CHAPTER XII.

THEOLOGY AND EVOLUTION.

Prejudiced Opinions on the Subject.—"Creation" sometimes denied from Prejudice.—The Unknowable.—Mr. Herbert Spencer's Objections to Theism; to Creation.—Meanings of Term "Creation."—Confusion from not distinguishing between "Primary" and "Derivative" Creation.—Mr. Darwin's Objections.—Bearing of Christianity on the Theory of Evolution.—Supposed Opposition, the Result of a Misconception.—Theological Authority not opposed to Evolution.—St. Augustine.—St. Thomas Aquinas.—Certain Consequences of Want of Flexibility of Mind.—Reason and Imagination.—The First Cause and Demonstration.—Parallel between Christianity and Natural Theology.—What Evolution of Species is.—Prof. Agassiz.—Innate Powers must be recognized.—Bearing of Evolution on Religious Belief.—Prof. Huxley.—Prof. Owen.—Mr. Wallace.—Mr. Darwin.—*A priori* Conception of Divine Action.—Origin of Man.—Absolute Creation and Dogma.—Mr. Wallace's View.—A Supernatural Origin for Man's Body not necessary.—Two Orders of Being in Man.—Two Modes of Origin.—Harmony of the Physical, Hyperphysical, and Supernatural.—Reconciliation of Science and Religion as regards Evolution.—Conclusion

THE special "Darwinian Theory" and that of an evolutionary process neither excessively minute nor fortuitous, having now been considered, it is time to turn to the important question, whether both or either of these conceptions may have any bearing, and if any, what, upon Christian belief.

Some readers will consider such an inquiry to be a work of supererogation. Seeing clearly themselves the absurdity of prevalent popular views, and the shallowness of popular objections, they may be impatient of any discussion on the subject. But it is submitted that there are many minds worthy of the highest esteem and of every consideration, which have regarded the subject hitherto almost exclusively from one point of view; that there are some persons who

are opposed to the progress (in their own minds or in that of their children or dependants) of physical scientific truth —the natural revelation—through a mistaken estimate of its religious bearings, while there are others who are zealous in its promotion from a precisely similar error. For the sake of both these, then, the author may perhaps be pardoned for entering slightly on very elementary matters relating to the question whether evolution or Darwinism has any, and if any, what, bearing on theology.

There are at least two classes of men who will certainly assert that they have a very important and highly-significant bearing upon it.

One of these classes consists of persons zealous for religion indeed, but who identify orthodoxy with their own private interpretation of Scripture or with narrow opinions in which they have been brought up—opinions doubtless widely spread, but at the same time destitute of any distinct and authoritative sanction on the part of the Christian Church.

The other class is made up of men hostile to religion, and who are glad to make use of any and every argument which they think may possibly be available against it.

Some individuals within this latter class may not believe in the existence of God, but may yet abstain from publicly avowing this absence of belief, contenting themselves with denials of "creation" and "design," though these denials are really consequences of their attitude of mind respecting the most important and fundamental of all beliefs.

Without a distinct belief in a personal God it is impossible to have any religion worthy of the name, and no one can at the same time accept the Christian religion and deny the dogma of creation.

"I believe in God," "the Creator of Heaven and Earth," the very first clauses of the Apostles' Creed, for-

mally commit those who accept them to the assertion of this belief. If, therefore, any theory of physical science really conflicts with such an authoritative statement, its importance to Christians is unquestionable.

As, however, "creation" forms a part of "revelation," and as "revelation" appeals for its acceptance to "reason," which has to prepare a basis for it by an intelligent acceptance of theism on *purely rational grounds*, it is necessary to start with a few words as to the reasonableness of belief in God, which indeed are less superfluous than some readers may perhaps imagine; "a few words," because this is not the place where the argument can be drawn out, but only one or two hints given in reply to certain modern objections.

No better example perhaps can be taken, as a type of these objections, than a passage in Mr. Herbert Spencer's "First Principles."[1] This author constantly speaks of the "ultimate cause of things" as "the unknowable," a term singularly unfortunate, and, as Mr. James Martineau has pointed out,[2] even self-contradictory: for that entity, the

[1] See 2d edit., p. 113.

[2] "Essays, Philosophical and Theological," Trübner & Co., First Series, 1866, p. 190. "Every relative disability may be read two ways. A disqualification in the nature of thought for knowing x is, from the other side, a disqualification in the nature of x from being known. To say, then, that the First Cause is wholly removed from our apprehension is not simply a disclaimer of faculty on our part: it is a charge of inability against the First Cause too. The dictum about it is this: 'It is a Being that may exist out of knowledge, but that is precluded from entering within the sphere of knowledge.' We are told in one breath that this Being must be in every sense 'perfect, complete, total—including in itself all power, and transcending all law' (p. 38); and in another that this perfect omnipotent One is totally incapable of revealing any one of an infinite store of attributes. Need we point out the contradictions which this position involves? If you abide by it, you deny the Absolute and Infinite in the very act of affirming it, for, in debarring the First Cause from self-revelation, you impose a limit on its nature. And, in the

knowledge of the existence of which presses itself ever more and more upon the cultivated intellect, cannot be the unknown, still less *the unknowable*, because we certainly know it, in that we know for certain that it exists. Nay more, to predicate incognoscibility of it, is even a certain knowledge of the mode of its existence. Mr. H. Spencer says:[3] "The consciousness of an Inscrutable Power manifested to us through all phenomena has been growing ever clearer; and must eventually be freed from its imperfections. The certainty that on the one hand such a Power exists, while on the other hand its nature transcends intuition, and is beyond imagination, is the certainty toward which intelligence has from the first been progressing." One would think, then, that the familiar and accepted word "the Inscrutable" (which is in this passage actually employed, and to which no theologian would object) would be an infinitely better term than "the unknowable." The above extract has, however, such a theistic aspect that some readers may think the opposition here offered superfluous; it may be well, therefore, to quote two other sentences. In another place he observes:[4] "Passing over the consideration of credibility, and confining ourselves to that of conceivability, we see that atheism, pantheism, and theism, when rigorously analyzed, severally prove to be absolutely unthinkable;" and speaking of "every form of religion," he adds,[5] "The analysis of every possible hypothesis proves, not simply that no hypothesis is sufficient, but that no hypothesis is even thinkable." The unknowable is admitted to be a power which cannot be regarded as having

very act of declaring the First Cause incognizable, you do not permit it to remain unknown. For that only is unknown of which you can neither affirm nor deny any predicate; here you deny the power of self-disclosure to the 'Absolute,' of which, therefore, something is known—viz., that nothing can be known!"

[3] Loc. cit., p. 108. [4] Loc. cit., p. 43. [5] Loc. cit., p. 46.

sympathy with us, but as one to which no emotion whatever can be ascribed, and we are expressly forbidden, "by *duty*," to affirm personality of God as much as to deny it of Him. How such a being can be presented as an object on which to exercise religious emotion it is difficult indeed to understand.[6] Aspiration, love, devotion to be poured forth upon what we can never know, upon what we can never affirm to know, or care for, us, our thoughts or actions, or to possess the attributes of wisdom and goodness! The worship offered in such a religion must be, as Prof. Huxley says,[7] "for the most part of the silent sort"—silent not only as to the spoken word, but silent as to the mental conception also. It will be difficult to distinguish the follower of this religion from the follower of none, and the man who declines either to assert or to deny the existence of God is practically in the position of an atheist. For theism enjoins the cultivation of sentiments of love and devotion to God, and the practice of their external expression. Atheism forbids both, while the simply non-theist abstains in conformity with the prohibition of the atheist, and thus practically sides with him. Moreover, since man cannot imagine that of which he has no experience in any way whatever, and since he has experience only of *human* perfections and of the powers and properties of *inferior* existences, if he be required to deny human perfections and to

[6] Mr. J. Martineau, in his "Essays," vol. i., p. 211, observes: "Mr. Spencer's conditions of pious worship are hard to satisfy; there must be between the Divine and human no communion of thought, relations of conscience, or approach of affection." . . . "But you cannot constitute a religion out of mystery alone, any more than out of knowledge alone; nor can you measure the relation of doctrines to humility and piety by the mere amount of conscious darkness which they leave. All worship, being directed to what is *above* us and transcends our comprehension, stands in presence of a mystery. But not all that stands before a mystery is worship."

[7] "Lay Sermons," p. 20.

abstain from making use of such conceptions, he is thereby necessarily reduced to others of an inferior order. Mr. H. Spencer says,[8] "Those who espouse this alternative position make the erroneous assumption that the choice is between personality and something lower than personality; whereas the choice is rather between personality and something higher. Is it not just possible that there is a mode of being as much transcending intelligence and will as these transcend mechanical motion?"

"It is true we are totally unable to conceive any such higher mode of being. But this is not a reason for questioning its existence; it is rather the reverse." "May we not therefore rightly refrain from assigning to the 'ultimate cause' any attributes whatever, on the ground that such attributes, derived as they must be from our own natures, are not elevations but degradations?" The way, however, to arrive at the object aimed at (i. e., to obtain the best attainable conception of the First Cause) is not to refrain from *the only conceptions possible to us*, but to seek the very highest of these, and then declare their utter inadequacy; and this is precisely the course which has been pursued by theologians. It is to be regretted that, before writing on this matter, Mr. Spencer did not more thoroughly acquaint himself with the ordinary doctrine on the subject. It is always taught in the Church schools of divinity, that nothing, not even *existence*, is to be predicated *univocally* of "God" and "creatures;" that, after exhausting ingenuity to arrive at the loftiest possible conceptions, we must declare them to be *utterly inadequate;* that, after all, they are but accommodations to human infirmity; that they are in a sense objectively false (because of their inadequacy), though subjectively and very practically true. But the difference between this mode of treatment and that adopted by Mr. Spencer is wide indeed; for the practical

[8] Loc. cit., p. 109.

result of the mode inculcated by the Church is, that each one may freely affirm and act upon the highest human conceptions he can attain of the power, wisdom, and goodness of God, His watchful care, His loving providence for every man, at every moment and in every need; for the Christian knows that the falseness of his conceptions lies only in their *inadequacy;* he may therefore strengthen and refresh himself, may rejoice and revel in conceptions of the goodness of God, drawn from the tenderest human images of fatherly care and love, or he may chasten and abase himself by consideration of the awful holiness and unapproachable majesty of the Divinity derived from analogous sources, knowing that no thought of man can ever be *true enough*, can ever attain the incomprehensible reality, which nevertheless really *is* all that can be conceived, *plus* an inconceivable infinity beyond.

A good illustration of what is here meant, and of the difference between the theistic position and Mr. Spencer's, may be supplied by an example he has himself proposed. Thus,[9] he imagines an intelligent watch speculating as to its maker, and conceiving of him in terms of watch-being, and figuring him as furnished with springs, escapements, cogged wheels, etc., his motions facilitated by oil—in a word, like himself. It is assumed by Mr. Spencer that this necessary watch conception would be completely false, and the illustration is made use of to show "the presumption of theologians"—the absurdity and unreasonableness of those men who figure the incomprehensible cause of all phenomena as a Being in some way comparable with man. Now, putting aside for the moment all other considerations, and accepting the illustration, surely the example demonstrates rather the unreasonableness of the *objector himself!* It is true, indeed, that a man is an organism indefinitely more complex and perfect than any watch; but, if the watch

[9] Loc. cit., p. 111

could only conceive of its maker in watch terms, or else in terms altogether inferior, the watch would plainly be right in speaking of its maker as a, to it, inconceivably perfect kind of watch, acknowledging, at the same time, that this, its conception of him, was *utterly inadequate*, although the best its inferior nature allowed it to form. For, if, instead of so conceiving of its maker, it refused to make use of these relative perfections as a makeshift, and so necessarily thought of him as amorphous metal, or mere oil, or by the help of any other inferior conception which a watch might be imagined capable of entertaining, that watch would be wrong indeed. For man can much more properly be compared with, and has much more affinity to, a perfect watch in full activity than to a mere piece of metal, or drop of oil. But the watch is even more in the right still, for its maker, man, virtually *has* the cogged wheels, springs, escapements, oil, etc., which the watch's conception has been supposed to attribute to him; inasmuch as all these parts must have existed as distinct ideas in the human watchmaker's mind before he could actually construct the clock formed by him. Nor is even this all, for, by the hypothesis, the watch *thinks*. It must, therefore, think of its maker as "a thinking being," and in this it is *absolutely and completely right*.[10] Either, therefore, the hypothesis is *absurd*, or it actually *demonstrates the very position it was chosen to refute*. Unquestionably, then, on the mere ground taken by Mr. Herbert Spencer himself, if we are compelled to think of the First Cause either in human terms (but with human imperfections abstracted and human perfections carried to the highest conceivable degree), or, on the other hand, in terms decidedly inferior, such as those are driven to who think of Him, but decline to accept as a help the term "personality," there

[10] In this criticism on Mr. Herbert Spencer, the author finds he has been anticipated by Mr. James Martineau. (See "Essays," vol. i., p. 208.)

can be no question but that the first conception is immeasurably nearer the truth than the second. Yet the latter is the one put forward and advocated by that author in spite of its unreasonableness, and in spite also of its conflicting with the whole moral nature of man and all his noblest aspirations.

Again, Mr. Herbert Spencer objects to the conception of God as "first cause," on the ground that "when our symbolic conceptions are such that no cumulative or indirect processes of thought can enable us to ascertain that there are corresponding actualities, nor any predictions be made whose fulfilment can prove this, then they are altogether vicious and illusive, and in no way distinguishable from pure fictions." [11]

Now, it is quite true that "symbolic conceptions," which are not to be justified either (1) by presentations of sense, or (2) by intuitions, are invalid as representations of real truth. Yet the conception of God referred to *is* justified by our primary intuitions, and we can assure ourselves that it *does* stand for an actuality by comparing it with (1) our intuitions of free-will and causation, and (2) our intuitions of morality and responsibility. That we *have* these intuitions is a point on which the author joins issue with Mr. Spencer, and confidently affirms that they cannot logically be denied without at the same time complete and absolute skepticism resulting from such denial—skepticism wherein vanishes any certainty as to the existence both of Mr. Spencer and his critic, and by which it is equally impossible to have a thought free from doubt, or to go so far as to affirm the existence of that very doubt or of the doubter who doubts it.

It may not be amiss here to protest against the intolerable assumption of a certain school, who are continually talking in lofty terms of "science," but who actually speak

[11] Loc. cit., p. 29.

of primary religious conceptions as "unscientific," and habitually employ the word "science," when they should limit it by the prefix "physical." This is the more amazing, as not a few of this school adopt the idealist philosophy, and affirm that "matter and force" are but names for certain "modes of consciousness." It might be expected of them at least to admit that opinions which repose on primary and fundamental intuitions are especially and *par excellence* scientific.

Such are some of the objections to the Christian conception of God. We may now turn to those which are directed against God as the Creator, i. e., as the absolute originator of the universe, without the employment of any preëxisting means or material. This is again considered by Mr. Spencer as a thoroughly illegitimate symbolic conception, as much so as the atheistic one—the difficulty as to a *self-existent Creator* being in his opinion equal to that of a *self-existent universe.* To this it may be replied that both are of course equally *unimaginable*, but that it is not a question of facility of conception—not which is easiest to conceive, but which best accounts for, and accords with, psychological facts; namely, with the above-mentioned intuitions. It is contended that *we have* these primary intuitions, and that with these the conception of a self-existent Creator is perfectly harmonious. On the other hand, the notion of a self-existent universe—that there is no real distinction between the finite and the infinite—that the universe and ourselves are one and the same things with the infinite and the self-existent—these assertions, in *addition to* being unimaginable, *contradict* our primary intuitions.

Mr. Darwin's objections to "Creation" are of quite a different kind, and, before entering upon them, it will be well to endeavor clearly to understand what we mean by "Creation," in the various senses in which the term may be used.

In the strictest and highest sense "Creation" is the absolute origination of any thing by God without preëxisting means or material, and is a *supernatural* act.[12]

In the secondary and lower sense, "Creation" is the formation of any thing by God *derivatively;* that is, that the preceding matter has been created with the potentiality to evolve from it, under suitable conditions, all the various forms it subsequently assumes. And this power having been conferred by God in the first instance, and those laws and powers having been instituted by Him, through the action of which the suitable conditions are supplied, He is said, in this lower sense, to create such various subsequent forms. This is the *natural* action of God in the physical world, as distinguished from His direct, or, as it may be here called, supernatural action.

In yet a third sense, the word "Creation" may be more or less improperly applied to the construction of any complex formation or state by a voluntary self-conscious being who makes use of the powers and laws which God has imposed, as when a man is spoken of as the creator of a museum, or of "his own fortune," etc. Such action of a created conscious intelligence is purely natural, but more than physical, and may be conveniently spoken of as hyperphysical.

We have thus (1) direct or supernatural action; (2) physical action; and (3) hyperphysical action—the two latter both belonging to the order of nature.[13] Neither the physical nor the hyperphysical actions, however, exclude the

[12] The author means by this, that it is *directly* and *immediately* the act of God, the word "supernatural" being used in a sense convenient for the purposes of this work, and not in its ordinary theological sense.

[13] The phrase "order of nature" is not here used in its theological sense as distinguished from the "order of grace," but as a term, here convenient, to denote actions not due to direct and immediate Divine intervention.

idea of the Divine concurrence, and with every consistent theist that idea is necessarily included. Dr. Asa Gray has given expression to this.[14] He says, "Agreeing that plants and animals were produced by Omnipotent fiat does not exclude the idea of natural order and what we call secondary causes. The record of the fiat—'Let the earth bring forth grass, the herb yielding seed,' etc., 'let the earth bring forth the living creature after his kind'—seems even to imply them," and leads to the conclusion that the various kinds were produced through natural agencies.

Now, much confusion has arisen from not keeping clearly in view this distinction between *absolute* creation and *derivative* creation. With the first, physical science has plainly nothing whatever to do, and is impotent to prove or to refute it. The second is also safe from any attack on the part of physical science, for it is primarily derived from psychical not physical phenomena. The greater part of the apparent force possessed by objectors to creation, like Mr. Darwin, lies in their treating the assertion of derivative creation as if it was an assertion of absolute creation, or at least of supernatural action. Thus, he asks whether some of his opponents believe "that, at innumerable periods in the earth's history, certain elemental atoms have been commanded suddenly to flash into living tissues."[15] Certain of Mr. Darwin's objections, however, are not physical, but *metaphysical*, and really attack the dogma of secondary or derivative creation, though to some perhaps they may appear to be directed against absolute creation only.

Thus he uses, as an illustration, the conception of a man who builds an edifice from fragments of rock at the base of a precipice, by selecting, for the construction of the various

[14] "A Free Examination of Darwin's Treatise," p. 29, reprinted from the *Atlantic Monthly* for July, August, and October, 1860.

[15] "Origin of Species," 5th edit., p. 571.

parts of the building, the pieces which are the most suitable, owing to the shape they happen to have broken into. Afterward, alluding to this illustration, he says:[16] "The shape of the fragments of stone at the base of our precipice may be called accidental, but this is not strictly correct, for the shape of each depends on a long sequence of events, all obeying natural laws, on the nature of the rock, on the lines of stratification or cleavage, on the form of the mountain which depends on its upheaval and subsequent denudation, and lastly, on the storm and earthquake which threw down the fragments. But, in regard to the use to which the fragments may be put, their shape may strictly be said to be accidental. And here we are led to face a great difficulty, in alluding to which I am aware that I am travelling beyond my proper province."

"An omniscient Creator must have foreseen every consequence which results from the laws imposed by Him; but can it be reasonably maintained that the Creator intentionally ordered, if we use the words in any ordinary sense, that certain fragments of rock should assume certain shapes, so that the builder might erect his edifice? If the various laws which have determined the shape of each fragment were not predetermined for the builder's sake, can it with any greater probability be maintained that He specially ordained, for the sake of the breeder, each of the innumerable variations in our domestic animals and plants—many of these variations being of no service to man, and not beneficial, far more often injurious, to the creatures themselves? Did He ordain that the crop and tail-feathers of the pigeon should vary, in order that the fancier might make his grotesque pouter and fantail breeds? Did He cause the frame and mental qualities of the dog to vary, in order that a breed might be formed of indomitable ferocity, with jaws fitted to pin down the bull for man's brutal sport?

[16] "Animals and Plants under Domestication," vol. ii., p. 431

But, if we give up the principle in one case—if we do not admit that the variations of the primeval dog were intentionally guided, in order that the greyhound, for instance, that perfect image of symmetry and vigor, might be formed—no shadow of reason can be assigned for the belief that the variations, alike in Nature, and the result of the same general laws, which have been the groundwork through "Natural Selection" of the formation of the most perfectly-adapted animals in the world, man included, were intentionally and specially guided. However much we may wish it, we can hardly follow Prof. Asa Gray in his belief that 'variation has been led along certain beneficial lines,' like a stream 'along definite and useful lines of irrigation.'"

"If we assume that each particular variation was from the beginning of all time preordained, the plasticity of the organization, which leads to many injurious deviations of structure, as well as that redundant power of reproduction which inevitably leads to a struggle for existence, and, as a consequence, to the "Natural Selection" and survival of the fittest, must appear to us superfluous laws of Nature. On the other hand, an omnipotent and omniscient Creator ordains every thing and foresees every thing. Thus we are brought face to face with a difficulty as insoluble as is that of free-will and predestination."

Before proceeding to reply to this remarkable passage, it may be well to remind some readers that belief in the existence of God, in His primary creation of the universe, and in His derivative creation of all kinds of being, inorganic and organic, do not repose upon physical phenomena, but, as has been said, on primary intuitions. To deny or ridicule any of these beliefs on physical grounds is to commit the fallacy of *ignoratio elenchi*. It is to commit an absurdity analogous to that of saying a blind child could not recognize his father because he could not *see* him, forgetting that he could *hear* and *feel* him. Yet there are

some who appear to find it unreasonable and absurd that men should regard phenomena in a light not furnished by or deducible from the very phenomena themselves, although the men so regarding them avow that the light in which they do view them comes from quite another source. It is as if a man, A, coming into B's room and finding there a butterfly, should insist that B had no right to believe that the butterfly had not flown in at the open window, inasmuch as there was nothing about the room or insect to lead to any other belief; while B can well sustain his right so to believe, he having met C, who told him he brought in the chrysalis, and, having seen the insect emerge, took away the skin.

By a similarly narrow and incomplete view, the assertion that human conceptions, such as "the vertebrate idea," etc., are ideas in the mind of God, is sometimes ridiculed; as if the assertors either on the one hand pretended to some prodigious acuteness of mind—a far-reaching genius not possessed by most naturalists—or, on the other hand, as if they detected, in the very phenomena furnishing such special conception, evidences of Divine imaginings. But let the idea of God, according to the highest conceptions of Christianity, be once accepted, and then it becomes simply a truism to say that the mind of the Deity contains all that is *good* and *positive* in the mind of man, *plus*, of course, an absolutely inconceivable infinity beyond. That thus such human conceptions may, nay must, be asserted to be at the same time ideas in the Divine mind also, as every real and separate individual that has been, is, or shall be, is present to the same mind. Nay, more, that such human conceptions are but faint and obscure adumbrations of corresponding ideas which exist in the mind of God in perfection and fulness. [17]

[17] The Rev. Baden Powell says: "All sciences approach perfection as they approach to a unity of first principles—in all cases recurring to or

The theist, having arrived at his theistic convictions from quite other sources than a consideration of zoological or botanical phenomena, returns to the consideration of such phenomena and views them in a theistic light, without of course asserting or implying that such light has been derived *from them*, or that there is an obligation of reason so to view them on the part of others who refuse to enter upon or to accept those other sources whence have been derived the theistic convictions of the theist.

But Mr. Darwin is not guilty of arguing against metaphysical ideas on physical grounds only, for he employs very distinctly metaphysical ones; namely, his conceptions of the nature and attributes of the First Cause. But what conceptions does he offer us? Nothing but that low anthropomorphism which, unfortunately, he so often seems to treat as the necessary result of Theism. It is again the dummy, helpless and deformed, set up merely for the purpose of being knocked down.

tending toward certain high elementary conceptions which are the representatives of the unity of the great archetypal ideas according to which the whole system is arranged. Inductive conceptions, very partially and imperfectly realized and apprehended by human intellect, are the exponents in our minds of these great principles of Nature."

"All science is but the partial reflection, in the *reason of man*, of the great all-pervading *reason of the universe*. And thus the *unity* of science is the reflection of the *unity* of Nature, and of the *unity* of that supreme reason and intelligence which pervades and rules over Nature, and from whence all reason and all science is derived." (Unity of Worlds, Essay i., § ii.; Unity of Sciences, pp. 79, 81.) Also he quotes from Oersted's "Soul in Nature" (pp. 12, 16, 18, 87, 92, 377). "If the laws of reason did not exist in Nature, we should vainly attempt to force them upon her: if the laws of Nature did not exist in our reason, we should not be able to comprehend them." . . . "We find an agreement between our reason and works which our reason did not produce." . . . "All existence is a dominion of reason." "The laws of Nature are laws of reason, and altogether form an endless unity of reason; . . . one and the same throughout the universe."

It must once more be insisted on, that, though man is indeed compelled to conceive of God in human terms, and to speak of Him by epithets objectively false, from their hopeless inadequacy, yet nevertheless the Christian thinker declares that inadequacy in the strongest manner, and vehemently rejects from his idea of God all terms distinctly implying infirmity or limitation.

Now, Mr. Darwin speaks as if all who believe in the Almighty were compelled to accept as really applicable to the Deity conceptions which affirm limits and imperfections. Thus he says: "Can it be reasonably maintained that the Creator intentionally ordered" "that certain fragments of rock should assume certain shapes, so that the builder might erect his edifice?"

Why, surely every theist must maintain that in the first foundation of the universe—the primary and absolute creation—God saw and knew every purpose which every atom and particle of matter should ever subserve in all suns and systems, and throughout all coming æons of time. It is almost incredible, but nevertheless it seems necessary to think that the difficulty thus proposed rests on a sort of notion that amid the boundless profusion of Nature there is too much for God to superintend; that the number of objects is too great for an infinite and *omnipresent* being to attend singly to each and all in their due proportions and needs! In the same way Mr. Darwin asks whether God can have ordered the race variations referred to in the passage last quoted, for the considerations therein mentioned. To this it may be at once replied that even man often has *several* distinct intentions and motives for a *single* action, and the theist has no difficulty in supposing that, out of an infinite number of motives, the motive mentioned in each case may have been an exceedingly subordinate one. The theist, though properly attributing to God what, for want of a better term, he calls "purpose" and "design," yet

affirms that the limitations of human purposes and motives are by no means applicable to the Divine "purposes." Out of many, say a thousand million, reasons for the institution of the laws of the physical universe, some few are to a certain extent conceivable by us; and among these the benefits, material and moral, accruing from them to men, and to each individual man in every circumstance of his life, play a certain, perhaps a very subordinate, part.[18] As Baden Powell observes, "How can we undertake to affirm, amid all the possibilities of things of which we confessedly know so little, that a thousand ends and purposes may not be answered, because we can trace none, or even imagine none, which seem to our short-sighted faculties to be answered in these particular arrangements?"[19]

The objection to the bull-dog's ferocity in connection

[18] In the same way Mr. Lewes, in criticising the Duke of Argyll's "Reign of Law" (*Fortnightly Review*, July, 1867, p. 100), asks whether we should consider that man wise who spilt a gallon of wine in order to fill a wine-glass? But, because we should not do so, it by no means follows that we can argue from such an action to the action of God in the visible universe. For the man's object, in the case supposed, is simply to fill the wine-glass, and the wine spilt is so much loss. With God it may be entirely different in both respects. All these objections are fully met by the principle thus laid down by St. Thomas Aquinas: "Quod si aliqua causa particularis deficiat a suo effectu, hoc est propter aliquam causam particularem impediantem quæ continetur sub ordine causæ universalis. Unde effectus ordinem causæ universalis nullo modo potest exire." . . . "Sicut indigestio contingit præter ordinem virtutis nutritivæ ex aliquo impedimento, puta ex grossitie cibi, quam necesse est reducere in aliam causam, et sic usque ad causam primam universalem. Cum igitur Deus sit prima causa universalis non unius generi tantum, sed universaliter totius entis, impossibile est quod aliquid contingat præter ordinem divinæ gubernationis; sed ex hoc ipso quod aliquid ex unâ parte videtur exire ab ordine divinæ providentiæ, quo consideratur secundam aliquam particularem causam, necesse est quod in eundem ordinem relabatur secundum aliam causam."—*Sum. Theol.*, p. i., q. 19, a. 6, and q. 103, a. 7.

[19] "Unity of Worlds," Essay ii., § ii., p. 260.

with "man's brutal sport" opens up the familiar but vast question of the existence of evil, a problem the discussion of which would be out of place here. Considering, however, the very great stress which is laid in the present day on the subject of animal suffering by so many amiable and excellent people, one or two remarks on that matter may not be superfluous. To those who accept the belief in God, the soul and moral responsibility; and recognize the full results of that acceptance—to such, physical suffering and moral evil are simply incommensurable. To them the placing of non-moral beings in the same scale with moral agents will be utterly unendurable. But even considering physical pain only, all must admit that this depends greatly on the mental condition of the sufferer. Only during consciousness does it exist, and only in the most highly-organized men does it reach its acme. The author has been assured that lower races of men appear less keenly sensitive to physical pain than do more cultivated and refined human beings. Thus only in man can there really be any intense degree of suffering, because only in him is there that intellectual recollection of past moments and that anticipation of future ones, which constitute in great part the bitterness of suffering.[20] The momentary pang, the present pain, which beasts endure, though real enough, is yet, doubtless, not to be compared as to its intensity with the suffering which is produced in man through his high prerogative of self-consciousness.[21]

As to the "beneficial lines" (of Dr. Asa Gray, before referred to), some of the facts noticed in the preceding chapters seem to point very decidedly in that direction, but

[20] See the exceedingly good passage on this subject by the Rev. Dr. Newman, in his "Discourses for Mixed Congregations," 1850, p. 345.

[21] See Mr. G. H. Lewes's "Sea-Side Studies," for some excellent remarks, beginning at p. 329, as to the small susceptibility of certain animals to pain.

all must admit that the actual existing outcome is far more "beneficial" than the reverse. The natural universe has resulted in the development of an unmistakable harmony and beauty, and in a decided preponderance of good and of happiness over their opposites.

Even if "laws of Nature" did appear, on the theistic hypothesis, to be "superfluous" (which it is by no means intended here to admit), it would be nothing less than puerile to prefer rejecting the hypothesis to conceiving that the appearance of superfluity was probably due to human ignorance; and this especially might be expected from naturalists to whom the interdependence of Nature and the harmony and utility of obscure phenomena are becoming continually more clear, as, e. g., the structure of orchids to their illustrious expositor.

Having now cleared the ground somewhat, we may turn to the question what bearing Christian dogma has upon evolution, and whether Christians, as such, need take up any definite attitude concerning it.

As has been said, it is plain that physical science and "evolution" *can* have nothing whatever to do with absolute or primary creation. The Rev. Baden Powell well expresses this, saying: "Science demonstrates incessant past changes, and dimly points to yet earlier links in a more vast series of development of material existence; but the idea of a *beginning*, or of *creation*, in the sense of the original operation of the Divine volition to constitute Nature and matter, is beyond the province of physical philosophy."[22]

With secondary or derivative creation, physical science is also incapable of conflict; for the objections drawn by some writers seemingly from physical science are, as has been already argued, rather metaphysical than physical.

Derivative creation is not a supernatural act, but is simply the Divine action by and through natural laws. To

[22] "Philosophy of Creation," Essay iii., § iv., p. 480.

recognize such action in such laws is a religious mode of regarding phenomena, which a consistent theist must necessarily accept, and which an atheistic believer must similarly reject. But this conception, if deemed superfluous by any naturalist, can never be shown to be *false* by any investigations concerning natural laws, the constant action of which it presupposes.

The conflict has arisen through a misunderstanding. Some have supposed that by "creation" was necessarily meant either primary, that is, absolute creation, or, at least, some supernatural action; they have therefore opposed the dogma of "creation" in the imagined interest of physical science.

Others have supposed that by "evolution" was necessarily meant a denial of Divine action, a negation of the providence of God. They have therefore combated the theory of "evolution" in the imagined interest of religion.

It appears plain, then, that Christian thinkers are perfectly free to accept the general evolution theory. But are there any theological authorities to justify this view of the matter?

Now, considering how extremely recent are these biological speculations, it might hardly be expected *a priori* that writers of earlier ages should have given expression to doctrines harmonizing in any degree with such very modern views,[23] nevertheless such most certainly is the case, and it

[23] It seems almost strange that modern English thought should so long hold aloof from familiar communion with Christian writers of other ages and countries. It is rarely indeed that acquaintance is shown with such authors, though a bright example to the contrary was set by Sir William Hamilton. Sir Charles Lyell (in his "Principles of Geology," 7th edition, p. 35) speaks with approval of the early Italian geologists. Of Vallisneri he says, "I return with pleasure to the geologists of Italy who preceded, as has been already shown, the naturalists of other countries in their investigations into the ancient history of the earth, and who still maintained a decided preëminence. They refuted and ridiculed the

would be easy to give numerous examples. It will be better, however, only to cite one or two authorities of weight. Now, perhaps no writer of the earlier Christian ages could be quoted whose authority is more generally recognized than that of St. Augustine. The same may be said of the mediæval period, for St. Thomas Aquinas; and, since the

physico-theological systems of Burnet, Whiston, and Woodward; while Vallisneri, in his comments on the Woodwardian theory, remarked how much the interests of religion, as well as those of sound philosophy, had suffered by perpetually mixing up the sacred writings with questions of physical science." Again, he quotes the Carmelite friar Generelli, who, illustrating Moro before the Academy of Cremona in 1749, strongly opposed those who would introduce the supernatural into the domain of Nature. "I hold in utter abomination, most learned Academicians! those systems which are built with their foundations in the air, and cannot be propped up without a miracle, and I undertake, with the assistance of Moro, to explain to you how these marine monsters were transported into the mountains by natural causes."

Sir Charles Lyell notices with exemplary impartiality the spirit of intolerance on both sides. How in France, Buffon, on the one hand, was influenced by the theological faculty of the Sorbonne to recant his theory of the earth, and how Voltaire, on the other, allowed his prejudices to get the better, if not of his judgment, certainly of his expression of it. Thinking that fossil remains of shells, etc., were evidence in favor of orthodox views, Voltaire, Sir Charles Lyell (Principles, p. 56) tells us, "endeavored to inculcate skepticism as to the real nature of such shells, and to recall from contempt the exploded dogma of the sixteenth century, that they were sports of Nature. He also pretended that vegetable impressions were not those of real plants." . . . "He would sometimes, in defiance of all consistency, shift his ground when addressing the vulgar; and, admitting the true nature of the shells collected in the Alps and other places, pretend that they were Eastern species, which had fallen from the hats of pilgrims coming from Syria. The numerous essays written by him on geological subjects were all calculated to strengthen prejudices, partly because he was ignorant of the real state of the science, and partly from his bad faith." As to the harmony between many early Church writers of great authority and modern views as regards certain matters of geology, see "Geology and Revelation," by the Rev. Gerald Molloy, D. D., London, 1870.

movement of Luther, Suarez may be taken as a writer widely venerated as an authority, and one whose orthodoxy has never been questioned.

It must be borne in mind that, for a considerable time after even the last of these writers, no one had disputed the generally-received view as to the small age of the world or at least of the kinds of animals and plants inhabiting it. It becomes therefore much more striking if views formed under such a condition of opinion are found to harmonize with modern ideas regarding "Creation" and organic life.

Now, St. Augustine insists in a very remarkable manner on the merely derivative sense in which God's creation of organic forms is to be understood; that is, that God created them by conferring on the material world the power to evolve them under suitable conditions. He says in his book on Genesis: [24] "Terrestria animalia, tanquam ex ultimo elemento mundi ultima; nihilominus *potentialiter*, quorum numeros tempus postea visibiliter explicaret."

Again he says:

"Sicut autem in ipso grano invisibiliter erant omnia simul, quæ per tempora in arborem surgerent; ita ipse mundus cogitandus est, cum Deus *simul omnia creavit*, habuisse simul omnia quæ in illo et cum illo facta sunt quando factus est dies; non solum cœlum cum sole et lunâ et sideribus . . . .; sed etiam illa quæ aqua et terra produxit potentialiter atque causaliter, priusquam per temporum moras its exorirentur, quomodo nobis jam nota sunt in eis operibus, quæ Deus usque nunc operatur." [25]

"Omnium quippe rerum quæ corporaliter visibiliterque nascuntur, occulta quædam semina in istis corporeis mundi hujus elementis latent." [26]

[24] "De Genesi ad Litt.," lib. v., cap. v., No. 14 in Ben. Edition, vol. iii., p. 186.

[25] Lib. cit., cap. xxii., No. 44.

[26] Lib. cit., "De Trinitate," lib. iii., cap. viii., No. 14.

And again: "Ista quippe originaliter ac primordialiter in quadam textura elementorum cuncta jam creata sunt; sed acceptis opportunitatibus prodeunt." [27]

St. Thomas Aquinas, as was said in the first chapter, quotes with approval the saying of St. Augustine, that in the first institution of Nature we do not look for *Miracles*, but for the *laws of Nature:* "In prima institutione naturæ non quæritur miraculum, sed quid natura rerum habeat, ut Augustinus dicit." [28]

Again, he quotes with approval St. Augustine's assertion that the kinds were created only derivatively, "*potentialiter tantum.*" [29]

Also he says: "In prima autem rerum institutione fuit principium activum verbum Dei, quod de materia elementari produxit animalia, vel in actua vel *virtute*, secundum Aug. lib. 5 de Gen. ad lit. c. 5." [30]

Speaking of "kinds" (in scholastic phraseology "substantial forms") latent in matter, he says: "Quas quidam posuerunt non incipere per actionem naturæ sed prius in materia exstitisse, ponentes latitationem formarum. Et hoc accidit eis ex ignorantia materiæ, quia nesciebant distinguere inter potentiam et actum. Quia enim formæ præexistunt eas simpliciter præexistere." [31]

Also Cornelius à Lapide [32] contends that at least certain animals were not absolutely, but only derivatively created, saying of them, "Non fuerunt creata formaliter, sed potentialiter."

As to Suarez, it will be enough to refer to Disp. xv. § 2, n. 9, p. 508, t. i. Edition *Vives*, Paris; also Nos. 13–15,

[27] Lib. cit., cap. ix., No. 16.

[28] St. Thomas, Summa, i., quest. 67, art. 4, ad 3.

[29] Primæ Partis, vol. ii., quest. 74, art. 2.

[30] Lib. cit., quest. 71, art. 1.

[31] Lib. cit., quest. 45, art. 8.

[32] *Vide* In Genesim Comment., cap. i.

and many other references to the same effect could easily be given, but these may suffice.

It is then evident that ancient and most venerable theological authorities distinctly assert *derivative* creation, and thus harmonize with all that modern science can possibly require.

It may indeed truly be said with Roger Bacon, "The saints never condemned many an opinion which the moderns think ought to be condemned." [33]

The various extracts given show clearly how far "evolution" is from any necessary opposition to the most orthodox theology. The same may be said of spontaneous generation. The most recent form of it, lately advocated by Dr. H. Charlton Bastian,[34] teaches that matter exists in two different forms, the crystalline (or statical) and the colloidal (or dynamical) conditions. It also teaches that colloidal matter, when exposed to certain conditions, presents the phenomena of life, and that it can be formed from crystalline matter, and thus that the *prima materia*, of which these are diverse forms, contains potentially all the multitudinous kinds of animal and vegetable existence. This theory, moreover, harmonizes well with the views here advocated, for just as crystalline matter builds itself, under suitable conditions, along *certain definite lines*, so analogously colloidal matter has *its definite lines and directions* of development. It is not collected in haphazard, accidental aggregations, but evolves according to its proper laws and special properties.

[33] Roger Bacon, Opus tertium, c. ix., p. 27, quoted in the *Rambler* for 1859, vol. xii., p. 375.

[34] See *Nature*, June and July, 1870. Those who, like Profs. Huxley and Tyndall, do not accept his conclusions, none the less agree with him in principle, though they limit the evolution of the organic world from the inorganic to a very remote period of the world's history. (See Prof. Huxley's address to the British Association at Liverpool, 1870, p. 17.)

The perfect orthodoxy of these views is unquestionable. Nothing is plainer from the venerable writers quoted, as well as from a mass of other authorities, than that "the supernatural" is not to be looked for or expected in the sphere of mere Nature. For this statement there is a general *consensus* of theological authority.

The teaching which the author has received is, that God is indeed inscrutable and incomprehensible to us from the infinity of His attributes, so that our minds can, as it were, only take in, in a most fragmentary and indistinct manner (as through a glass darkly), dim conceptions of infinitesimal portions of His inconceivable perfection. In this way the partial glimpses obtained by us in different modes differ from each other; not that God is any thing but the most perfect unity, but that apparently conflicting views arise from our inability to apprehend Him, except in this imperfect manner, i. e., by successive slight approximations along different lines of approach. Sir William Hamilton has said,[35] "Nature conceals God, and man reveals Him." It is not, according to the teaching spoken of, exactly thus; but rather that physical Nature reveals to us one side, one aspect of the Deity, while the moral and religious worlds bring us in contact with another, and at first, to our apprehension, a very different one. The difference and discrepancy, however, which is at first felt, is soon seen to proceed not from the reason, but from a want of flexibility in the imagination. This want is far from surprising. Not only may a man naturally be expected to be an adept in his own art, but at the same time to show an incapacity for a very different mode of activity.[36] We rarely find an artist who

[35] "Lectures on Metaphysics and Logic," vol. i., Lecture ii., p. 40.

[36] In the same way that an undue cultivation of any one kind of knowledge is prejudicial to philosophy. Mr. James Martineau well observes: "Nothing is more common than to see maxims, which are unexceptionable as the assumptions of particular sciences, coerced into the

takes much interest in jurisprudence, or a prize-fighter who is an acute metaphysician. Nay, more than this, a positive distaste may grow up, which, in the intellectual order, may amount to a spontaneous and unreasoning disbelief in that which appears to be in opposition to the more familiar concept, and this at all times. It is often and truly said, that "past ages were preëminently credulous as compared with our own, yet the difference is not so much in the amount of the credulity, as in the direction which it takes." [37]

Dr. Newman observes: "Any one study, of whatever kind, exclusively pursued, deadens in the mind the interest, nay, the perception of any other. Thus Cicero says that Plato and Demosthenes, Aristotle and Isocrates, might have respectively excelled in each other's province, but that each was absorbed in his own. Specimens of this peculiarity occur every day. You can hardly persuade some men to talk about any thing but their own pursuit; they refer the whole world to their own centre, and measure all matters by their own rule, like the fisherman in the drama, whose eulogy on his deceased lord was, 'He was so fond of fish.'" [38]

The same author further says: [39] "When any thing, which comes before us, is very unlike what we commonly

service of a universal philosophy, and so turned into instruments of mischief and distortion. That "we can know nothing but phenomena"—that "causation is simply constant priority"—that "men are governed invariably by their interests," are examples of rules allowable as dominant hypotheses in physics or political economy, but exercising a desolating tyranny when thrust on to the throne of universal empire. He who seizes upon these and similar maxims, and carries them in triumph on his banner, may boast of his escape from the uncertainties of metaphysics, but is himself all the while the unconscious victim of their very vulgarest deception." ("Essays," Second Series, *A Plea for Philosophical Studies*, p. 421.)

[37] Lecky's "History of Rationalism," vol. i., p. 73.

[38] "Lectures on University Subjects," by J. H. Newman, D. D., p. 322.

[39] Loc. cit., p. 324.

experience, we consider it on that account untrue; not because it really shocks our reason as improbable, but because it startles our imagination as strange. Now, revelation presents to us a perfectly different aspect of the universe from that presented by the sciences. The two informations are like the distinct subjects represented by the lines of the same drawing, which, accordingly as they are read on their concave or convex side, exhibit to us now a group of trees with branches and leaves, and now human faces." . . . . "While, then, reason and revelation are consistent in fact, they often are inconsistent in appearance; and this seeming discordance acts most keenly on the imagination, and may suddenly expose a man to the temptation, and even hurry him on to the commission, of definite acts of unbelief, in which reason itself really does not come into exercise at all." [40]

Thus we find in fact just that distinctness between the ideas derived from physical science on the one hand and from religion on the other, which we might *a priori* expect if there exists that distinctness between the natural and the miraculous which theological authorities lay down.

Assuming, for argument's sake, the truth of Christianity, it evidently has not been the intention of its author to make the evidence for it so plain that its rejection would be the mark of intellectual incapacity. Conviction is not forced upon men in the way that the knowledge that the government of England is constitutional, or that Paris is the capital of France, is forced upon all who choose to inquire into those subjects. The Christian system is one which puts on the strain, as it were, *every* faculty of man's

[40] Thus Prof. Tyndall, in the *Pall Mall Gazette* of June 15, 1868, speaking of physical science, observes: "The *logical feebleness* of science is not sufficiently borne in mind. It keeps down the weed of superstition, not by logic, but by slowly rendering the mental soil unfit for its cultivation."

nature, and the intellect is not (any more than we should *a priori* expect it to be) exempted from taking part in the probationary trial. A moral element enters into the acceptance of that system.

And so with natural religion—with those ideas of the supernatural, viz., God, Creation, and Morality, which are anterior to revelation and repose upon reason. Here, again, it evidently has not been the intention of the Creator to make the evidence of His existence so plain that its non-recognition would be the mark of intellectual incapacity. Conviction, as to theism, is not forced upon men as is the conviction of the existence of the sun at noonday.[41] A moral element also enters here, and the analogy there is in this respect between Christianity and theism speaks eloquently of their primary derivation from one common author.

Thus we might expect that it would be a vain task to seek anywhere in Nature for evidence of Divine action, such that no one could sanely deny it. God will not allow Himself to be caught at the bottom of any man's crucible, or yield Himself to the experiments of gross-minded and irreverent inquirers. The natural, like the supernatural, revelation appeals to *the whole* of man's mental nature and not to the *reason alone*.[42]

None, therefore, need feel disappointed that evidence of the direct action of the first cause in merely natural phenomena ever eludes our grasp; for assuredly those same phenomena will ever remain fundamentally inexplicable by physical science alone.

There being, then, nothing in either authority or reason

[41] But this is not, of course, meant to deny that the existence of God can be demonstrated, so as to demand the assent of the intellect taken, so to speak, by itself.

[42] See some excellent remarks in the Rev. Dr. Newman's Parochial Sermons—the new edition (1869), vol. i., p. 211.

which makes "evolution" repugnant to Christianity, is there any thing in the Christian doctrine of "Creation" which is repugnant to the theory of "evolution?"

Enough has been said as to the distinction between absolute and derivative "creation." It remains to consider the successive "evolution" (Darwinian and other) of "specific forms," in a theological light.

As to what "evolution" is, we cannot of course hope to explain it completely, but it may be enough to define it as the manifestation to the intellect, by means of sensible impressions, of some ideal entity (power, principle, nature, or activity) which before that manifestation was in a latent, unrealized, and merely "potential" state—a state that is capable of becoming realized, actual, or manifest, the requisite conditions being supplied.

"Specific forms," kinds or species, are (as was said in the introductory chapter) "peculiar congeries of characters or attributes, innate powers and qualities, and a certain nature realized in individuals."

Thus, then, the "evolution of specific forms" means the actual manifestation of special powers, or natures, which before were latent, in such a successive manner that there is in some way a genetic relation between posterior manifestations and those which preceded them.

On the special Darwinian hypothesis, the manifestation of these forms is determined simply by the survival of the fittest of many indefinite variations.

On the hypothesis here advocated the manifestation is controlled and helped by such survival, but depends on some unknown internal law or laws which determine variation at special times and in special directions.

Prof. Agassiz objects to the evolution theory, on the ground that "species, genera, families, etc., exist as thoughts, individuals as facts,"[43] and he offers the dilemma,

[43] *American Journal of Science*, July, 1860, p. 143, quoted in Dr. Asa Gray's pamphlet, p 47.

"If species do not exist at all, as the supporters of the transmutation theory maintain, how can they vary? and if individuals alone exist, how can the differences which may be observed among them prove the variability of species?"

But the supporter of "evolution" need only maintain that the several "kinds" become manifested gradually by slight differences among the various individual embodiments of one specific idea. He might reply to the dilemma by saying, species do not exist *as species* in the sense in which they are said to vary (variation applying only to the concrete embodiments of the specific idea), and the evolution of species is demonstrated not by individuals *as individuals*, but as embodiments of different specific ideas.

Some persons seem to object to the term "creation" being applied to evolution, because evolution is an "exceedingly slow and gradual process." Now, even if it were demonstrated that such is really the case, it may be asked, what is "slow and gradual?" The terms are simply relative, and the evolution of a specific form in ten thousand years would be instantaneous to a being whose days were as hundreds of millions of years.

There are others, again, who are inclined absolutely to deny the existence of species altogether, on the ground that their evolution is so gradual that if we could see all the stages it would be impossible to say *when* the manifestation of the old specific form ceased and that of the new one began. But surely it is no approach to a reason against the existence of a thing that we cannot determine the exact moment of its first manifestation. When watching "dissolving views," who can tell, while closely observing the gradual changes, exactly at what moment a new picture, say St. Mark's, Venice, can be said to have commenced its manifestation, or have begun to dominate a preceding representation of "Dotheboys Hall?" That, however, is no reason for denying the complete difference

between the two pictures and the ideas they respectively embody.

The notion of a special nature, a peculiar innate power and activity—what the scholastics called a "substantial form"—will be distasteful to many. The objection to the notion seems, however, to be a futile one, for it is absolutely impossible to altogether avoid such a conception and such an assumption. If we refuse it to the individuals which embody the species, we must admit it as regards their component parts—nay, even if we accept the hypothesis of pangenesis, we are nevertheless compelled to attribute to each gemmule that peculiar power of reproducing its own nature (its own "substantial form"), with its special activity, and that remarkable power of annexing itself to certain other well-defined gemmules whose nature it is also to plant themselves in a certain definite vicinity. So that in each individual, instead of one such peculiar power and activity dominating and controlling all the parts, you have an infinity of separate powers and activities limited to the several minute component gemmules.

It is possible that, in some minds, the notion may lurk that such powers are simpler and easier to understand, because the bodies they affect are so minute! This absurdity hardly bears stating. We can easily conceive a being so small, that a gemmule would be to it as large as St. Paul's would be to us.

Admitting, then, the existence of species, and of their successive evolution, is there any thing in these ideas hostile to Christian belief?

Writers such as Vogt and Buchner will of course contend that there is; but naturalists, generally, assume that God acts in and by the various laws of Nature. And this is equivalent to admitting the doctrine of "derivative creation." With very few exceptions, none deny such Divine concurrence. Even "design" and "purpose" are recog-

nized as quite compatible with evolution, and even with the special "nebular" and Darwinian forms of it. Prof. Huxley well says,[44] "It is necessary to remark that there is a wider teleology, which is not touched by the doctrine of evolution, but is actually based upon the fundamental proposition of evolution." . . . "The teleological and the mechanical views of Nature are not necessarily mutually exclusive; on the contrary, the more purely a mechanist the speculator is, the more firmly does he assume a primordial molecular arrangement, of which all the phenomena of the universe are the consequences; and the more completely thereby is he at the mercy of the teleologist, who can always defy him to disprove that this primordial molecular arrangement was not intended to evolve the phenomena of the universe."[45]

Prof. Owen says that natural evolution, through secondary causes, "by means of slow physical and organic operations through long ages, is not the less clearly recognizable as the act of all adaptive mind, because we have abandoned the old error of supposing it to be the result[46] of a primary, direct, and sudden act of creational construction." . . . "The succession of species by continuously-operating law is not necessarily a 'blind operation.' Such law however discerned in the properties and successions of natural objects, intimates, nevertheless, a preconceived progress. Organisms may be evolved in orderly succession, stage after stage, toward a foreseen goal, and the broad features of the course may still show the unmistakable impress of Divine volition."

[44] See *The Academy* for October, 1869, No. 1, p. 13.

[45] Prof. Huxley goes on to say that the mechanist may, in turn, demand of the teleologist how the latter knows it was so intended. To this it may be replied he knows it as a necessary truth of reason deduced from his own primary intuitions, which intuitions cannot be questioned without *absolute* skepticism.

[46] The professor doubtless means the *direct* and *immediate* result. (See Trans. Zool. Soc., vol. v., p. 90.)

Mr. Wallace[47] declares that the opponents of evolution present a less elevated view of the Almighty. He says: "Why should we suppose the machine too complicated to have been designed by the Creator so complete that it would necessarily work out harmonious results? The theory of 'continual interference' is a limitation of the Creator's power. It assumes that He could not work by pure law in the organic, as He has done in the inorganic world." Thus, then, there is not only no necessary antagonism between the general theory of "evolution" and a Divine action, but the compatibility between the two is recognized by naturalists who cannot be suspected of any strong theological bias.

The very same may be said as to the special Darwinian form of the theory of evolution.

It is true Mr. Darwin writes sometimes as if he thought that his theory militated against even *derivative creation.*[48] This, however, there is no doubt, was not really meant; and indeed, in the passage before quoted and criticised, the possibility of the Divine ordination of each variation is spoken of as a tenable view. He says ("Origin of Species," p. 569): "I see no good reason why the views given in this volume should shock the religious feelings of any one;" and he speaks of life "having been originally breathed by the Creator into a few forms or into one," which is *more* than the dogma of creation actually requires. We find, then, that no *in*compatibility is asserted (by any scientific writers wor-

[47] "Natural Selection," p. 280.

[48] Dr. Asa Gray, e. g., has thus understood Mr. Darwin. The doctor says in his pamphlet, p. 38: "Mr. Darwin uses expressions which imply that the natural forms which surround us, because they have a history or natural sequence, could have been only generally, but not particularly designed—a view at once superficial and contradictory; whereas his true line should be, that his hypothesis concerns the *order* and not the *cause*, the *how* and not the *why* of the phenomena, and so leaves the question of design just where it was before."

thy of mention) between "evolution" and the coöperation of the Divine will; while the same "evolution" has been shown to be thoroughly acceptable to the most orthodox theologians who repudiate the intrusion of the supernatural into the domain of Nature. A more complete harmony could scarcely be desired.

But, if we may never hope to find, in physical Nature, evidence of supernatural action, what sort of action might we expect to find there, looking at it from a theistic point of view? Surely an action the results of which harmonize with man's reason,[49] which is orderly, which disaccords with the action of blind chance and with the "fortuitious concourse of atoms" of Democritus; but at the same time an action which, as to its modes, ever, in parts, and in ultimate analysis, eludes our grasp, and the modes of which are different from those by which we should have attempted to accomplish such ends.

Now, this is just what we *do* find. The harmony, the beauty, and the order of the physical universe are the themes of continual panegyrics on the part of naturalists, and Mr. Darwin, as the Duke of Argyll remarks,[50] "exhausts every form of words and of illustration by which intention or mental purpose can be described," [51] when speaking of the wonderfully complex adjustments to secure the fertilization of orchids. Also, we find coexisting with this harmony a mode of proceeding so different from that of man as (the direct supernatural action eluding us) to form a stumbling-

[49] "All science is but the partial reflection, in the *reason of man*, of the great all-pervading *reason of the universe*. And the unity of science is the reflection of the *unity* of Nature and of the *unity* of that supreme reason and intelligence which pervades and rules over Nature, and from whence all reason and all science is derived." (Rev. Baden Powell, "Unity of the Sciences," Essay i., § ii., p. 81.)

[50] "The Reign of Law," p. 40.

[51] Though Mr. Darwin's epithets denoting design are metaphorical, his admiration of the result is unequivocal, nay, enthusiastic!

block to many in the way of their recognition of Divine action at all: although nothing can be more inconsistent than to speak of the first cause as utterly inscrutable and incomprehensible, and at the same time to expect to find traces of a mode of action exactly similar to our own. It is surely enough if the results harmonize on the whole and preponderatingly with the rational, moral, and æsthetic instincts of man.

Mr. J. J. Murphy [52] has brought strongly forward the evidence of "intelligence" throughout organic Nature. He believes "that there is something in organic progress which mere "Natural Selection" among spontaneous variations will not account for," and that "this something is that organizing intelligence which guides the action of the inorganic forces, and forms structures which neither "Natural Selection" nor any other unintelligent agency could form."

This intelligence, however, Mr. Murphy considers may be unconscious, a conception which it is exceedingly difficult to understand, and which to many minds appears to be little less than a contradiction in terms; the very first condition of an intelligence being that, if it knows any thing, it should at least know its own existence.

Surely the evidence from physical facts agrees well with the overruling, concurrent action of God in the order of Nature; which is no miraculous action, but the operation of laws which owe their foundation, institution, and maintenance, to an omniscient Creator of whose intelligence our own is a feeble adumbration, inasmuch as it is created in the "image" and "likeness" of its Maker.

This leads to the final consideration, a difficulty by no means to be passed over in silence, namely the ORIGIN OF MAN. To the general theory of Evolution, and to the special Darwinian form of it, no exception, it has been shown,

[52] See "Habit and Intelligence," vol. i., p. 348.

need be taken on the ground of orthodoxy. But, in saying this, it has not been meant to include the soul of man.

It is a generally-received doctrine that the soul of every individual man is absolutely created in the strict and primary sense of the word, that it is produced by a direct or supernatural [53] act, and, of course, that by such an act the soul of the first man was similarly created. It is therefore important to inquire whether "evolution" conflicts with this doctrine.

Now, the two beliefs are in fact perfectly compatible, and that either on the hypothesis—1. That man's body was created in a manner different in kind from that by which the bodies of other animals were created; or 2. That it was created in a similar manner to theirs.

One of the authors of the Darwinian theory, indeed, contends that, even as regards man's body, an action took place different from that by which brute forms were evolved. Mr. Wallace [54] considers that "Natural Selection" alone could not have produced so large a brain in the savage, in possessing which he is furnished with an organ beyond his needs. Also that it could not have produced that peculiar distribution of hair, especially the nakedness of the back, which is common to all races of men, nor the peculiar construction of the feet and hands. He says,[55] after speaking of the prehensile foot, common without a single exception to all the apes and lemurs, "It is difficult to see why the prehensile power should have been taken away" by the mere operation of "Natural Selection." "It must certainly have been useful in climbing, and the case of the baboons shows that it is quite compatible with terrestrial locomotion. It may not be compatible with perfectly easy

[53] The term, as before said, not being used in its ordinary theological sense, but to denote an immediate Divine action as distinguished from God's action through the powers conferred on the physical universe.

[54] See "Natural Selection," pp. 332–360. [55] Loc. cit., p. 349.

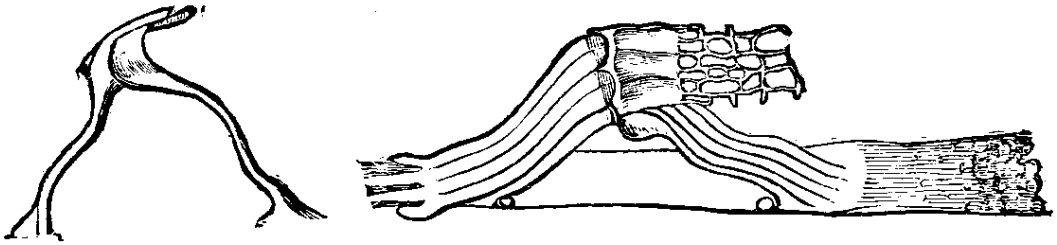
erect locomotion; but, then, how can we conceive that early man, *as an animal*, gained any thing by purely erect locomotion? Again, the hand of man contains latent capacities and powers which are unused by savages, and must have been even less used by palæolithic man and his still ruder predecessors. It has all the appearance of an organ prepared for the use of civilized man, and one which was required to render civilization possible." Again, speaking of the "wonderful power, range, flexibility, and sweetness of the musical sounds producible by the human larynx," he adds: "The habits of savages give no indication of how this faculty could have been developed by Natural Selection; because it is never required or used by them. The singing of savages is a more or less monotonous howling, and the females seldom sing at all. Savages certainly never choose their wives for fine voices, but for rude health, and strength, and physical beauty. Sexual selection could not therefore have developed this wonderful power, which only comes into play among civilized people. It seems as if the organ had been prepared in anticipation of the future progress of man, since it contains latent capacities which are useless to him in his earlier condition. The delicate correlations of structure that give it such marvellous powers, could not therefore have been acquired by means of Natural Selection."

To this may be added the no less wonderful faculty in the ear of appreciating delicate musical tones, and the harmony of chords.

It matters not what part of the organ subserves this function, but it has been supposed that it is ministered to by the fibres *of Corti*.[56] Now it can hardly be contended that the preservation of any race of men in the struggle for life could have depended on such an extreme delicacy and

[56] See Prof. Huxley's "Lessons in Elementary Physiology," p. 218.

refinement of the internal ear[57]—a perfection only fully exercised in the enjoyment and appreciation of the most exquisite musical performances. Here, surely, we have an instance of an organ preformed, ready beforehand for such



FIBRES OF CORTI.

action as could never by itself have been the cause of its development—the action having only been subsequent, not anterior. The author is not aware what may be the minute structure of the internal ear in the highest apes, but if (as from analogy is probable) it is much as in man, then *a fortiori* we have an instance of *anticipatory* development of a most marked and unmistakable kind. And this is not all. There is no reason to suppose that any animal besides man appreciates musical *harmony*. It is certain that no other one *produces* it.

Mr. Wallace also urges objections drawn from the origin of some of man's mental faculties, such as "the capacity to form ideal conceptions of space and time, of eternity and infinity—the capacity for intense artistic feelings of pleasure, in form, color, and composition—and for those abstract notions of form and number which render geometry and

[57] It may be objected, perhaps, that excessive delicacy of the ear might have been produced by having to guard against the approach of enemies, some savages being remarkable for their keenness of hearing at great distances. But the perceptions of *intensity* and *quality* of sound are very different. Some persons who have an extremely acute ear for delicate sounds, and who are fond of music, have yet an incapacity for detecting whether an instrument is slightly out of tune.

arithmetic possible," also from the origin of the moral sense.[58]

The validity of these objections is fully conceded by the author of this book, but he would push it much further, and contend (as has been now repeatedly said) that another law, or other laws, than "Natural Selection" have determined the evolution of *all* organic forms, and of inorganic forms also. And it must be contended that Mr. Wallace, in order to be quite self-consistent, should arrive at the very same conclusion, inasmuch as he is inclined to trace all phenomena to the action of superhuman WILL. He says:[59] If therefore we have traced one force, however minute, to an origin in our own WILL, while we have no knowledge of any other primary cause of force, it does not seem an improbable conclusion that all force may be will-force; and thus that the whole universe is not merely dependent on, but actually *is*, the WILL of higher intelligences, or of one Supreme Intelligence."

If there is really evidence, as Mr. Wallace believes, of the action of an overruling intelligence in the evolution of the "human form divine;" if we may go so far as this, then surely an analogous action may well be traced in the production of the horse, the camel, or the dog, so largely identified with human wants and requirements. And if from other than physical considerations we may believe that such action, though undemonstrable, has been and is; then (reflecting on sensible phenomena the theistic light derived from psychical facts) we may, in the language of Mr. Wallace, "see indications of that power in facts which, by themselves, would not serve to prove its existence."[60]

Mr. Murphy, as has been said before, finds it necessary to accept the wide-spread action of "intelligence" as the agent by which *all* organic forms have been called forth

[58] Loc. cit., pp. 351, 352. [59] Loc. cit., p. 368.

[60] Loc. cit., p. 350.

from the inorganic. But all science tends to unity, and this tendency makes it reasonable to extend to all physical existences a mode of formation which we may have evidence for in any *one* of them. It therefore makes it reasonable to extend, if possible, the very same agency which we find operating in the field of biology, also to the inorganic world. If on the grounds brought forward the action of intelligence may be affirmed in the production of man's bodily structure, it becomes probable *a priori* that it may also be predicated of the formative action by which has been produced the animals which minister to him, and all organic life whatsoever. Nay, more, it is then congruous to expect analogous action in the development of crystalline and colloidal structures, and in that of all chemical compositions, in geological evolutions, and the formation not only of this earth, but of the solar system and whole sidereal universe.

If such really be the direction in which physical science, philosophically considered, points; if intelligence may thus be seen to preside over the evolution of each system of worlds and the unfolding of every blade of grass—this grand result harmonizes indeed with the teachings of faith that God acts and concurs, in the natural order, with those laws of the material universe which were not only instituted by His will, but are sustained by His concurrence; and we are thus enabled to discern in the natural order, however darkly, the Divine Author of Nature—Him in whom "we live, and move, and have our being."

But if this view is accepted, then it is no longer absolutely necessary to suppose that any action different in kind took place in the production of man's body, from that which took place in the production of the bodies of other animals, and of the whole material universe.

Of course, if it *can* be demonstrated that that difference which Mr. Wallace asserts really exists, it is plain that we

then have to do with facts not only harmonizing with religion, but, as it were, preaching and proclaiming it.

It is not, however, necessary for Christianity that any such view should prevail. Man, according to the old scholastic definition, is "a rational animal" (*animal rationale*), and his animality is distinct in nature from his rationality, though inseparably joined, during life, in one common personality. This animal body must have had a different source from that of the spiritual soul which informs it, from the distinctness of the two orders to which those two existences severally belong.

Scripture seems plainly to indicate this when it says that "God made man from the dust of the earth, and breathed into his nostrils the breath of life." This is a plain and direct statement that man's *body* was *not* created in the primary and absolute sense of the word, but was evolved from preëxisting material (symbolized by the term "dust of the earth"), and was therefore only *derivatively created*, i. e., by the operation of secondary laws. His *soul*, on the other hand, was created in quite a different way, not by any preëxisting means, external to God Himself, but by the direct action of the Almighty, symbolized by the term "breathing:" the very form adopted by Christ, when conferring the *supernatural* powers and graces of the Christian dispensation, and a form still daily used in the rites and ceremonies of the Church.

That the first man should have had this double origin agrees with what we now experience. For supposing each human soul to be directly and immediately created, yet each human body is evolved by the ordinary operation of natural physical laws.

Prof. Flower, in his Introductory Lecture [61] (p. 20) to his course of Hunterian Lectures for 1870, well observes: "Whatever man's place may be, either *in* or *out* of Nature,

[61] Published by John Churchill.

whatever hopes, or fears, or feelings about himself or his race he may have, we all of us admit that these are quite uninfluenced by our knowledge of the fact that each individual man comes into the world by the ordinary processes of generation, according to the same laws which apply to the development of all organic beings whatever, that every part of him which can come under the scrutiny of the anatomist or naturalist, has been evolved according to these regular laws from a simple minute ovum, indistinguishable to our senses from that of any of the inferior animals. If this be so—if man is what he is, notwithstanding the corporeal mode of origin of the individual man, so he will assuredly be neither less nor more than man, whatever may be shown regarding the corporeal origin of the whole race, whether this was from the dust of the earth, or by the modification of some preëxisting animal form."

Man is indeed compound, in him two distinct orders of being impinge and mingle; and with this an origin from two concurrent modes of action is congruous, and might be expected *a priori*. At the same time as the "soul" is "the form of the body," the former might be expected to modify the latter into a structure of harmony and beauty standing alone in the organic world of Nature. Also that, with the full perfection and beauty of that soul, attained by the concurrent action of "Nature" and "Grace," a character would be formed like nothing else which is visible in this world, and having a mode of action different, inasmuch as complementary to all inferior modes of action.

Something of this is evident even to those who approach the subject from the point of view of physical science only. Thus Mr. Wallace observes,[62] that on his view man is to be placed "apart," as not only the head and culminating point of the grand series of organic Nature, but as in some degree *a new and distinct order of being*.[63] From those infinitely

[62] Natural Selection, p. 324. [63] The italics are not Mr. Wallace's.

remote ages when the first rudiments of organic life appeared upon the earth, every plant and every animal has been subject to one great law of physical change. As the earth has gone through its grand cycles of geological, climatal, and organic progress, every form of life has been subject to its irresistible action, and has been continually but imperceptibly moulded into such new shapes as would preserve their harmony with the ever-changing universe. No living thing could escape this law of its being; none (except, perhaps, the simplest and most rudimentary organisms) could remain unchanged and live amid the universal change around it."

"At length, however, there came into existence a being in whom that subtle force we term *mind*, became of greater importance than his mere bodily structure. Though with a naked and unprotected body, *this* gave him clothing against the varying inclemencies of the seasons. Though unable to compete with the deer in swiftness, or with the wild-bull in strength, *this* gave him weapons with which to capture or overcome both. Though less capable than most other animals of living on the herbs and the fruits that unaided Nature supplies, this wonderful faculty taught him to govern and direct Nature to his own benefit, and make her produce food for him when and where he pleased. From the moment when the first skin was used as a covering; when the first rude spear was formed to assist in the chase; when fire was first used to cook his food; when the first seed was sown or shoot planted, a grand revolution was effected in Nature, a revolution which in all the previous ages of the earth's history had had no parallel, for a being had arisen who was no longer necessarily subject to change with the changing universe, a being who was in some degree superior to Nature, inasmuch as he knew how to control and regulate her action, and could keep himself in harmony with her, not by a change in body, but by an advance in mind."

"On this view of his special attributes, we may admit 'that he is indeed a being apart.' Man has not only escaped 'Natural Selection' himself, but he is actually able to take away some of that power from Nature which before his appearance she universally exercised. We can anticipate the time when the earth will produce only cultivated plants and domestic animals; when man's selection shall have supplanted 'Natural Selection;' and when the ocean will be the only domain in which that power can be exerted."

Baden Powell[64] observes on this subject: "The relation of the animal man to the intellectual, moral, and spiritual man, resembles that of a crystal slumbering in its native quarry to the same crystal mounted in the polarizing apparatus of the philosopher. The difference is not in physical Nature, but in investing that Nature with a new and higher application. Its continuity with the material world remains the same, but a new relation is developed in it, and it claims kindred with ethereal matter and with celestial light."

This well expresses the distinction between the merely physical and the hyperphysical natures of man, and the subsumption of the former into the latter which dominates it.

The same author in speaking of man's moral and spiritual nature says,[65] "The assertion in its very nature and essence refers wholly to a DIFFERENT ORDER OF THINGS, apart from and transcending any material ideas whatsoever." Again[66] he adds, "In proportion as man's *moral* superiority is held to consist in attributes *not* of a *material* or corporeal kind or origin, it can signify little how his *physical* nature may have originated."

Now physical science, as such, has nothing to do with the soul of man, which is hyperphysical. That such an entity exists, that the correlated physical forces go through their Protean transformations, have their persistent ebb and

[64] "Unity of Worlds," Essay ii., § ii., p. 247.

[65] Ibid., Essay i., § ii., p. 76. [66] Ibid., Essay iii., § iv., p. 466.

flow outside of the world of WILL and SELF-CONSCIOUS MORAL BEING, are propositions the proofs of which have no place in this work. This at least may however be confidently affirmed, that no reach of physical science in any coming century will ever approach to a demonstration that countless modes of being, as different from each other as are the force of gravitation and conscious maternal love, may not coexist. Two such modes are made known to us by our natural faculties only: the physical, which includes the first of these examples; the hyperphysical, which embraces the other. For those who accept revelation, a third and a distinct mode of being and of action is also made known, namely, the direct and immediate, or, in the sense here given to the term, the supernatural. An analogous relationship runs through and connects all these modes of being and of action. The higher mode in each case employs and makes use of the lower, the action of which it occasionally suspends or alters, as gravity is suspended by electro-magnetic action, or the living energy of an organic being restrains the inter-actions of the chemical affinities belonging to its various constituents.

Thus conscious will controls and directs the exercise of the vital functions according to desire, and moral consciousness tends to control desire in obedience to higher dictates.[67]

[67] A good exposition of how an inferior action has to yield to one higher is given by Dr. Newman in his "Lectures on University Subjects," p. 372. "What is true in one science, is dictated to us indeed according to that science, but not according to another science, or in another department.

"What is certain in the military art, has force in the military art, but not in statesmanship; and if statesmanship be a higher department of action than war, and enjoins the contrary, it has no force on our reception and obedience at all. And so what is true in medical science, might in all cases be carried out, *were* man a mere animal or brute without a soul; but since he is a rational, responsible being, a thing may be ever so true in medicine, yet may be unlawful in fact, in consequence of

The action of living organisms depends upon and subsumes the laws of inorganic matter. Similarly the actions of animal life depend upon and subsume the laws of organic matter. In the same way the actions of a self-conscious moral agent, such as man, depend upon and subsume the laws of animal life. When a part or the whole series of these natural actions is altered or suspended by the intervention of action of a still higher order, we have then a "miracle."

In this way we find a perfect harmony in the double nature of man, his rationality making use of and subsuming his animality; his soul arising from direct and immediate creation, and his body being formed at first (as now in each separate individual) by derivative or secondary creation, through natural laws. By such secondary creation, i. e., by natural laws, for the most part as yet unknown but controlled by "Natural Selection," all the various kinds of animals and plants have been manifested on this planet. That Divine action has concurred and concurs in these laws we know by deductions from our primary intuitions; and physical science, if unable to demonstrate such action, is at least as impotent to disprove it. Disjoined from these deductions, the phenomena of the universe present an aspect devoid of all that appeals to the loftiest aspirations of man, that which stimulates his efforts after goodness, and presents consolations for unavoidable shortcomings. Conjoined with these same deductions, all the harmony of physical Nature and the constancy of its laws are preserved unimpaired, while the reason, the conscience, and the æsthetic instincts, are alike gratified. We have thus a true reconciliation of science and religion, in which each gains and neither loses, one being complementary to the other.

Some apology is due to the reader for certain observations and arguments which have been here advanced, and

the *higher* law of morals and religion coming to some different conclusion."

which have little in the shape of novelty to recommend them. But, after all, novelty can hardly be predicated of the views here criticised and opposed. Some of these seem almost a return to the "fortuitous concourse of atoms" of Democritus, and even the very theory of "Natural Selection" itself—a "survival of the fittest"—was in part thought out not hundreds but *thousands* of years ago. Opponents of Aristotle maintained that by the accidental occurrence of combinations, organisms have been preserved and perpetuated such as final causes, did they exist, would have brought about, disadvantageous combinations or variations being speedily exterminated. "For when the very same combinations happened to be produced which the law of final causes would have called into being, those combinations which proved to be advantageous to the organism were preserved; while those which were not advantageous perished, and still perished like the minotaurs and sphinxes of Empedocles."[68]

In conclusion, the author ventures to hope that this treatise may not be deemed useless, but have contributed, however slightly, toward clearing the way for peace and conciliation, and for a more ready perception of the harmony which exists between those deductions from our primary intuitions before alluded to, and the teachings of physical science, as far, that is, as concerns the evolution of organic forms—*the genesis of species.*

The aim has been to support the doctrine that these species have been evolved by ordinary *natural laws* (for the most part unknown) controlled by the *subordinate* action of "Natural Selection," and at the same time to remind

[68] Quoted from the *Rambler* of March, 1860, p. 364: "Ὅπου μὲν οὖν ἅπαντα συνέβη, ὥσπερ κἂν εἰ ἕνεκά του ἐγίνετο, ταῦτα μὲν ἐσώθη ἀπὸ τοῦ αὐτομάτου συστάντα ἐπιτηδείως, ὅσα δὲ μὴ οὕτως ἀπώλετο καὶ ἀπόλλυται, καθάπερ Ἐμπεδοκλῆς λέγει τὰ βουγενῆ καὶ ἀνδροπρωρα."—ARIST. *Phys.*, ii. c. 8.

some that there is and can be absolutely nothing in physical science which forbids them to regard those natural laws as acting with the Divine concurrence and in obedience to a creative fiat originally imposed on the primeval Cosmos, "in the beginning," by its Creator, its Upholder, and its Lord.