PRINCETON REVIEW.

JULY, 1867.

No. III.

ART. I .- The Hebrew word zin Yashabh.

LANGUAGE is not a merely arbitrary invention, but partakes of the character of thought, whose vehicle it is. Consequently, its phenomena, its words and forms and constructions, are in no case purely dependent upon accident or caprice, but have arisen under the operation of fixed causes, and contain in themselves indications more or less clear of the sources from which they sprung. The language of any people is the mind of that people made external and tangible. It exhibits their inner life in its affinities with, and specific differences from that of other peoples, reveals the compass and range of their ideas, the extent of their knowledge, the character of their sentiments and feelings, their conceptions, whether of objects of thought or objects of sense, the impressions made upon them by surrounding nature, and even shows traces of the historical experiences through which they have passed. Recent scientific investigations and popular treatises have made us all familiar with the fact, that a careful study of the words of any language in their structure, usage, history and relations, not only reveals much that was unsuspected by superficial smatterers, but much also that had escaped those who were intimately and familiarly acquainted

ART. IV .- A Philosophical Confession of Faith.

What is here designated as a confession of faith, will be arranged under several distinct heads; beginning with that which immediately follows.

The Three Primary Beliefs.

(1.) The three primary and practical beliefs of all men are—First, the internal persuasion and full belief of every individual that he himself exists and thinks; the maxim, Cogito, ergo sum, as an expression of personal experience, having the order of its terms reversed and the whole combined, so as to become Sum, et ergo cogito. I am, and so it is that I think.

The second equally perfect persuasion and full belief of every individual is that, through the avenues of the senses, he also feels.

The third of the beliefs in question results by immediate inference from the other two, and, it is this; viz., that the thinking and feeling here described—reflection and sensation—are in themselves, immensely different.

These three are practical beliefs of the race—the beliefs under the influence of which men always act, however they may sometimes reason themselves out of the formal reception of one or more of them. They are veritable corner-stones of physics, as well as of metaphysics.* In the very respect of an immediate and simple faith, which accepts of the undistorted evidence of the senses, and also that which trusts in our mental processes rightly exercised, the philosopher and the little child are placed on the same level; insonuch that we see verified, even in this, the noble aphorism of Bacon, that, with respect to the interpreta-

* A bald positive philosophy—as well as every form of materialism fully confessed—rejects or ignores the information which rests upon the first of these beliefs, and thus refuses to avail itself of the most intimate knowledge that we have; while the reasoner, who altogether refuses to believe in the existence of an external world, ignores, on his part, all the special information which sensation is fitted to give. And he and the materialist are, after all, so far alike, that each, in his own way, rejects the third of the primary beliefs, by confounding the ineffaceable distinction between reflection and sensation.

tion of nature, "it is a point fit and necessary in the front and beginning of this work, without hesitation or reservation to be professed, that it is no less true in this human kingdom of knowledge, than in God's kingdom of heaven, that no man shall enter into it, 'except he become first as a little child.'"*

Of the Personal Consciousness of Causation, and the distinguishing characteristic of a Cause—The Physical Cause.

(2.) Among our earliest experiences is that of the executive determination of the will, which prompts and brings with it the effort that evokes our muscular exertion. In this, there is "a distinct and immediate personal consciousness of causation," which has its special place in "that sequence of events, by which the volition of the mind is made to terminate in the motion of material objects." "I mean," says Sir J. Herschel, "the consciousness of effort, accompanied with intention thereby to accomplish an end, as a thing entirely distinct from mere desire or volition on the one hand, and mere spasmodic contraction of muscles on the other." "It is our own immediate consciousness of effort, when we exert force to put matter in motion, or to oppose and neutralize force, which gives this internal conviction of power and causation, so far as it refers to the material world." We recognize similar effects which we can refer to the exercise of similar efforts in our fellow-men; and the same are often largely exhibited by the inferior animals, and in such case too, are evidently under the control of at least an analogous determination of will. Our superior intelligence enables us to apply all this with a skill that the animals do not

The power and causation are, in our own experience, understood to be evoked by a spiritual agency. The forces brought into action or put under constraint by the inferior animals, and the forces which are urgent in the material world are also so like that which we evoke for the action and application of our own muscular frame-work, that we can, by muscular effort, aid, oppose, or neutralize such forces; and we can also, otherwise, set any of these to influence, in a similar way, any of the

^{*} Valerius Terminus of the Interpretation of Nature. Bacon's Works, Basil Montague's edition, vol. i. p. 267.

others. And force, in its efficiency or its urgency, in all these cases, being thus manifestly the same in kind, we are led to conclude (as not an unreasonable induction even) that, in every such case, the urgent or efficient force is itself evoked by an agency similar to our own, and "somehow exerted, though not accompanied with our own consciousness;* it being accepted as a sound maxim (illustrated and enforced by experience) that similar effects should as far as possible be referred to similar causes. And, inasmuch, withal, as many of the pre-arrangements and adaptations in nature are far superior to those which we can devise and execute ourselves, the efficient force must in the end be referred back to the agency of a spirit enormously superior to ourselves; far more so, than we ourselves are to the animals.

For, in all our experience of the force which we personally exert, and all that such a force encounters without us, we become satisfied that that which enters into the efficiency of causation, thus personally understood and tried-that which gives to the cause in question its cause-like character—is energy. And when, therefore, we discern efficiency of the same sort (or urgency, when efficiency is held in check) anywhere, though we cannot trace it back to our own will or consciousness; yet we conclude that the very existence of such an efficiency or urgency implies that of the appropriate determining energy. Nay more, we in effect apply this to the case of every efficiency, and not merely to that which is connected with physical force; insisting that urgency, or efficiency, or the traces of such, each and all, imply energy, either as being now, or else having been applied; for this is included in the statement that every effect must have a cause; which last must, of course, (as already indicated) be energetic, to be a cause at all.

It is to the energy in nature which we find to be thus efficient or urgent, though unable, directly, to trace it any further back—that we give the name of the (proximate) physical cause.

Energy immediately efficient—A Physical Cause not antecedent to its first effect.

- (3.) The sun acts upon the most remote planet of the system,
- * The quotations here are from Sir J. Herschel's Outlines of Astronomy, (439), and note to that article, first published in edition of 1833.

and that planet acts upon the sun; but this mutual gravitating force of the two is not like the outflow of conducted electricity, or the vibrations of light and of heat, or like sound; in all of which a progress from onc elementary part to another is concerned, and this progressive transference occupies time. But the action of gravitation, though it indeed takes place in straight lines outspreading from a centre, like the radiations of light and heat, yet takes no time, or, at most, cannot be shown to take any; the nicest observations indicating that if any time at all be occupied in the transmission of gravitation, the velocity of its transmission must be full fifty million times that of light itself. We could not, even if this were accurately so, suppose gravitation to be due to any outflow or influx of a material substance, or even a vibration of the particles of such, without the introduction of the hypothesis of the existence of some such substance, diverse, it may be, from any others which seem to be recognized; and this, when we have no sufficient evidence that any time at all is occupied. The energetic action of gravitation must then be regarded as being immediately efficient at any distance however great.

The application of force through other agencies already specified, occupies time, because, as already indicated, of the motions involved. So also the transmission through a metallic or other bar, of the force due to pressure, occupies time, because the successive series of little particles which constitute the bar, must, one after the other, be set in vibration, being crowded toward, and again receding from one another. Experiments on the transmission of sound indicate, that a thrust upon one end of an iron bar extending the whole distance from the earth to the sun, would require a thousand days for its transmission to the other end. But the effect upon the first series of particles to which the thrust is applied, would, even then, be immediate; the time of transmission through the bar being as its length, and reduced to nothing for the first series of particles merely, with which the motion (that takes time) begins, the particles, at the first, being entirely obedient to force, and so starting as soon as force is applied. The like may also be inferred, because gravitation, which takes no time for its action,

is itself so like any force which may be employed to thrust the bar, that any such force may be made to aid, "oppose, or neutralize" gravitation. A physical cause then—so far from being "a mere stated antecedent"—is, at its first application, not antecedent to its effect at all. And, even when intervening motions and transfers of force occur, the physical cause is not a mere stated antecedent to its last effect, since, [see our number (2),] the cause must not only thus precede its last effect, but also be appropriately energetic.*

- . Mind and Matter immensely different in their Phenomena.
- (4.) In our article (2) "the sequence of events" is traced, which, beginning with the executive determination of the will, results in efficient action on material substances. A careful attention to this will indicate:

1st. That in the very case in question, the effort of the human agent does not originate the force which he applies, but only evokes that force; and how much muscular strength (and not how much mental power) he can thus apply, depends at once upon his bodily development and the state of his health; and no amount of mental reflection will evoke the force, until the will is made executive, in the application of effort, put forth through muscular agency.

2d. The reaction on ourselves, of excessive effort in the way either of thought or of muscular exertion, is well described as being fatigue. But the fatigue which incapacitates us, for the time, from the pursuit of accurate and well connected thought, can as immediately and perfectly be distinguished from that which makes us, at the time, incapable of a continuance of energetic bodily action, as sensation itself can be immediately distinguished from reflection; so different are being tired with walking, and being so stired with laborious and continued thought, as, temporarily, to be unable to think connectedly any longer. Even in the case in which certain forms of thought are accompanied with a sensation of "the racking of the brain," this last may itself be immediately and perfectly distinguished

^{*} The crowing of a cock very often precedes the rising of the sun; but the agitation and the noise of the crowing do not bring about sunrise.

from the weariness and relaxation of mental energy, superinduced by that very process of thinking, and which prevents, just then, our thinking intensely any more. The very great difference between bodily and mental phenomena scems specially to be reflected by these so very different reactions, thus brought into juxtaposition and vivid contrast.

3d. "The intention to accomplish an end," and the executive determination of the will carrying out that intention, originate within; choice and the determination then to do, uniting in the putting forth of the effort which evokes lastly the efficient action on matter.

When, however, conversely, matter acts or reacts on us through the same sensational arrangements, that action or reaction begins from without, in accordance with a law or laws which exclude choice or will, for they exclude "disobedience," and this action or reaction, through the same sensational arrangements as before, is more or less distinctly made known in the end, to consciousness and the interpreting intelligence within; provided, that attention to the same (which attention is itself under the control of executive will and effort), be duly put forth, otherwise, (as in a case of abstraction of attention, in deep reverie), the connection of the sensational series with the conscious interpreting intelligence is so far severed, that we are no longer sensible of the material action from without. The last link, therefore, in the conveyance of information of an influence duc to that which has neither consciousness nor will in itself—this last connecting link thus traceable, is one distinctly indicative of that of which matter (in its very action thus made known to us) is itself incapable; or the connection with the consciousness and intelligence within is effected by that which does what the actions of matter itself cannot effect;* so that the phenomena of matter and mind thus brought into juxtaposition by the very "sequence of events" which connects the two, are in contrast, again seen to be immensely different; even

^{*} The conclusion with respect to the last connecting link in the conveyance of information from without, and the first of the series of arrangements by which matter is to be influenced from within, being both mental, is only the more cogent in view of the fact that the one-half of a nerve conveys sensibility, and the other, "voluntary motion;" so that we simultaneously produce pressure, and feel that we do it, without any interference of nervous action.

more so than, (1), are sensation and reflection themselves. We are not, then, in view of all here presented, at liberty to attribute to mind the properties or the phenomena of matter, nor yet to matter the properties or phenomena of mind; both the characteristics and the laws involved in the one case being so utterly different from the characteristics and the laws in the other.*

The Great Pre-existent.

(5.) That something always was, is what all will admit who reflect upon the matter at all; since, (2), there would be no energy in nothing to originate something.

This great pre-existent cannot, however, be mere matter, i. e., matter apart from force. It would indeed be an assumption to suppose that matter could so exist; since we always find matter associated with force. But even if the contrary were supposable, matter alone could not be regarded as the great antecedent, since it must then be self-existent; and self-existence itself. must, (2), imply the most indescribable energy, the self-existent being eternally the sustainer of its own efficiency. Now matter shows itself to be utterly inert, and force is its master; the smallest force being adequate to influence the greatest mass; and this, though indeed more force is evoked, when the conditions due to a nearer approach, give a wider scope for that mutual action with which the efficiency of force is linked-of which more hereafter. But even if all these difficulties could be gotten over, matter does not now originate, nor could it be supposed to have originated its oërmastering force; and so force must either be supposed to have always co-existed with matter, or else force itself be pre-existent to matter.

But whether force thus pre-existed or else co-existed with matter, it cannot, under either aspect, be regarded as the great pre-existent to aught else.

For force is efficient in accordance with law; and the laws of nature, as by us ascertained and expressed, have, for us, the

^{*} In the case of physical forces like those in question, it is only when something like consciousness and will develope themselves as evoking, in the way of choice, the forces which vital action has garnered up, that we recognize phenomena like those of thought. Apart from such, (when the favouring circumstances are all present), even in the vital actions, animal as well as vegetable, disobedience to law is excluded, and no choice appealed to.

eharacter of rules prescribing both the mode and the measure of action under them. And (as heretofore insisted) these laws "are invariably obeyed; their transgression is not punished, it is excluded."*

Now, it is not easy to see how force could thus be self-limiting and controlling. It would be still more difficult to conceive of force as developing the vital principle, which somehow modifies the action of forces within the living individual, making them work after a providential fashion, for the special benefit of every part of the plant or animal, and so of the whole. And still greater, (4), would be the difficulties in the way of supposing that force, even allied with matter, had developed itself into consciousness, associated with executive will. And most diffieult of all, would it then be, to account on such an hypothesis of the progressive action of force, for the numerous and exquisite adaptations which we everywhere meet with in nature, and even in our very selves. For all this would give to force, at the outset, antecedent to consciousness, the characteristic attributes and arrangements of intelligence, and the subsequent development of intelligence itself, with an executive will; or this law-restricted, pre-arranging force, the originator of intelligence and will when all was ready, must, at least at the first, have been "an unconscious intelligence"—an unknowing knowingness-an intelligence which somehow provided for all things and all relations of things, ere it knew that it knew anything. But we are besides prohibited from attributing all this to force, or to force allied to matter, by what is exhibited in (2); viz., that force in its application to material objects even, is such as it would be, if evoked by an intelligent agency, not unlike, and yet vastly superior to our own, so that, whether, as here, the characteristic attributes of the cause be in question, and an assigned eause, in view of them, be put on trial to determine whether it be adequate to the effects; or the effects be compared with those which confessedly are due to an intelligent cause, the result of both comparisons is the same; and though the inductions in the one ease, and in the other, may separately be regarded, as not being fully adequate, yet the difficulties which are everywhere presented as excluding the acceptance of

^{*} Whewell-Bridgewater Treatise, chap. v.

any hypothesis inferior to that which they point to, are real; and the "consilience" of the inductions in the same result is itself cogent in also requiring a far better hypothesis, untrammeled by the difficulties of any other inferior to itself, and withal fully adequate to account for the phenomena—an hypothesis, no way less than this; that the great efficient pre-existent, and, (2), Great First Cause, must, like ourselves, be intelligent and active, and yet be immeasurably superior to us, i. e., must be the Great Spirit. This, presenting as it does, every aspect of an immensely adequate hypothesis—with every inferior one helplessly excluded—must, at the very least, be accepted until something else can be shown to meet the vast exigencies of the case at all.

But self-existence in itself implies an indescribable causelike and even self-caused energy, eternally self-continued; and the Great Spiritual First Cause, therefore, can be nothing less than almighty.

The uncompromising laws "disobedience" to which is "excluded"—the providential working of the principle of vitality—the often closely arranged, but non-conflicting adaptations of all sorts; these and other arrangements, all indicate an aspect of intelligence and wonder-working skill in the Great Spiritual First Cause; who cannot, then, be characterized as being any thing less than infinitely wise. All this, moreover, will imply his omniscience, and that, in its special form of prescience to the largest extent; and in the special sense of the term (to be hereafter considered) would show Him to be omnipresent. The self-existent withal, in itself, "hath immortality." It is among the glorious perfections of such a being, that he cannot die.

The Great Spirit, moreover, can have about Him no taint of moral evil. For, the more widely extended our inductions are, the more plainly do they evince, not only the existence of sin, but also that destructiveness is as inseparable from sin, as is efficiency, or the tendency to it, from energy. Were then, the great administrator of the uncompromising laws, the pre-arrangements and adaptations of all nature, other than perfectly, and, of course, in his case, infinitely good, the occurrences of devastation and ruin everywhere, instead of being exceptional cases, would be exhibited with a frightful generality.

Beyond this it is impossible for us to reason clearly with, respect to the state of an infinitely great being, enormously sinful (if at all); were even the awful supposition admissible being anything less than blasphemous; much less could we determine whether self-existence itself would be at all consistent with such a state. The existing dispositions of things indicate the contrary now; and a being infinitely perfect in all the attributes already indicated, must be infinitely above all temptation to evil. Then too, such a being must, in himself be, in every respect, "without variableness or shadow of turning." Lastly in this connection—in so far as we can discern the absolute infinite, in this case, must in the respect of its distinguishing attributes, be as truly exclusive of all other beings like itself, as, in a somewhat analogous way, boundless space is exclusive of all other space boundless like itself; though every limited space or volume is included within the infinity of absolute space: and so the Great Infinite First Cause-including within himself the infinity of all perfection—is One; there is no other.

To fulfil all that thus appears to be requisite in the Great First Cause of all; viz., that He should be one, and be self-existent, almighty, infinitely wise, omniscient, discerning the end from the beginning, omnipresent, infinitely good; and thus absolutely unchangeable in himself, and so incapable of sin, as well as absolutely immortal—for all this, nothing else is great enough, nothing else is wise enough, nothing else is powerful enough, nothing else is enduring enough, nothing else is good enough than the "living God and everlasting King"—all "glorious in holiness"—of a very old fashioned book.* This is the great, the final hypothesis—an hypothesis broad as the universe, which God sustains and pervades by his power, and lasting as the eternity, which he, "the always ancient one," "inhabiteth;" an

^{*} In order to our acceptance, as such, of the infinitely adequate hypothesis which that old fashioned book affords to us, it is not requisite that we should even discuss the question whether the volume is indeed all that it claims to be. It is not necessary for us to settle the question whether Sir Isaac Newton was a good man, before we adopt the theory of gravitation. But that the only adequate hypothesis for science should itself be found in the Bible, is itself an argument in support of the Bible's claims.

[†] Pollock.

hypothesis withal, in conformity with which, the justly accepted formula of "the uniformity of causation," admits of this sublime paraphrase—Science is possible, because God is true.

Such a being, though exalted in his attributes above all limiting conditions, yet cannot well be described as "the unconditioned;" since existence itself has the very distinct aspect of a condition, and that, as being infinitely superior to non-existence, in the sense in which a finite quantity is infinite as measured by the zero of its own species.

The "absolute," and at the same time "unconditioned," is then an abstract idea which cannot be realized at all, and, besides, in no respect has it that, or can it fulfil that which is indispensable in the instance of a great Pre-existent, viz., (2) and (3), infinite energy; which is, in its own way, not a limited, but an all-embracing condition. To insist, then, at the outset, that the "unconditioned" must be God, or there is none, is to assume as true the converse proposition; viz. that God can exist only as the unconditioned: or to assume, without argument as to the fitness of the hypothesis, that atheism is of course But that does not prove it to be so; for God need not be no God, because, in order to be God, he must positively be self-existent, and in the possession of the infinite perfections which pertain to that, he must (in a negative aspect) be infinitely incapable of sin and death; being gloriously in all, above all limit or defect. That he should be so is essential to his being God. For, as in our estimate of the human being, character essentially enters as well as talent; so does a similar element enter into our estimate of what the Divine Being must (and ought to) be, with "a far more exceeding and eternal" appropriateness.

The ultimate reference of Necessary Truths.

(6.) The abstract truths which we call necessary, must all have been discerned by the prescience of Him whose self-existence, in all its perfection, is the one absolutely necessary reality. Such truths, then, to be truths, must be consistent with the perfect verity thus found in God himself; the necessity for them existing because they never can be other than

consistent with that unalterable verity. They are discerned by us to be what they are, because our reasoning faculties are, in their own measure, veritably adapted to the elaboration and discernment of such truths.

What we know of the Presence of Spirit.

(7.) We know that our own spirits are present, in an accepted sense of that term, in, or rather to, the region which we can take cognizance of, or within which our power extends. its most intense sense, this is all true of the soul with respect to the body of its own indwelling; the two being so intimately connected, or rather united, as to form but one person. In so far as the general sensation of feeling is concerned, we seem to be conscious of the presence of the soul to every part of the body; especially is that true of that general feeling of buoyancy which belongs to extraordinary health, with its accompanying vivacity. But if-trying one of the senses by itself-the attempt be made, with one eye closed, to look, as far as may be, at that half of the body in which is the closed eye, the impression which accompanies the view, such as it is, will be that the percipient soul is confined to that half of the body in which is the open eye.

Again, during a great intellectual effort, the soul seems to be specially present to that part of the brain which, in an accepted sense, is sympathetically affected; and hence that "racking of the brain" which, (4), accompanies such intense thought; which yet can be distinguished from veritable mental weariness. We recognize very similar effects when we speak of the heart swelling with joy; and in other analogous expressions.

In cases, such as these, of a presence of the soul, seemingly restricted to a part only of the body; the experience of a more intense sensation there, would seem to render us partially insensible to feeling elsewhere; as in the presence of bright light, the eye becomes more or less insensible to lights of less intensity. This is more completely true when we make use of the sensibility of one eye, and that part of the nervous system immediately connected with it, to the exclusion of the other eye and its similar connections. When, however, antecedent to any wearying thought, we try to imagine a scene, a vivid descrip-

tion of which we are reading; or to recall, in imagination, what we have seen; or to suppose ourselves placed amid new scenes; we shall, if we attempt it, find it difficult to say where the soul seems to be during the exercise: and it will be found to be as difficult to determine just where the soul seems to be, when it is engaged in the contemplation of the special characteristics of benevolence, or those of ingratitude, &c. We know, then, that the soul, in so far as its consciousness and activity of various sorts are concerned, is somehow present in all these cases, and in these, it seems above all, to be present to the body itself. The soul is present to the realities with which it has to do, and that which the imagination pictures is in some sense, also, present to the soul; but will all that warrant us in saying that the soul is present in any of those realities even, or can we say that the soul occupies space at all, as matter does? Can we say this without thereby asserting more than we know? It ought not to oppose any bar to this conclusion that we should find it difficult to think of how the soul could occupy space, or quite as difficult to imagine that it does not. We do not after all understand how the executive determination of the will gives motion to the arm; but the evidence that it does so, is among the best we have. But that, as before stated, the soul is, somehow, present to the realities with which it has to do; and that its imaginings are, in their own way, present to it, we may safely assert; anything beyond that being more than we know. We cannot, then, in view of all, be at liberty to assert of the alone Infinite One, that he occupies or fills, and in that way pervades all space; though we could go nowhere and not find his presence there—as it were, to meet us; taking cognizance of our very thoughts, and even of that personal character of our very selves, which would indicate beforehand something of what those thoughts would be.*

^{*} The Scripture phraseology, though it may not require all that is here said, yet seems not to be inconsistent with it. "If I ascend into heaven, thou art there"—as if it were added, to meet me, &c., &c. "A great and strong wind rent the mountains and break in pieces the rocks before the Lord; but the Lord was not in the wind; and after the wind, an earthquake; but the Lord was not in the earthquake; and after the earthquake a fire; but the Lord was not in the fire." His presence was made known to the prophet by the "still small voice" that followed. "He stood and measured the earth; he beheld and drove

The Practical Now, and the Eternal Now.

(8.) An instant is the limit between two portions of duration, or two portions of time, which is duration parcelled out, or measured. Such is midnight; when one day has ended and another is about to begin. It does not last or endure at all—is not a small, but indefinite portion of time, as a moment is. The present is thus instantaneous; * and through the instantaneous present, in a metaphorical sense, the future incessantly passes over into the past. But it is otherwise as to duration, with the practical now. That endures while we have a momentary but distinct cognizance of what is passing. As, for example, now I am taking in the meaning of this sentence. And yet this our practical now, is an appreciable portion of the whole life of an ephemera, which lasts but for a day; and during that now, multitudes of sensations of that ephemera may have place; for there is time for numerous flutterings of the insect's wing. The practical-now of intelligences far more exalted than we are, might perhaps, in a similar but grander fashion, itself include a sensible portion of a whole human life. But in the view of the alone Infinite One, whose knowledge, in its perfection as well as its extent, has no limits, all this must exist to a degree which is perfect, and to extent which is infinite; and so all that has taken place in history, and all that even might be revealed in prophecy, must, in view of that alone Infinite One, all be included in one enormous, comprehensive, ever-during Now. Such is His eternal now. And God has sometimes been described as himself being "the eternal now." The Scripture figure respecting him is, he "inhabiteth eternity."

Did Matter exist from all Eternity.

(9.) As already indicated in (5), we may not attribute to mere matter the energy implied in self-existence. If, then, matter

asunder the nations; and the everlasting mountains were scattered, the perpetual hills did bow." A figure, such as that He pervades all space, seems never to be made use of Scripture; and this, though it is said that "He inhabiteth eternity." "In him we live and move and have our being," refers especially to his sustaining power, rather than to where he is.

^{*} Some languages seem to recognize this; as their verbs have no present tense.

existed from all eternity, the Great Spirit and matter must from all eternity have co-existed. But, (4), as we are not at liberty to attribute to matter the phenomena or the properties of spirit, and it is by means of their phenomena and their properties that spirit and matter make themselves known to us; we are yet more severely restrained from attributing to matter the same essence as that of spirit; unless something else can be made evident which shall remove all these difficulties, and also sufficiently cogent to warrant our belief that the essence of matter and that of spirit, even that of the Great Spirit, is the same. If then, matter be not self-existent, and we may not accept the hypothesis, that the essence of matter is the same with that of the Great Spirit, then, if notwithstanding, the Great Spirit and matter did from all eternity co-exist, we must presume matter to have some such relation to, and connection with, the Great Spirit, as the body has with the soul. But if we are to be aided in our reasoning by what we know of that wonderful union in one person-our very selves-and consider withal how vastly superior we are to anything else which we find in other animals; we must, if nature be united to the Great Spirit. as body is to soul, look for an exquisite bodily organization of all nature, and find some cogent proof of it, ere we can admit that-

> "All are but parts of the same general whole; Whose body nature is, and God the soul."

Of such an organization we find no proof.

Physical force we never find wholly dissociated from matter; and it need not, therefore, in this connection, be separately considered.

The existence from all eternity of life such as we know of or can find traces of, scarcely any one would contend for; nor does any proof of such an hypothesis appear: and that life could result from a progressive development of mere force, has (5) already been examined, and rejected.

Are all other Beings, and all things else Phenomenal of God.

(10.) Phenomena is the name for a class of associated facts, so closely associated, that we refer them very commonly to the same thing; the phenomena being indications to us of the pro-

perties of the thing. The analogy to this in the general disposition of all nature is not specially manifest.

Then, as regards ourselves, we have an abiding consciousness, and thus a full persuasion of our own personality, and our individual intelligence and will; the indications of which are phenomenal of us in view of our fellow-men; but this same complete personality and individual will, personally understood by us, forbid our supposing that we are mere phenomenal manifestations of another being.

And again, as regards ourselves—as, (5), character must be regarded as essential in our estimate of the Divine Being, we may not regard men as being phenomenal of God, for they are wicked, and he, (5), perfectly holy. And if we are not to be regarded as being phenomenal of God, then, whatever clse may account for our origin and faculties, may be accepted as sufficient in the case of the lower animals; since, in respect of all that regards consciousness and will and their relations, we have all that they have, and more.

And as to matter, in all that by which it makes itself known to us, it is, (4), so different from spirit, that we may not in any appropriate sense regard our own bodies as being phenomenal of our souls; although the connection between them is so intimate that they constitute one person; and the soul, (4), by an executive determination of its own, acts through the bodily organization, and so evokes the physical action of matter. In this most intimate juxtaposition of the two, again, the one does not proclaim itself as being phenomenal of the other; and all that by which matter makes itself known to us, being, (4), irreconcileable with the distinguishing indications of spirit, we need again, some far more cogent proof than appears, ere we admit the hypothesis that matter is phenomenal of spirit, in the absence even, (9), of any personal bodily connection. But with regard to matter and spirit both, phenomena are to us most extensively indicative of change; and how then can nature in itself and all its relations be phenomenal of Him, who himself, (5), is without change. Can sin, as before, be phenomenal of the perfectly holy, and death-so extensively prevalent—be phenomenal of Him who, (5), cannot die.

Spirit a Substance and Matter also, though immensely different from Spirit.

(11.) As already indicated, (1), the first of our primitive beliefs immediately connected with our own consciousness and introspection, is that every individual himself is, and that so it is that he thinks; and the full and practical belief in his personal identity remains with him through all the vicissitudes of life, while reason lasts. Then too, (5), to this identical self belongs a personal character, which acts itself out through his faculties; and yet man, (9) and (10), cannot be regarded as being the same in essence, nor yet phenomenal only of the Great Spirit. All this is reconciled by the hypothesis that the human soul is not merely a bundle of will, memory, affections, and other human faculties, but that it is a spiritual substance, having its own personal character, and preserving through life's vicissitudes its personal identity; and of which substance and character both, the actions of intelligence, will, and affections, are so many manifestations; and the moral conformity, or otherwise of these, to that which is true and right, is indicative, in its own way, of the character of the man's very self.

Then, the atoms, or last elements of matter, must be regarded as having a substantial reality, and not as being "mere centres of force." For the property of impenetrability which is exhibited by all ponderable matter, offers, in the case of any atom, a forcible resistance somehow—and that, apparently, in all directions—to the occupying of its own place by any other atom; a state of things which does not well seem to be consistent with an equilibrium at the centre of force; or which will account withal for the atom's reaction. Then, the laws of motion do not seem to indicate that the forces at such a supposed centre are at all modified by the application of other force; but this extraneous and additional force is absorbed in producing a transference of the atom in space, the impenetrable forces at the supposed centre remaining unaltered; the inertia of matter being thus exhibited as a force-absorbent, and not as a mere negation. This and what immediately precedes, seem not to be satisfied if only centres of force make up matter, and no real atoms be present.

Lastly, although, (3), gravitation is not an outflowing, and its action at a distance takes no time, yet the mutual action of atom upon atom, is in the straight line which may be drawn connecting the two; and if each atom be a veritable indivisible, and not a mere centre of force, that share of the solid-angular outspreading from either atom, which falls upon the other, will be four times as great when the distance of the two is but onehalf what it is the instance of any other two atoms; nine times as great when the distance is but one-third; &c., &c.; and thus, if there be always the veritable indivisible on which the lines indicative of the direction of the gravitating force may fall, the opportunity for the action of one atom on the other, and of the latter again on the former; that is the conditions of the mutual action of the two atoms, on which the exhibition of the force depends, will themselves be such, that the force will vary inversely as the square of the distance; in accordance with its The veritable existence of the indivisible ascertained law. element or atom seems, thus, again to be indicated.

Matter and spirit, then, being both regarded as substances, we yet, (4), (5), and (9), must regard those substances as being themselves immensely different.

What is Creation?

(12.) The question here asked becomes pertinent—other hypotheses, (5), (9), and (10), being excluded. In view, then, of what has already been exhibited, (5) and (11), creation consists in the great Creator causing to exist, a substance distinct from his blessed self, [see (7)], where nothing was before. This a little child will accept, when he is told that God Almighty did it; and in view of all that has been already indicated, the philosopher may accept the same with a like simple faith. To account for the origin of things, there is nothing better, nor even sufficient.*

All things Divinely Upheld, as well as Created.

(13.) To suppose that the Great Creator having given existence to other beings, as well as to things, then left them subject

^{*} This is again an hypothesis found in the Bible—the question of its character as a revelation being still [note to (5)] in this discussion, held in abeyance.

to law, would seem to be scarcely less than to have rendered them, for the time being, self-existent, *i. e.*, (5), *deified* them; thus contradicting (9). "He upholdeth all things by the word of his power."

What is Force? and how did it Originate?

(14.) As, (12), the Great Creator gave to man an existence distinct from his own, but yet endowed with intelligence, will, and other faculties, not wholly unlike to his own attributes; so he would seem to have endowed matter with force, not wholly unlike in its effects to those of other powerful action; but yet distinct from his own almightiness: though continued, (13), and evoked, (1), by his own power.

The Characteristics of Force.

(15.) 1st. Force is found associated with matter, and it is in such a connection that it manifests its tendencies; viz., to produce, to modify, or to prevent motion.

2d. Matter already associated with force may, as it were, absorb additional force; and the tendency of the force thus absorbed is to put the matter, thus associated with more force, in motion, and thereby render that matter the vehicle of energy—put it in a state of power. A cannon-ball propelled from the gun, without ceasing to be iron, or steel, &c., or veritably weighing any more, has become powerful to destroy.

3d. Force has about it a species of immortality—once applied it does not cease to act—the energy momentarily applied causing a body to go on with a uniform velocity; and though, in time, it may have successively moved various minute particles, and been extensively distributed among them, the energy which belongs to the force once applied will yet continue to act with characteristic efficiency, and that efficiency proportional to the force.

4th. Though force thus does not die, yet it sometimes sleeps. The force which has been made efficient in the breaking of a body, does not reappear until cohesion is restored. The dynamical action of force evoked by the hand in winding a clock will not reappear when the clock is stopped, nor while the clock is suffered to remain so. The force absorbed and accumulated during the growth of a tree, is rapidly set free when the wood of the tree is burned.

Of Vital Power, and its Characteristics.

(16.) Life, wherever manifested, shows itself, after the manner of an individualizing dominant principle, harnessing and controlling the physical properties, and making them work in the service of vital functions. The concatenation of sequences, withal, is longer than that involved in the influence of unorganized matter, and every thing works after a providential fashion, the parts in the living organism having their efficiency so regulated that, in the distribution of it, the several agencies are "alternately means and ends."*

There are evidences of enormous effects of the physical forces in the past. But not in those vast agitations and upheavals whose last subsidence is now barely traceable; or experienced in miniature in the earthquake-not in those great aerial agitations, now imperfectly realized in the tornado-not in that overwhelming surge of melted material, of which the basaltic monuments yet remain-not in the whirlwind, nor the earthquake, nor the fire, whose effects were so enormous, was there such a display, and at the same time such a hiding of power, as when-with reference to organized material-the flat went forth which conferred upon it an additional benediction, as it bade it LIVE. As such, life is, as already described, individualizing and dominant, making properties do their work, in the service of functions, and every part to work for the benefit of the whole, as also the whole for the benefit of every part. The concatenation of sequences is thus a long one, and the working after a providential fashion, extending even to the commencement and continuance of a new life beyond that of the individual already alive; yet, in a healthy state, and when the actions are unrestrained except by themselves, the laws of life are as uncompromising, and disobedience to them is as completely excluded, as in the case of those which regulate the properties and the changes of unorganized material. While thus arranged to work through a longer concatenation, after a providential fashion throughout, and toward results even in the distant future, the vital forces are sustained, arranged to be evoked and continued, and to act in accordance with laws as uncompromising, and with as little reference, in themselves, to will, in the subject of those laws, as in the case of the mere lifeless clod.

But wherever vital energy appears, it is sovereign—controlling all else with which it is connected; and it cannot, therefore, (5), be regarded as the development of mere progressive force; and much less can conscious life be regarded as a development of that which had no such superior endowment. To suppose so, is little better than to put the accuracy and sequence of law in place of the new energy which, in life, lies behind the law; and this consideration is no less stringent, though it is true that there are evidences of a wonderful development of plan, but yet no satisfactory ones of the actual development of the organized, and then again of the more exquisitely organized and endowed, out of the inferior, or even lifeless, which preceded them; the lifeless and the unconscious working after a providential fashion to the development out of itself of that which would then be alive, or subsequently that which would even be consciousworking thus after the fashion of life, to introduce life, before the source of efficiency in the case, was itself alive; and so that life thus introduced should control and modify all that introduced it. That would seem to have, in itself, more than one element of self-confutation. We cannot dispense with the hypothesis here of the additional endowment of a new and dominant, individualizing energy. But this will not prevent great modifications, by special development, within far narrower limits, of that which is alive.

Three Great Guiding Maxims.

(17.) Three great guiding maxims are consequent upon what has already been presented. These are:

I. "God always first;" he being (5), (9), (6), and (14), the Creator of all other beings and all things else, in all their relations. "He is before all things, and by him all things consist." This is for science, (5), its great and final hypothesis; † and it

^{*} For just this form of this great truth, the writer of this is indebted to the late Prof. John L. Ludlow, D. D., of New Brunswick, N. J.

[†] And in religion, God always first, is Calvinism; especially that practical Calvinism which Christians accept when they pray.

excludes atheism, and, with it, that special form of atheism, materialism.

II. God always *independent* of all that he has "created and made;" though all such, in all their relations, are dependent on him. [See (5), (6), (9), (13), and (14).]*

This excludes monism and pantheism.

III. God always infinitely good—"glorious in holiness." It is essential to this perfection, (5), that God should be gloriously above all temptation to evil. In this he is above control by any extraneous motive. He is not governed by any external and immutable rule of right apart from his blessed self—that would be fate. Whatever there is either true, beautiful, or good that he has originated in other beings or in things, in these, (6), he exhibits so many illustrations of his perfections, but they are not actual developments of himself personally—that, (10), would be pantheism; but truth, beauty, and goodness, wherever found, have their origin in the spontaneous outflowing of his infinite perfection, of his supreme excellence.

Were it possible that the Divine Being could ever swerve from this his immortal rectitude, disorder and ruin, (5), must then everywhere prevail. The cardinal truth on which rests the welfare of the universe, is, that God is good. In it, withal, is found the last resort for the explanation of every moral difficulty.†

The Supra-natural.

- (18.) Man, in numerous relations, is evidently a part of nature, though occupying the position of lord of this portion of the creation. He is then, thus, but supra-natural, not supernatural.‡
- * "Of old hast thou laid the foundations of the earth, and the heavens are the work of thy hands. They shall perish, but thou shalt endure; yea, all of them shall wax old like a garment, and as a vesture shalt thou change them, and they shall be changed; but thou art the same, and thy years shall have no end."
- † "Even so, Father, for so it seemed good in thy sight," is one most illustrious example.
- ‡ In the scriptural account, he appears as the last and highest work of the "six days"—a work not finished, until he was made.

ADDENDA.

The Extra-natural.

(19.) The extra-natural is not itself subject to natural laws; and yet may be incidentally introduced to the region of those laws. Angels are extra-natural; but their visits to earth are among the things revealed. The bringing about of such a visit must be described by another term, viz.

The Supernatural.

(20.) A law of nature is a precise relation pervading a whole class of facts, or it is a general fact with reference to the succession of phenomena. Its two conspicuous features are generality and precision; and the ultimate reference of the law of nature is indicated, when we say that it expresses the mode in which the Divine power ordinarily chooses to act; or while maintaining energy, evokes also its physical action.

It is among the unquestioned characteristics of the supernatural, that it involves the exercise of power not provided for by the laws of nature, in their ordinary action.

The renovation of the human soul by Divine agency, is thus preëminently supernatural. But the laws of human activity are not thereby suspended; though the whole moral character is renovated.

This may aid us to see that though miracles (in the accepted sense of that term) are also supernatural; we may not, therefore, assert that a miracle is a suspension of the laws of nature; since, even in the renovation of the human soul, there is, confessedly no suspension of the laws of human activity. To say, in view of all that, there is a suspension of natural law in the case of a miracle, is to assert more than we know; though, when that assertion is made, we have no right to contradict it; for that would, alike, involve the assumption of a greater knowledge than we possess.*

Similar reasons should restrain us from asserting that, in the

^{*} Though the assertion itself might in some cases appear a little extraordinary; as when, for example, it should be stated that there was a suspension of the laws of nature when the multitude were sufficiently fed by a few "loaves and fishes." There might in such a case seem rather to have been an extension of the laws of nature.

case of miracles, the exercise of divine power is *immediate*; the accounts given to us of some of them, would rather seem to imply the *contrary*; as, for instance, when an external application was made to the eyes of the blind, which was caused to be miraculously efficient; and so the gradual restoration to sight in another instance, so much after the fashion of means placed in the train of being (miraculously) efficient.

In view of the whole then, it must be considered that we exceed the limits of our knowledge, when we undertake to assert just how a miracle is wrought; though we may always say, assuredly, that in such a case, a work is wrought in a way not provided for in the ordinary laws of nature. These latter, as already stated, are distinctly indicative of the mode in which the Divine power (maintaining and working) ordinarily chooses to act. In the case of miracles, the exercise of Divine power is after an extraordinary fashion; and neither the mode nor the measure of the effect of its action is exhibited by ordinary natural laws. As respects the power in question, that seems to be all that we may assert; while freely admitting that—in the orderings of Divine providence—miracles have been introduced only on appropriate occasions, and for the furtherance of high ends.

When the blessed Saviour walked upon the water, he was, somehow, miraculously upheld; but does it become us to assert that his body, for the time being, ceased to weigh?

In view of all that has been here stated;—then, moreover, when two entirely similar miracles—such as the miraculous feeding of the five thousand, and then that of the four thousand—have been wrought; may it not be that the efficiency was put forth after such a special and similar fashion in both cases, that, just in that respect, it may be said that miracles have their laws; though even in their mode of action, all inscrutable to us?

Lastly, that a special revelation of the divine will and purposes should itself be accompanied by extraordinary phenomena and effects, indicative of the Divine presence and power, is so far from being impossible, or even incredible, that under just such circumstances, such phenomena and effects are rather to be looked for; or that miracles should accompany a revelation is, for these reasons, to be regarded as among the very

likely events; insomuch, that the cvidences of a revelation, though otherwise sufficient, would appear to be incomplete, and so far seemingly questionable, without the evidence of miracles: not questionable for claiming those which are well attested.

ART. V .- The General Assembly.

THE General Assembly of the Presbyterian Church in the United States of America met, according to adjournment, in the Central church, Cincinnati, Ohio, on the 16th day of May, 1867, and was opened with a sermon from the Rev. R. L. Stanton, D. D., Moderator of the last Assembly, from 1 Cor. ii. 2, "For I determined not to know anything among you, save Jesus Christ and him crucified."

W. P. Breed, D. D., and John Crozier, ministers; and T. Newton Wilson, elder, were appointed a Committee on Elections, to whom the cases of persons present with informal commissions, or with no commissions, were referred.

The Stated Clerk announced that commissions in due form had been presented by persons claiming to represent the Presbyteries of Transylvania, West Lexington, Palmyra, and St. Louis, but that the Committee on Commissions were satisfied that the persons enrolled were the true and legal representatives of those Presbyteries. They recommended that these commissions be referred to the Committee on Elections, so give these claimants an opportunity of being heard.

On motion of Rev. Dr. R. J. Breckinridge, the report was laid on the table till after the appointment of the Standing Committees.

The Stated Clerk announced that he had been officially notified of the formation of the following new Presbyteries:—Presbytery of Rio Janeiro, Brazil, by the Presbytery of Baltimore, with six ministers and three churches; the Presbytery of Holston, East Tennessee; and the Presbytery of Catawba, in North Carolina. These Presbyteries and their commissioners were then ordered to be enrolled.