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ARTICLE VI.

FINITE AND INFINITE.[1]

BY THE REV. H. B. FRY, OBERLIN, OHIO.

THE difference of conception which we must form of the Finite and the Infinite belongs to the nature of ideas. There is, however, a difference in their modes of existence and their relations, which belongs to the nature of substance. Their nature is in some respects essentially diverse. Not that the one is more real than the other; reality is one. In it there are no degrees or varieties; hence things cannot be more or less real and be real at all. Nor can they be real in different ways or in different senses. The real is something, the unreal is nothing; and there is no compromise between them. Nor does one have more or less claim to being than the other. Being is the reality of substance; hence it cannot vary in degree or in kind. In their modes of existence, however, the infinite and finite do differ. This will become evident as this discussion develops.

[1] The importance that attaches to the idea of God and his relations to the universe has caused an intense interest in whatever evidences present themselves of his existence. Hence the endeavor to prove the reality of his being is an old one, and has often been made, but unfortunately never with entire satisfaction; so that the impression is apparently universal that no demonstrative proof is possible, and any attempt in that direction is regarded as futile, and about as visionary as the attempt to square the circle. The present article is taken from a forthcoming work on "The Nature of Personal Being," and is of the nature of a proof of the Divine existence, which professes to be absolutely demonstrative, and when it has become familiar is seen to be intuitive. How far it has succeeded in this direction is left for the reader to judge. It is purely metaphysical, and calls for careful study before any verdict is rendered.

All reality is determined according to the principle of necessity; and is either conditioned or unconditioned. The term condition is equivocal, and means, first, state or situation in which a thing exists; second, it denotes naked *sine qua non*. It includes mere possibility. Thus, unity is the condition of plurality and identity, of diversity. Third, it is used to denote influence and dependence. In this last sense it is used in this discussion. The unconditioned is the ultimate condition of all that is conditioned; and all reasoning by implication is based upon the relations of the conditioned to its condition, and *vice versa*, reasoning from the conditioned to its condition is called *a posteriori*, and that in the opposite direction is call *a priori*. The former brings to view the principle of dependence and support. The latter discloses influence and result. Now, dependence implies support, and *vice versa*. The same is true of influence and result; because they are really only the same principle regarded from different points of view.

Existence takes two forms, viz. change and unchange. These are the result of action and inaction, and result in sameness and difference. Pure change is achronic, and is the result of spontaneous activity. The principle of action is causation. The correlate of pure action is pure passion. These give us the ultimate subject and object of action. In pure action we never look beyond the subject to find whence the influence comes. The spontaneity of the subject forbids this; for it is the unconditioned condition of change. In pure passion also we never look beyond the object to find the end of influence. The passivity of the object forbids this. In causation the subject is called cause, because it possesses power and transmits influence. Pure, unconditioned cause is called first cause. The object is conditioned for the effect, i. e. the existence of the effect is conditioned upon the influence of the cause. Thus, in causation viewed *a priori*, we have influence on the one side

and result on the other, as the consequence of that influence: viewed *a posteriori*, we have dependence in the object for the result, and this dependence is upon the influence of the subject of action, which thus becomes the support. The relation in either case is identical with that of the condition and the conditioned. Now, this relation, like existence, is a unit in kind. The objects thus connected may differ, but their relation, never. It is a difficult relation to trace out in all its applications.

Unchange is the result of inaction, and results in sameness. Unchange is chronic, i. e. occupies time. We have seen that the principle of change is Causation; that of unchange is Continuance. These are not two different principles. They are the same, only in different circumstances. Influence and result, dependence and support, is the determining principle of both. Existence in unchange is not that of simple antecedence and subsequence,—nor that of simple *sine qua non*. The relation is logical, and is that of precedence and consequence. Things exist now because they have existed before, and will exist in the future as the result of their present existence, and because influence secures this result.

This will appear more clearly by the consideration of the relation between continuance and second cause. Second cause is conditioned condition of result; i. e. it acts only as it is acted upon. It is an instrument, not an agent. It serves merely to transmit influence received from without, and which it cannot itself originate. First cause is unconditioned condition of result; i. e. first cause is original source of influence: second cause is source of borrowed influence. First cause is simply subject of influence. Second cause is both object and subject of influence. It is first conditioned for influence, and then becomes condition of influence: is first object, then subject of influence. Influence is first borrowed from without, and then transmitted. Viewed *a pos-*

teriori there is first dependence, and then support; like the successive links of a pendent chain, each sustains only as it is sustained; or the continuous length of a suspended line: all that is below hangs upon all that is above: and that above sustains only as it is sustained. Now causation in second causes and continuance have these differences. A series of second causes is like the distinct links of a suspended chain, being connected by dependence and support. Continuance more nearly resembles the suspended line, continuous throughout, without any natural division to mark the steps of dependence. In causation also influence travels from subject to object by discrete leaps. In continuance influence is permanently resident in the same subject, and result is not felt outside of the subject itself, but is realized only in the stream of time. The subject itself becomes object, and the object, subject, as time elapses. In causation there is change. In continuance is sameness. The one involves power in efficient action, in the other is power without action. The influence in either case is identical: it determines what shall be. If a thing not now existing is to be in the future a change must take place, and that change must be secured by causation. If, however, it be now existing, its future existence is secured, not by cause and change, but by the force of continuance without change. In each case there is influence and result. The future of that which now exists is as truly a dependence as that of that which at present is non-existent. Dependence thus runs throughout the whole history of any object. Like the centre of a bridge, held up by abutments at the ends, each part and particle from the centre to the ends depends upon its next neighbor, until the final support is reached. So of existence. Each moment depends upon its predecessor, until the creative act is reached, which is the ultimate support.

For the sake of bringing these facts before us more clearly, let us take an illustration. Twenty ivory balls

are suspended each by a thread, so as to touch each other. No. 1 is withdrawn from its contact with No. 2, and then allowed to return freely to impinge against it. Suppose we regard No. 1 as first cause; i. e. as spontaneous in its action, and ultimate source of influence, as unconditioned condition of influence. By impact No. 2 receives this influence from No. 1. No. 1 is the condition of influence in No. 2, and No. 2 is conditioned for its change upon No. 1. The change in No. 1 is self-originated by the supposition, and becomes the *sine qua non* of change in No. 2; and this takes place by means of influence transmitted by 1 and received by 2. Thus, 2 depends upon 1 for its change. Now, 2 has received influence which it did not possess before impact from 1. This influence, now resident in 2 and called momentum, renders it the condition of change in No. 3. No. 3 is thus conditioned upon No. 2 as 2 was previously dependent upon 1, the source of influence. Now, 3 repeats the history of 2, and all the rest of the eighteen, in like manner. Thus influence travels from ball to ball, each at first being conditioned upon, and then becoming condition of, passing influence. No. 20 receives the influence and, if it were a pure passivity, instead of an instrumentality, it would be the ultimate end of influence, as No. 1 was supposed to be the ultimate origin. But all the twenty balls are, in fact, of the nature of second causes, and serve simply to transmit influence. Now, No. 20 does not cease to be instrumental when it separates from 19. In its motion it is continuously conditioned and condition; because the momentum which travelled through the nineteen balls is lodged in 20 in the form of influence to continue motion. If no force from the string or any other source interfered with it, it would fly forever.

Let us examine into the nature of this fact. Continued motion is of the nature of second cause, for each moment of motion in the flying ball is conditioned upon a prior condition, and as soon as influence is received by transmission

it becomes the *sine qua non*, the condition, the logical antecedent, of the motion of the next moment. If motion were interrupted for a single moment all its future would drop out, as a pendent chain falls when severed from its support, or as if No. 20 suddenly became a pure passivity, instead of an instrumentality. Influence transmitted continuously in motion is called momentum; and when momentum is destroyed motion ceases. In the case of the flying ball motion is produced by causing momentum, and continued by retaining it. Thus we may account for motion at any time by either of two means; viz. by present force to produce it, or by previous motion; and influence travels with the stream of time from past to present, and from present to future, and along the space line of its progress from the point of starting, and not in the opposite direction. Thus motion uninterfered with is perpetual, because momentum as communicated influence is permanently resident in the moving body. In interrupted motion three things present themselves for our consideration, which are equals, and in essence are identical. They are the starting force, the stopping force, and the momentum. The same is true of the causative influence among the ivory balls.

What, then, is the exact difference between ball No. 19 and No. 20? No. 1 exerted an influence upon No. 2. As a result of this, No. 2 exerted an influence upon No. 3, and so on to No. 20. Is No. 20 of a different nature from its predecessors? It does not transfer influence to any other ball; but this does not change its nature to that of a pure passivity; i. e. an ultimate object. It exerts an influence as truly as any of its predecessors did, but the influence is within its own self, and the result of that influence is motion. Influence may exist without any transferrence of it to any thing without. It may remain permanently within an object to hold it continuously in its present state. Here is a union

of change with unchange. If No. 20 in its flight should meet another body that influence would immediately appear by its transfer and change. In No. 20 the motion of the first moment is dependent upon the impulse received from No. 19; but the motion of the next moment is produced by the motion of the first. Thus, impact and motion indifferently are adequate to produce motion. The only difference is a question of change and unchange.

Now, what is true in the case of the balls, and of continued motion, is true likewise of all the conditions and circumstances of things; and even of their very existence, irrespective of circumstances. We find in the simple existence of things, irrespective of changing and changeable circumstances, resident influence which carries its subject along the stream of time, just as momentum continues the flight of the moving ball, or as influence is transmitted among the suspended ivory balls. But how do we know this? We know it by knowing the nature of things. Unchange has influence in it as truly as change. From the very nature of things, existence is identical with second cause, i. e. influence is transmitted from moment to moment in the stream of time from past to present and from present to future, i. e. from time anterior to time posterior. The present is conditioned upon the past, and when influence has been received it is transmitted to the future, which is conditioned upon the present. Thus existence uninterrupted, is a perpetual fact. This is what is meant by the term continuance, as applied either to simple existence, to motion, or to the interaction of second causes as in the case of the ivory balls. This fact may be further elucidated by noticing how we account for existence. Our method is dual. We may account for the passing influence in any one of the ivory balls by supposing the impetus just now started by first cause, or by supposing it transmitted through other intervening balls; or the motion of the flying ball may be accounted for by supposing it just now

started by impact, or by supposing it caused by previous motion; or we may account for the existence of any object at any time by supposing it just now created by causation, or by supposing its prior existence. Either possesses the needed influence to produce the result, the one by cause and change, the other by continuance without change.

We thus see that priority in time in existence is not of the nature of simple antecedence and subsequence, because influence is involved in it. This appears as clear as day by the following illustration. Whately in his Logic gives, as illustrative of *causa essendi* and *causa cognoscendi*, the following: I see it rain without seeing the ground. I say, therefore, The ground is wet, for it has rained. This is the *causa essendi*, and is *a priori* in reasoning. If, however, without seeing the rain fall, I see the wetness of the ground, and say, It has rained, for the ground is wet, this is reasoning *a posteriori*, and is a case of *causa cognoscendi* simply. This is the law of causation from the nature of change. But in unchange the same principle is found. If I say, I will exist to-morrow, because I exist to-day, this is valid reasoning, and *a priori*, for I give the *causa essendi*. My being is clothed with influence to produce or bring about the future. But suppose I say; I exist to-day; therefore I existed yesterday, I do not give the *causa essendi* of my being, but simply the *causa cognoscendi;* because I am not reasoning with the stream of influence, but against it, and it is therefore called *a posteriori*. In either case the reasoning is valid; whether in change or unchange, in causation or continuance, influence is found, by the determining principle of necessity.

Regarded *a posteriori* this principle is that of dependence. Now, dependence, like reality, is a unit in kind. The objects which depend may differ, but their dependence, never. It is the principle which connects effect with cause. It is that which gives meaning to the expression, *Sine qua*

non. It is the most prominent idea expressed in the word Passivity. And yet it is a difficult idea to trace out in all its applications. It is not so difficult to detect dependence where one body of matter rests upon another, or hangs as a pendent chain; but to see it in all cases of causation, and especially in continuance, as the essential principle in the law, is not so easy, and few ever attempt to follow it out in its various applications. This is the difficulty in the present case. Dependence in existence is difficult to see, but until it is seen clearly we cannot understand the nature of things. Dependence implies support. Viewed *a posteriori* we say, Everything which is conditioned is a dependency.

The states of material substance are dependencies. Motion is marked by dependence. Material bodies move as they are moved. Unhindered motion continues after the moving force is withdrawn, because momentum carries the body forward, just as the moving cause started it. At every point of the body's flight its motion is as truly dependent upon its previous motion as the starting depended upon the starting force. The object is moving at this moment, because it was moving the moment before. If it had been at rest the last moment, it would be at rest now, unless a moving force should interfere to produce motion. If it moves now it will move the next moment, unless it is stopped. Here, then, we see the principle of dependence running through all motion from beginning to end. Until this is clearly apprehended the nature of motion cannot be understood.

From what we have just seen we may also learn that the law of rest is identical with that of motion. These states are equally natural to body, and exist under the same conditions; and it is equally indifferent to both. They must be identical in this respect. A material body rests only as it is put at rest; and rest continues by the same law of dependence which determined its beginning, i. e. it continues to

rest until the tendency to rest is taken out of it by a starting force. Motion does not arise from rest, nor rest from motion. Each creates its own by continuation. Each moment of rest depends upon the preceding. There can be no transfer from the one to the other without the interference of an external cause. The law of external force as the source, and that of influence, coupled with dependence as implied in continuance, obtain with rest as with motion. We account for rest by active cause, or by previous rest. Rest generates rest by the law of continuance, as cause produces its incipiency. The same is true of the configuration of parts, whether in an orderly system to answer some useful end, or without order or purpose. Whatever arrangement they have or whatever place they occupy, may be given by some cause now acting, or it may continue as it has been in the past. Thus, rest and motion, configuration of parts or place of body, are all governed by the same laws, and give us intimations of the nature of matter.

The fact that things are mutable, i. e. may be set in motion or may be put at rest, may have form or location given them, may be created or annihilated, is not a thing to be known empirically, i. e. learned simply by seeing it done: this must be known as an attribute of matter. We must know it by knowing the nature of matter. If it is not thus known it cannot be known at all; otherwise, if we saw a body moved, we could not say thence that another body could be; nor could we say that the same body could be moved again. Hence we say, "body is mutable;" and when we have said that, we have denied that body is immutable. Thus, when we have a proper conception of the nature of matter we predicate of it mutability; and this predication carries with it the impossibility that it could be otherwise. To say that it might be is to make immutability mutable. Now we see that matter is in its ultimate nature either mutable or immutable. But we know that it is mutable. Thus,

if we acknowledge that a body may be moved, we not only predicate mobility of the nature of matter, and deny its immobility, but we put in the very nature of motion dependence and temporality, and hence deny eternity to it; for a thing cannot be susceptible of being set in motion and be susceptible of eternal motion. That would be to affirm and deny dependence in its nature with regard to movement and rest. If the nature of matter allows eternal motion it forbids rest; and if a change from rest to motion by cause is possible in the nature of things, eternal motion is impossible, because an infinite series of dependencies is absurd. If bodies from their nature can begin to move, the supposition that they might move eternally is to affirm and deny dependence of the same thing. We need to rid ourselves of the idea that dependence in things is an accident and not an attribute. No one would deny that mobility is an attribute of matter; but mobility is mutability, since it is not simply the susceptibility to motion, but it is also the susceptibility to be set in motion, and mutability contains dependence as an essential attribute.

The same is true of rest. Motion and rest sustain such relations to each other that if dependence belongs to the one it belongs also to the other. Rest we know to be caused. This sets it forever beyond immutability. If things may be put at rest, mutability is an attribute of rest, which puts dependence in it as an attribute; and independence and eternity are denied. The nature of a thing cannot be mutable, and the thing itself be eternal. If rest were immobility we might not be able to affirm dependence of it. But it is not. Rest is as mutable as motion. This puts dependence in it. The respects in which rest and motion differ do not include mutability. It is an attribute common to both; hence rest is a dependence like motion. Things may be stopped by causation as well as started. In its nature a quickening of motion is equal to a starting from rest, as it requires causa-

tion to produce it; and a diminution of velocity is the same in nature as causing of rest from motion. Dependence is in both alike, and they are, therefore, temporal. The same is true of a change of direction in motion; and, in fact, of all the circumstances of matter, such as time, place, configuration of parts, etc. If we ask why a thing is here or there we recognize the fact that causation may account for its location. If causation may account for the location of body, then it is the only principle that can account for it. And this is true, because dependence is the principle which calls for causation to account for it. When a man sees a house, he may think of a builder, and ask "who made it?" He never asks "who made space?" The nature of space forbids the inquiry. The nature of the house calls for it. In a house there is mutability; i. e. it is an object of power. In space there is none; hence space is eternal; the house is not. Notice, this question is not prompted empirically, because he has ever seen this or any other house made. Unless something in the nature of the house prompts the question there is no passing to it from anything else. Observation alone prompts no questions concerning causes; the perceived nature of things is the parent of all inquiry. If observation discloses dependence in the existence of an object we are prepared for the when, the where, the why, and the how; and not till then.

A further fact deserves attention, viz. that if the nature of an object is such that any of its states are mutable, it is necessarily mutable in all respects. Thus, if mutability can be predicated of motion, it can be predicated also of that which moves: hence rest, configuration of parts, every quality, fact, relation, which belongs to matter is, like motion, both mutable and temporal. This fact extends, of course, to the very existence of the mutable; for the attributes of anything cannot be mutable and the thing itself be immutable and eternal. If any one should fail to see this, why he

may perchance see it in the dual method which we have for accounting for that existence. Thus, if we suppose an object to exist at any given time or place, we may account for it either by supposing the object to be just now coming into existence by creation, or by supposing it to have existed previously. Either will account for its present being, because its existence, being a perpetual dependence, needs accounting for at every moment and at every place, whether that being is in its incipiency or in its continuance. It is easy to see that finite being has nothing in its nature to account for it. Dependence hampers it on every side. We have no cause, therefore, to make any apology for assuming this need at any time. The when, the how, and the why, are always in place, when we are considering the being, states, or circumstances of the finite. If a finite object should ever cease to exist it could never exist again. All its future drops out, as a pendent chain falls when severed from its support. Its prior existence thus becomes the *sine qua non* of its subsequent existence. We need to observe right here what is implied in this fact, viz. that existence is not dependent for its incipiency, and then independent for its continuance. Dependence is found in continued existence as truly as in its beginning. As we cannot doubt that the existence of the universe in a particular state is the determining principle of its existence at the next moment, whether it remains in the same condition or circumstance, or is changed to a different one by existing movement; so we can no more doubt that its existence, irrespective of states or conditions at any moment, is the *sine qua non* of its existence in the following. We may regard this relation as identical with that of causation, for it is, so far as the principle of dependence is concerned; but it is different, of course, in not involving power in efficient action. The one produces sameness, as is implied in continuation; the other produces difference or change.

In the establishment of this argument success or failure is found in the ability or inability to show that dependence exists as an element in continued existence. This is the key to the situation. That dependence is a unit in kind is acknowledged by all who cultivate clear ideas. That it should in all cases and under all circumstances imply support, is absolutely axiomatic. That it is the principle by which existence can be accounted for is true no less of its continuance than of its incipiency. To see this we need to realize that the stream of dependence flows from past to future in continuance, just as it does in causation. Every one can see that the relation from cause to effect is different from that from effect to cause. The one is that of dependence, the other is that of independence; i. e. the cause is independent of the effect, but not *vice versa*. In a pendent chain each link is dependent on the one above it, and independent of the one below. The same is true of the stream of continued existence. The present moment sustains a different relation to the past from that which it sustains to the future. This is easily seen in the law of motion. What is the difference between the relation of present motion to its past and that which it sustains to its future? Continued existence depends as truly upon this law as its incipiency did upon that of causation. What difference is there between causation and continuance? In the one case there is an exertion of power and change, and in the other there is none. But this does not touch the principle under consideration. The vital point in establishing identity between causation and mere continuance is this, that influence and dependence exist as truly in the one case as in the other. Until we can see the difference of relation *a priori* in causation from that *a posteriori* we have not attained to the idea of causation. No more can we understand the law of continuance until we can see a difference in the relation of succession *a priori* and *a posteriori*. The law of continuance in existence has one

voice, in which it speaks perpetually of its beginning, as effect has no meaning without cause. Thus dependence becomes the great fact of finite existence. It is found in every part.

One of the chief difficulties we encounter in endeavoring to bring before the mind the force of continued existence lies in the false conception people have of the nature of continuance itself. They are prone to regard it as a sort of "airy nothing," a mere abstraction, which has no rightful claim to be compared with causation. This is a palpable error. Continuance carries existence forward in time with a force equal to the power exerted in its creation. If any one should fail to see this let him try to interrupt that existence by an annihilating act. This same false view is taken of the nature of rest. It seems to be almost a passive nonentity, but a moment's thought discloses the fact that as great power is required to break it up as to create it. The starting and stopping forces are equal. Existence possesses a tenacity which is not easily broken up, a momentum which is not easily overcome.

Out of the fact that dependence is found in the existence of finite substance grows necessarily another marked characteristic in its nature which is equally important, viz. its *temporality*. Since dependence implies support, it excludes from finite being an infinite past. No series of dependencies can be infinite; for infinity in a series excludes a beginning. To suppose that support in a series of dependencies may be dispensed with by making the series infinite is self-contradictory and absurd. The absence of support in a finite series cannot be compensated by making the series infinite. A dependent series cannot be infinite, for it must have a support, which cuts off the series. The conditioned implies the unconditioned as its ultimate condition. A series of conditioned conditions implies an unconditioned condition as their origin. Passing influence implies a source,

for all the conditioned members in the series borrow influence from their immediate predecessors before they can pass it on. A series of borrowers cannot be infinite. This is illustrated in the ivory balls. Each is conditioned upon its predecessor for influence before it can exert influence upon its successor. There is always a source to influence, and each dependent member is but the repetition of every other. Multiplying the number of conditioned members gives no support. We thus know that every series of dependent events must originate in a spontaneous cause, i. e. in a personal will; for will is the only power possible or rationally conceivable in which action may originate. But dependence is not confined to active movement. It may exist after causative movement has ceased. In such a case a series of dependencies may exist, like a line suspended by one end. Each part is a support to all below it, while it is supported by all above. The lower end is a pure dependence, else it is not the end of the series. The upper end is attached to a pure support in which dependence must not exist, else it is not the beginning of the series. In respect to the principle of dependence this series is identical with that of active movement. Each part, like the effect of causative movement, is determined by that upon which it depends. Every part of the line but the lowest is of the nature of second cause, for it serves simply to transmit support. The ultimate origin of every series of dependencies, even of the states and of the existence itself of finite substance, is purely a first cause, a free, spontaneous will. Nothing can be a source of movement but that which is itself unmoved. Nothing can be a source of change but that which can originate change. All change has a source, because it is conditioned. An infinite series of changes among second causes is absurd. A support which is itself a dependence is only a temporary expedient. Where there are a series of such supports each speaks with equal clearness of the support which is the first

of the series. Passing influence cannot be eternal, for it is conditioned. It has its starting point in the unconditioned. Continuance cannot be eternal, because influence and dependence call for a beginning. The idea that matter is eternal is a fiction of scientists which the least child repudiates. The only eternity possible to matter is an indefinitely remote antiquity. It has a source, and that source is eternal and unconditioned. In the case of the ivory balls we see that No. 20 speaks as unmistakably of No. 1 as does No. 2. We get no nearer the source of influence by running along the series towards it, because every ball is but the repetition of every other. In the case of the flying ball we know it was started, because force is not naturally resident in second cause. An instrumentality acts only as it is acted upon. Motion began in first cause, because it was unconditioned for influence. We get no nearer the source of motion by looking toward it than in looking the other way. The source of influence is found by implication, not by observation. By knowing the nature of motion we know it was started, whether brief or long-continued. The same is true of continued existence. The supposition of eternity to it is effectually excluded as a rational hypothesis by its very nature. It is necessarily temporal. It is in fact an event and implies a cause; because dependence and influence are found in every part. The necessary finity of every dependent or conditioned series is seen clearly in the relation of each dependent member in its series, irrespective of the multiplication of links. In the case of the ivory balls, if No. 20 be prevented from moving out from 19 force must be exerted. This force is only the force of impact originated in No. 1, and communicated through the intervening balls. This we know from the nature of the series. All the balls from 1 to 20 are each but the repetition of the other, and all declare alike that 1 is the starting point, i. e. 1 must exist or the remaining nineteen cannot transmit its influence. Here the fact confronts

us that the series has an ultimate limit. No. 1 is as important to the process as the remaining nineteen. The nineteen cannot act till 1 has acted. Dependence implies support, for the conditioned has for its *sine qua non* the unconditioned. The same is true of continued motion. The force exerted in destroying motion implies the exertion of force in starting it. The motion of the flying ball is but the repetition of the same thing in every part. The starting force is simply repeated in all motion, however prolonged. Every moment of motion implies this starting force. If that force should not be seen in motion it becomes manifest in its stoppage, and the amount of force existing in the movement of any body can be accurately measured by the force required to stop it. Thus we see in the fact that a moving body may be stopped by the employment of force, the exercise of a starting force; and in this we may also know that motion is not eternal. The same is true of existence in its continuance. All through its history existence is one and the same thing, conditioned throughout; and when we may apply without absurdity the idea of annihilation to existence we prove the temporality of all existence to which this idea is applicable. Annihilation is not only the correlate of creation, but it implies it. The bare possibility of annihilation necessitates creation. Nor is existence a mere nothing which may cease of itself. All existence continues in time with a force equal to that required to create and to annihilate it; and it goes on by its own necessity until it is stopped by a force adequate to accomplish that result, because the transmitted influence, given in its creation, cannot cease of itself.

And right here we find the same weakness manifested toward continued existence which we see with regard to second causes. Men often speak of matter as essentially active, and thus rid themselves of the necessity of referring its movements ultimately to a first cause. In this view they

lose sight of the peculiar and only nature that body can claim, viz. its instrumentality. If it is not an instrument it is nothing, and there is no such thing as instrumentality in existence; for nothing else can claim that nature. Spontaneity is foreign to body; it acts only as it is acted upon. The least child knows this. But the same difficulty besets him who puts independence in the existence of matter. In this view existence is regarded as an independent standing out, as though there were somewhat of spontaneity about it. On the contrary, continued existence is a result. Things remain as they were stood, as a perpetual monument, as a vestige of the creative act which brought them into being.

Now, we have seen that the connection between cause and effect, and that between the successive moments of existence are identical; i. e. they are both that of pure dependence, however they may differ in other respects. We have this illustrated in the identity of result in accounting for the present existence of any object by referring it to a creating cause or to prior existence. We can see also that the non-existence of any object can be secured by either of two suppositions; viz., by supposing an annihilating cause, or by supposing its prior non-existence. We thus see that the existence of the finite is a dependence which cannot begin or cease without the action of a cause sufficient to produce the result. If the connection of the present with the past were severed so that past existence could not project itself into the present, continuous existence would be impossible. Each moment of its existence is a dependence, and would drop out if it did not rest upon the preceding. No more could it have been in the eternal past; for that would involve an infinite series of dependencies, which is an absurdity. We can see, therefore, that while the passive nature of finite substance does not permit its being to cease without the action of a power sufficient to annihilate it; so that same nature forbids its eternal existence in the past. It implies the exercise of creative

power to account for it. The duration of its existence is limited on the one side by the time of its creation, and on the other by the present. It is an ever-increasing quantity, but never infinite. Now, as we inevitably see in the construction of any object the evidence of force or power expended in its construction, so we see in the existence of the very materials which lie back of all form, the creative fiat which brought it into being. This perception is intuitive and constitutes the positive proof of its creation. But we can see also on the negative side proof demonstrative of the origin of things. That which we can conceive of as ceasing to be, or of being susceptible of annihilation, or that which we may think of as being created, cannot be rationally conceived of as without beginning. A thing which, by its nature, is an object of power is so conceived of, because we see that it is passive and dependent in its nature. If we had no other evidence that we have not existed eternally, we have proof demonstrative of it in the fact that we dread annihilation: for the nature which permits annihilation forbids an uncreated existence. In this we know that our own existence, and that of the material world need accounting for. We want to know concerning each object the when, the why, and the how. We say of a material object, for instance, Why does it exist? How long has it existed? So also concerning ourselves we inquire, Why do I exist? When did I come into being? etc. We ask such questions even of the universe itself. This is not an accidental way of conceiving of them. It is the necessary form of all consistent thought. It is the result of an intuitive perception of their nature. This fact is so prominent in our thoughts that simple, unspeculative minds frequently confound invisibility with nonentity. With such persons natural growth is liable to be regarded as a creation, and destruction, as by fire, as an annihilation. This necessary reference of everything to a creator as the cause of its being, not only controls our earlier thinking, but

imposes itself as a law in the most complicated processes of thought. It is only by persistently disregarding their fundamental intuitions that men, calling themselves scientists, can be induced by beholding the stupendous multiplication of second causes in the universe, to believe that the series is infinite, and hence an ultimate First Cause is not needed. Such fallacy might be avoided by observing the distinction between the indefinitely great and the absolutely infinite.

In the preceding part of this discussion we have dealt with facts that are absolutely known. It is not a matter of probability, but a certainty, that dependence exists in the very nature of things, so that their being forms a continued series of dependencies. We know equally well that every series in which dependence is found must have a beginning, because dependence implies support, which necessitates a beginning. Thus we see that all things, including the great universe itself, were made. Now another fact equally evident, confronts us, viz. that *If anything is, something always was.* This is a necessity of reason, growing out of what we have been considering. It may, however, seem difficult to avoid the absurdity of an infinite series of dependencies. How is this dilemma avoided? Evidently by finding something in whose existence dependence is not found; and relegating thereto the work of creation. Is there such a thing as independent existence? Let us consider the nature of time and space, and of principles generally. Do they have reality to-day because they were real yesterday? Can they be annihilated? Think them away, they nevertheless persist. They exist not by the law of continuance which marks everything in the universe. Their existence is an independent series, which may be infinite. There is such a thing as independent, unconditioned existence, existence which needs no accounting for, existence which never looks back to see whence it came. Space cannot but be, and this necessity does not depend upon the exercise of power and the law of continuance. Its own nature

accounts for it. A further fact forces itself upon us with equal clearness, and which we know absolutely. It is found in the nature of dependence itself. This fact is, that the principle of dependence implies finiteness in the things which depend. Hence the axiom that dependence implies support applies only to the finite. The infinite is not an object of power. In considering this axiom we see that dependence and support must exactly equal each other. That which supports may, therefore, be greater, but not less, than that which depends upon it; just as the container may equal, or may be greater, but never less than the contained. Now we know that all quantity is finite; and the relations of equality, of greater and less, pertain only to the finite. They have no application to the absolutely infinite. Measurement cannot pply to it even in thought; because nothing in objectivea reality answers to it. Hence the idea of infinite dependence is an impossible one.

These things will not appear so evident to the mind of him who confounds the infinite with the indefinitely great. The only remedy for this difficulty is found in a proper conception of the infinite. We need to be aware of the fact that the infinite cannot be approached by multiplying the finite; that the indefinitely great is no nearer the infinite than the indefinitely small. The vast and the diminutive are alike removed from the infinite. The vast universe possesses no more independence than the atom. The infinite alone lies outside of the law of passivity and dependence. The infinite may have finite parts, but these parts have no reference to a whole, as there is no sum total to the infinite. A cubic foot of space is a part of space only in the sense that it is a quantity of space, and thus belongs to it. But it bears no ratio to infinite space in respect to quantity, since space as infinite has not the attribute of quantity. The indefinitely great has a whole as distinguished from, and as

made up of its parts, whose sum total constitutes its whole. Not so of the infinite. Space may be said to be made up of cubic feet of space. Yet this is not true in every sense; for there is no sum total of which it is made up. Infinite space is a unit in the sense that it is indivisible: not that any part of it cannot be divided, but divisibility is a finite attribute, and belongs not to infinity. Since, therefore, the law of dependence pertains only to that which has definite quantity and definite limits, it cannot apply to the infinite. An infinite receptacle and an infinite support are alike absurdities. How much more absurd the idea of an infinite object contained in or dependent upon something else! There is such a thing as unconditionally necessary existence; and this is an attribute of infinite personality. To suppose dependence and a beginning to such is absurd. We cannot think God away by any means, when once we have gotten him. This is the significance of the Psalmist's expression, "The fool hath said in his heart, There is no God." The idea of God persists in spite of our efforts to suppress it. Time and space are implied in almost all thought, so that it is incomplete without them; and hence impossible often to think them away. Infinite personality forces itself upon us only when we are accounting for things ultimately. That God can be thought away, otherwise than by ignoring those facts which necessitate the thought of him, is false. Rational thinking has its laws which may not be disregarded. Absurd fancies become possible only by entertaining inadequacy of view. In the same way even time and space may be ignored. Men have held that disembodied existence did not involve any reference to space. The infinite and the finite both exist from necessity. In this they do not differ. The difference lies in the source of that necessity. The one is conditional, the other is unconditional. The former is that of sequence; the latter has nothing to do with sequence. In

the existence of the infinite each moment has its source in itself.

In the earlier part of this discussion, in dealing with the nature of the finite I have everywhere assumed that dependence is peculiar to the finite. We can now see why. The infinite is independent. The absurdity of putting dependence into our idea of the infinite appears also when we discern the source of dependence in the finite. The dependence of continued existence in finite things is the result of causation. Logically we find the causative act in continued existence, as we find the starting and stopping force in motion and rest. Chronologically the dependence found in the creative act does not cease with the act itself, but continues as its result in continued existence. We thus see by implication the creative act at every moment of a finite object's existence. The dependence began in an act but it did not cease when the act ceased. Here appears the absurdity of supposing dependence in being without finding its source in creation. Do away the idea of creation, and you annihilate dependence in existence; for either has no meaning without the other. The idea of a beginning to the infinite is unthinkable, because its creation is an impossibility. Hence dependence in its existence is unthinkable. He who puts it there misapplies ideas. With the infinite the future does not depend upon the past. The best means of freeing the infinite from the idea of dependence is to entertain a clear idea of infinity itself; what it is, and what it implies. As we saw in the case of a pendent chain, that dependence implies finity, so independence in a series carries infinity with it. The existence of that which always was is an infinite series, and independent. We have, then, two series of three facts each, which are correlates. Where we find one of these facts we find the other two by implication. The members of the first series are finiteness, dependence, and temporality: those of the second series are eternity, independence, and in-

finity. These facts are fundamental, and vital in importance, and should not be lost sight of, or ever divorced from each other.

This leads us to a final fact, viz., *that the infinite God is*, and the reality of this fact *is absolutely known*. In establishing the argument for the existence of God we need only a starting point which is intuitive, and the entire argument is intuitive. This starting point is found in the intuition expressed in the words, "I am." The process then without ceasing to be intuitive, links together the correlates; thus, "I am finite, dependent, was made, ultimately by a person whose being is eternal, independent, infinite." The distinct steps in this process are really only two: 1st, the finite self; 2d, the infinite Creator. By a necessity of thought these two facts are inseparably connected; so that no prolonged process of reasoning is needed. It is indeed to all men an intuitive fact, and lies at the basis of all our rational life. At every turn in life we meet it. We see nothing, we hear nothing, we experience nothing, the law of whose existence is not that of dependence. Indeed, dependence is the great fact of life, and it necessarily and immediately implies the infinite One. Finiteness and dependence are always before our minds, and invariably linked together. The infinite and independent is not only the correlate of the finite and dependent, for they are connected by the principle of dependence and support, as the all-sufficient reason by which we are enabled to form rational and consistent thought of the universe. Rational thought cannot advance a step with the finite without an immediate reference to the infinite personality which stands back of it all. Not dead forces but personality is the great fact of life. The material world is vocal with this great fact. Why then are there any atheists? And why have theists been so troubled to find a demonstration of God's being? For the same reason that men have doubted and even denied the existence of time and space

and substance, and indeed the objects of most of our intuitions. Elaborated discussions are sometimes needed to show men what they already know.

This proof of the divine existence is absolutely demonstrative, and by familiarity becomes purely intuitive. It forms the basis upon which every other objective argument must stand. If this one should fail they must all fail with it. Indeed, they can be only corollaries to this one. Take, for example, Paley's argument from design. Its fundamental principle, that adaptation proves design, is utterly invalid until we can see that the existence of things in which adaptation is found is a dependence, and must be accounted for. Adaptation may exist where dependence is not found, and hence a designer is not implied. Time and space show adaptation to the things that exist in them. While our personal being shows design in the adaptation of its parts and powers, the same adaptation seen in the powers of the eternal Creator by no means implies the same thing. Power is adapted to produce results: in creatures this implies design; in the Creator it does not. Why is this so? The answer is this: in the one, dependence renders the existence of the object an incomplete fact, which finds its complement in the idea of a creator. In the other, independence precludes all this.

The argument from causation fails in essentially the same respect. We find things already existing. The idea of a beginning to their existence is irrelevant, and could never be suggested except accidentally; unless we find something in their nature that implies it. Finiteness itself, except as it implies dependence, could not do it. There is no direct connection between them. They leave a chasm which needs to be bridged. Nothing but the principle of dependence can do this. Without actual observation and remembrance of its beginning no object could be known to be a creature, unless its nature implied it. This argument assumes the very point it is bound to prove if it is to have any

force; viz., that things were not eternally in the past. If the existence of things is not an event the law of causation is irrelevant. Causation applies only where there is known to be a change. Eternal sameness allows no place for cause. To find the cause of things we must find their beginning. But how do we know that there was a beginning? We must not assume it as this argument does. Its weakness is seen in the fact that it finds in the existence of finite things a continual sameness, and, without the shadow of a reason, infers a change at some time. In the law of causation it finds simply the means by which a change might take place. The present argument finds in this sameness itself the ground of change. It shows that continued existence is an incomplete fact, which finds its intelligibility in a beginning which is grounded in causation. Dependence in existence points incessantly to a change somewhere in the past, but it is indifferent to the time when it took place. Professor Agassiz is said to have made the remark that the ultimate atoms of which material bodies are composed behave like manufactured articles. This was a wise observation if he saw dependence in their existence; otherwise it was a remark without sense or reason. A watch implies nothing concerning its origin until its nature points to it. If it should be argued, as it sometimes is, that the changes which we see in the world and experience in our own selves prove a beginning to all things, I answer, Change in condition, except as it points to dependence in existence, is silent concerning any origin to that existence. This is illustrated in the old and persistent doctrine that matter is eternal, in spite of the changes through which it is constantly going. Recognize dependence in continuance, and eternity in matter is effectually excluded. The argument from sufficient reason, which affirms that the existence of rational beings in the universe implies a rational creator, is only a particular application of the argument from causation, and fails just where that one does. All these ar-

guments fail in the very important respect that, even if they could prove a creator, they would not prove him infinite. They all appear to imply that dependence is found somewhere; but their authors do not seem to know where to locate it. So, while in form they ignore it, their arguments have force only as they assume it, for it must be the vital principle of them all.

The doctrine of evolution has been pressed into service to account for the origin of things. It is a sounding line that can never touch bottom. It may possibly give a general history of the development of things; but can never give their source. This must be gotten from a perception of the nature of things, as the apostle Paul says: "For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead." A knowledge of the divine existence can never be gained from testimony. If any number of men should testify that they had seen an infinite body of matter we would know that their testimony was false. Every revelation of personality is necessarily finite. If God should testify to his own infinity, it would only produce belief, and not knowledge. The Bible assumes a general knowledge of his existence in its very opening sentence. The nature of things had already revealed him.