It is submitted that this is a unique group of the objective internal evidences in the book itself, as distinguished from the subjective internal evidences in the heart of each believer, testifying that the Bible is not the word of man, but "the word of our God." The induction is legitimate and sufficiently complete to be valid and entitled to our respect and deference. The fact is too palpable for rational denial. It cannot be ignored, and how else can it be explained?

2. The *second* corollary or consequence to be noted is, that *the teachings of Scripture*, so interwoven with all other knowledge, *must be as lasting as the human intelligence and as the truth itself*. It is by no chance shufflings that these wonderful correlations and interlacings are seen to exist. It is like the work of the explorer's spade disclosing the unexpected depth and breadth of the foundations, imperfectly known, on which the superstructure of our religion is based. When it is seen that all true progress of human knowledge, instead of validly antagonizing, falls into line with the divine word, and that no exception has as yet made good its pretensions, the talisman is found for exorcising the demon of infidelity which questions THE PERMANENCE OF CHRISTIANITY and speciously forebodes that it is to pass away and



give place to some form of human knowledge as a substitute. Bring us something better than Christianity, and we are pledged to receive it, for we propose always to go for the best. But please do not ask us to give up what we have, till you show us something better suited to our wants as sinners, and resting on better evidence, to fill the void that would be caused by its loss.

The permanence of our religion, however, does not rest on any arbitrary fiat or transient utility, but on its truth. There is inherent weakness and darkness in error. It flies and perishes before the light. "Truth, like a torch, the more it's shook it shines." The Christ, in one breath, says: "*I am the light* of the world: he that followeth me shall not walk in darkness, but shall have *the light* of life." (John viii. 12.) In another breath, the same Christ says: "*I am the way, the truth, and the life.*" (John xiv. 6.) "I am the truth," "I am the light." If our Christ is the concrete embodiment of the truth, then all discoveries of truth in whatever domain must serve to confirm and to strengthen his claims. For it is an axiom, not to be questioned, that all truths are harmonious. It is error that loves the darkness rather than the light, and dies amidst its worshippers.

In the Saviour's prayer to the Father, when he prayed not that his followers should be taken out of the world but sanctified in the truth or by means of it, he added, "*Thy word is truth.*" And this is the same word of which Isaiah speaks when he says: "The grass withereth, the flower fadeth: but the word of our God shall stand forever."

The possessive pronoun "our," in Bible idiom, contains the assuring implication that God is under covenant engagement to maintain his word. To that perpetual maintenance his veracity, his honor, his oath, his entire character are irrevocably pledged. But this maintenance has not been without conflict; indeed, it has been, is, and shall be, in the midst of unceasing warfare. Christianity is a fighting religion, opposing all falsehood and error in the hearts, minds, and lives of men; it makes no compromises and offers no terms to its foes but unconditional surrender. It does not live nor flourish by favor, nor by might, nor by power, but by

my Spirit, saith the Lord. (2 Cor. x. 4-5.) It is not a war of sentiment, nor of passion, but of truth against falsehood; and as certainly as truth in science and philosophy shall ultimately triumph over ignorance and error, so certainly is the truth of God destined to triumph and endure. The pretence that the progress of knowledge—of the synthetic philosophy, for example—is destined to supersede Christianity and the word of God is less rational and plausible than that the flickering arc light will supplant the glorious sun in lighting up this world and the starry heavens. The visionary speculator who should ask you to take stock in that enterprise would be set down as a lunatic. I should consider him no wiser who should take stock in any substitute for Christianity and risk in it all his interests for time and for eternity.

How readest thou? “Everyone, therefore, which heareth these words of mine and doeth them—not forgetteth or neglects, but *doeth them*—shall be likened unto a wise man which built his house upon the rock: and the rain descended, and the winds blew and beat upon that house, and it fell not, for it was founded upon the rock.” (Matt. vii. 24-25.) It might be well for those who are crouching and shivering in their shanties down on the sand lots to come up higher and mount the walks that encompass the city of our God. “Walk about Zion, and go round about her; tell the towers thereof; mark ye well her bulwarks, consider her palaces; that ye may tell it to the generations following. For this God is our God forever and ever; he will be our guide even unto death.” There is no thought nor sign of retreat or of surrender in this stronghold with its well appointed and impregnable citadel and gorgeous palaces and Almighty Captain who is able to save to the uttermost. The word surrender or defeat is not known in its vocabulary. The blood-stained banner of the cross floats in defiance and in triumph from every tower. It is only occasionally that a pitiable victim of Satan’s wiles or a self-deluded traitor struggles from the outworks over to the camp of the enemy. But the powers of hades shall not prevail. Yet the soldiers of the cross are sometimes sorely straitened. But their deliverer ever faithfully comes to their rescue.

Some twenty years ago I saw in the halls of the Palmer House,

Chicago, a medium-sized man with a deep depression in one cheek, the mark of a severe wound. His name was given as Colonel ———. Within a fortnight, in riding from Nashville to Atlanta, the Kennesaw Mountain was pointed out in full view from the cars. A fort on those heights was charged with holding an important vantage ground and defending valuable stores. The enemy knew well the importance of capturing the position, and made a determined, and what threatened to be an irresistible, assault. A signal of extreme peril was flung out, and human endurance seemed well-nigh exhausted, when the Colonel, commanding, who was on anxious lookout, saw through the riven and lifting clouds of smoke the signal of his commanding General, "Hold the fort, for I am coming."

Man's extremity is God's opportunity. The word of our God shall stand forever. "To bring out the truth in the Bible is a true way to defend the Bible."

"There are great truths that pitch their shining tents  
Outside our walls, and though but dimly seen  
In the gray dawn, they will be manifest  
When the light widens into perfect day."

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