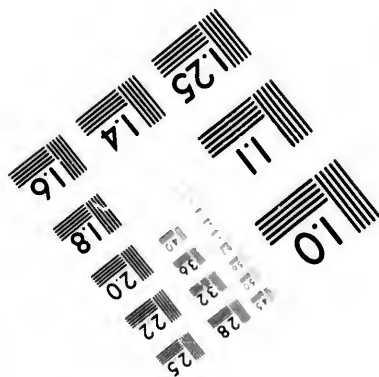
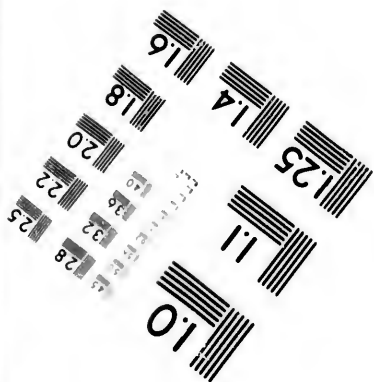
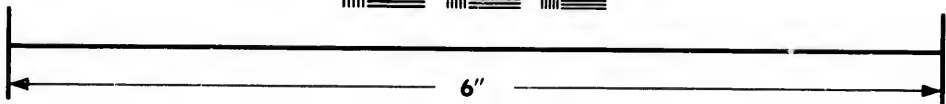
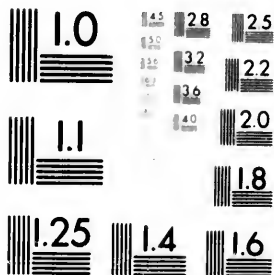


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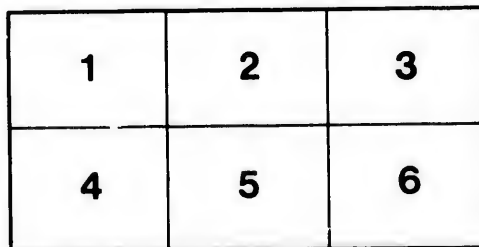
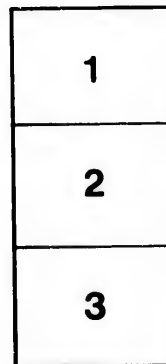
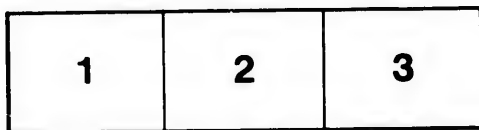
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EVOLUTION

—AND—


THE POSITIVE ASPECTS

—OF—


MODERN THOUGHT

—IN REPLY TO—

THE BISHOP OF ONTARIO'S  
SECOND LECTURE ON AGNOSTICISM



BY W. D. LESUEUR, B.A.



OTTAWA :

PRINTED BY A. S. WOODBURN, ELGIN STREET.  
1884.

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# EVOLUTION

—AND THE—

## POSITIVE ASPECTS OF MODERN THOUGHT.

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“The existence of an immutable order is therefore the primary foundation of true religion, whether in a spontaneous or a systematic form.”

AUGUSTE COMTE.

“The intellectual grasp of the laws that govern the world is science; while the devout submission of the heart to conform our life to those laws is religion.”

FREDERIC HARRISON.

The pamphlet which I lately published under the title of “A Defence of Modern Thought,” in review of a lecture on “Agnosticism” by the Bishop of Ontario, has awakened a wider interest than I expected. It has called forth two written replies—one by the Bishop of Ontario himself,\* and a second by an anonymous writer†—and it has also been made a theme of discussion in more than one city pulpit. The Bishop having re-stated all his positions, and criticized the arguments used by me, I feel it due to those who have read my pamphlet to give them some account of how the matter now stands, as between myself and my Right-reverend opponent. Has he made good his positions, and inflicted a serious defeat on the forces of evolutionary science, and upon me, as their very humble champion, or does his

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\* “A Second Lecture on Agnosticism, by the Right-reverend the Lord Bishop of Ontario.”

† A Criticism of Mr. LeSueur’s pamphlet by Vindex.’



Second Lecture simply confirm the proof offered by the first of his insufficient preparation for the discussion on which he has ventured? I have reason to believe that this question has already been decided, in a sense not favorable to the Right-reverend Lecturer, by those whose studies fit them to pronounce a prompt judgment upon it; but there are others who frankly confess that a little guidance in such matters is helpful to them; and it is for their benefit that I go over the ground in the following pages, everywhere inviting, and doing all I can to facilitate, the fullest investigation of any statements I may make.

Apart, however, from the critical examination of the "Second Lecture on Agnosticism" now before us, I hope to be able, before I close, to say some words in confirmation of the general views which I ventured to put forward in my first pamphlet, and which have been vigorously attacked in several orthodox quarters.

The learned Lecturer does not approve of the suggestion contained in my previous pamphlet, that instead of seeking a quarrel with modern thinkers on the ground of Agnosticism, he should do it on the ground of their rejection of the miraculous. In making the suggestion, however, I was governed by very practical considerations. I knew that an issue could much more readily be joined on the latter ground than on the former. Comparatively few men of science are pronounced agnostics, while very many avow more or less plainly their disbelief in miracles. As regards the belief in God there is a general desire, on the part of those who profess their inability to arrive at it by scientific processes, to exempt it from criticism. In this matter at least men of science are not aggressive; and I felt that in combating them upon this point the Lecturer was not making the best use of his dialectical resources. Moreover I knew that, in

attacking the doctrine of evolution, as a kind of cover and shield of Agnosticism, he was taking a position which some of the most learned and discreet defenders of Christianity have abandoned. Even Cardinal Newman, if I mistake not, has declared that there is nothing in the Darwinian theory which is necessarily incompatible with any essential Christian doctrine. If we open a book of which the Bishop has made some use, though not as much as he might have done, "The Unseen Universe," we shall find the eminent authors distinctly taking up the position that "it is not so much the right, or privilege as *the bounden duty* of the man of science to put back the direct interference of the Great First Cause—the unconditioned—as far as he possibly can in time. This is the intellectual or rather theoretical work which he is called upon to do—the post that has been assigned to him in the economy of the universe." Again: they observe "If two possible theories of the production of any phenomenon are presented to the man of science, one of these implying the immediate operation of the Unconditioned, and the other the operation of some cause existing in the universe, we conceive that he is called upon, by the most profound obligations of his nature, to choose the second in preference to the first." \* Now, what is here recommended, in a book designed as an aid to faith, is precisely what evolutionists are doing to-day.

Some further proof of how the doctrine of evolution is regarded in enlightened theological quarters may not be unacceptable. "Let us ask," says the Rev. Francis H. Johnson in the newly established *Andover Review* (Congregational) "why it is that the scientific doctrine of evolution should be so repeatedly and conspicuously associated with philosophies antagonistic to Christianity? Is it the fault of

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\* "Unseen Universe"—Am. edition, 1875, pp. 131-2.

evolution? Or it is the fault of Christianity? Shall we conclude that the new-comer has disclosed a fatal affinity for atheistic society, and must therefore be avoided? Or shall we, on the other hand, be forced to acknowledge that Christianity has repulsed evolution, often ridiculed it from its pulpits, often condemned it without a hearing, and thus surrendered the revelation which it contains to be construed atheistically? Brave attempts have been made by Christian scientists to rescue its truths, and to induce theologians to give them an unbiassed hearing. Such men as Dr. Asa Gray and Dr. Joseph Leconte have, on the part of science, clearly shown the way. But the policy of Theology, with some notable exceptions, has been one of masterly inactivity. Preserving its traditional attitude toward scientific discovery, it has devoted the main force of its energy, so far as evolution is concerned, to the setting forth of its weak points, as if the weakness of evolution were the strength of Christianity."\* I could proceed to quote the acute and learned President of Princeton College, Dr. McCosh, and many other eminent Christian writers who all consider the case in favor of evolution as practically proved; but what has already been given may suffice for the present.

The Bishop of Ontario, however, has not abated one jot or tittle of his hostility to the doctrine in question; and we must therefore proceed to consider his further arraignment of it. Let us, in the first place, see how he handles the authorities to which he appeals. Mr. Grant Allen, a few years ago, wrote a telling article entitled "The Ways of Orthodox Critics: ". we may perhaps discover that we have here, an orthodox critic whose ways are, to say the least, peculiar. At the outset he gives up Lyell as an anti-evolutionist, but seeks, in a far from commendable

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\* *Andover Review*, April, 1884, page 368.

manner, to minimize the error which he committed on this point, by representing it as a mere matter of quoting the wrong edition of a particular work. It was really a matter of not knowing anything about one of the most notable facts in the history of science in our day. To talk about not having consulted the last edition of Lyell's book, is as ridiculous as if one were to excuse himself, on similar grounds, for having referred to Dr. Newman as still an Anglican clergyman. To be sure Dr. Newman's conversion occurred a little longer ago than Lyell's; but, after all, twenty years affords time enough in these days for news to penetrate even to the most sequestered regions. The adhesion of Lyell to the Darwinian theory was really the adhesion of the modern school of geologists of which—so far at least as England was concerned—he was the recognized head.

In lieu of Lyell, however, we are offered the celebrated Professor Virchow, with whose views the Lecturer appears to have become acquainted through an article in that respectable publication "The Leisure Hour." It will, I think, strike most intelligent readers that to go to "Leisure Hour" to find out what Virchow thinks on the subject of evolution is rather a funny way of working up a scientific thesis; and when I add that what is given to us as a quotation contains words which Virchow never spoke or wrote, the precariousness as well as the oddity of the proceeding will be evident. Virchow, however, is far from being a substitute for Sir Charles Lyell in this controversy. Lyell, thirty years ago, was a leading opponent of the theory of the mutability of species, whereas Virchow, in his Munich address of 1877, from which the Lecturer purports to quote, merely asserts that the evolution theory is not yet sufficiently proved to justify us in teaching it dogmatically, as a thing

established. Had the learned Lecturer been aware that Virchow, in that very address, had used the words I am about to quote, it does not seem likely that he would have brought him forward so triumphantly, as an authority on his side. "At this moment," says the great investigator, "there are probably few naturalists who are not of opinion that man is allied to the rest of the animal world, and that a connection will possibly be found, if indeed not with Apes, then perhaps in some other direction, as is now the opinion of Professor Vogt. I acknowledge openly that this is a *desideratum* of science. I am quite prepared for it, and I should not for a moment wonder or be alarmed if the proof were found that the ancestors of man belonged to some other order of vertebrates." Later on in his discourse, he almost goes out of his way to suggest a reason why the palaeontological evidence of man's descent from some lower type of life has not yet been discovered. "We cannot avoid the consideration," he says, "that perhaps it was on some quite special spot of earth that Tertiary man lived. This is quite possible, since, during the last few years, the remarkable discovery has been made that the fossil ancestors of our horses occur in countries from which the horse had entirely disappeared for a long time. When America was first discovered there were no horses there at all; in the very place where the ancestors of our horses had lived, no living horse remained. Thus it may also be that Tertiary man has existed in Greenland or Lemuria, and will again be brought to light from under the ground somewhere or other." \*

The Bishop pauses for a moment in his argument for the purpose of convicting me of an error. I said, in my first

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\* I quote from a full report of Professor Virchow's speech which appeared in the *Popular Science Monthly Supplement* for February, 1878, and also in *Nature*, a month or two earlier.

pamphlet, that Huxley would not claim more to-day for the Darwinian theory than Lyell had done, when he wrote that Darwin, "without absolutely proving" the theory, had rendered it "in the highest degree probable, by an appeal to many distinct and independent classes of phenomena in natural history and geology." To prove me wrong, Huxley is quoted as having spoken, in one of his New York lectures, of "the *demonstrative* evidence of evolution," and as having said that the doctrine in question at the present time "rests upon exactly as secure a foundation as the Copernican theory of the motions of the heavenly bodies did at the time of its promulgation." Precisely. Now, did Prof. Huxley, in those New York lectures, take any pains to explain the sense in which he used the word "demonstrative," as applied to the evidence for evolution? He did: three times at least he gave the explanation. In the first lecture of the series, for example, he expressed himself as follows; and those who are fond of dogmatizing about dogmatism of science would do well to note the words: "We must recollect that any human belief, however broad its basis, however defensible it may seem, is, after all, only a probable belief, and that our widest and safest generalizations are simply statements of the highest degree of probability." Now what does Lyell say?—that the Darwinian theory has been made to appear "in the highest degree probable." The coincidence of expression is somewhat remarkable. "The occurrence of historical facts" says Huxley again, "is said to be demonstrated, when the evidence that they happened is of such a character as to render the assumption that they did not happen in the highest degree improbable; and the question I have now to deal with is, whether evidence of this degree of cogency, in favor of the evolution of animals is, or is not, obtainable from the record of the succession of living forms which is presented to us by fossil remains." (Lecture III).

All that Huxley aimed to do was to prove that the negative of the Darwinian hypothesis was "in the highest degree improbable;" Lyell maintained that the theory itself was "in the highest degree probable." Huxley says: "An inductive hypothesis is said to be demonstrated when the facts are shown to be in entire accordance with it." Lyell says that the hypothesis now in question is supported by "many distinct and independent classes of phenomena." Huxley allows that inductive conclusions do not admit of absolute proof, and Lyell that the facts adduced by Darwin, though strongly favoring his theory, yet fall short of "absolute proof." How there could have been closer agreement between the two men, unless they had consulted together and agreed to express themselves in identical terms, I cannot well imagine.

Another point is worthy of notice. Huxley says that the evidence at present adducible for evolution is as satisfactory as that offered on behalf of the Copernican theory "*at the time of its promulgation.*" The Bishop, in quoting those words, quite fails to notice their force. The evidence in favor of the Copernican theory was by no means as strong, when that theory was first promulgated, as it is now. On a later page of his pamphlet, he drops entirely the qualifying words used by Prof. Huxley and says: "Professor Huxley gives us what he calls demonstrative evidence of evolution—evidence as clear, he says, as that for the Copernican theory." Again, two pages later: "This, then, is the highest evidence adducible. Huxley calls it as demonstrative as the Copernican theory." Prof. Huxley is thus twice misquoted, and the impression is created on the mind of the casual reader that Prof. Huxley holds the evidence in favor of evolution to be as strong as that which *to-day* exists for the truth of the Copernican theory—a thing which he was very careful not

to say. The reader will agree with me that this is not a fair method of conducting controversy.

Professor Huxley, it will be remembered, argued, in his New York lectures, from the unbroken series of fossil equine forms discovered in the United States and Europe, but particularly in the United States, to the descent of the modern horse from a five-toed ancestor. The Bishop finds the argument inconclusive, and quotes Professor Owen as follows: "These extinct animals differ from each other in a greater degree than do the horse, the zebra and the ass, which by Professor Huxley are acknowledged to be true species." The unguarded and innocent reader, who did not know that Owen's work, the "Anatomy of the Vertebrates," from which this quotation purports to be made, was published eight years before Huxley delivered his New York lectures, would certainly conclude that Owen had penned this passage for the express purpose of controverting the views of Professor Huxley. To the reader less innocent, who knew the respective dates of publication, the quotation would be, to say the least a puzzle. We therefore turn to the page indicated (Vol. III. p. 792), and there we read: "Palaeotherium, Paloplotherium, Anchitherium, Hipparion and Equus differ from each other in a greater degree than do the horse, zebra and ass"—no mention of Huxley's name whatever, no reference whatever to his views. Professor Owen was referred to in the Bishop's first lecture as an opponent of evolution, and the further use now made of his name would strengthen the impression that he was a believer in the special creation hypothesis. Let him therefore speak for himself: "If the alternative—species by miracle or by law?—be applied to Palaeotherium, Paloplotherium, Anchitherium, Hipparion, Equus, I accept the latter without misgiving, and recognize such law as continu-



ously operating throughout tertiary time." \* Where Owen differs from Huxley is, not in denying the genetic connection, which the latter asserts to exist, between present forms of life and past ones specifically or generically different, but in disputing the sufficiency of such a cause as natural selection to produce specific or generic differences. The most concise statement of his views on the subject which I can find is the following: "Being unable to accept the volitional hypothesis, or that of impulse from within, or the selective force exerted by outward circumstances, I deem an innate tendency to deviate from the parent type, operating through periods of adequate duration, to be the most probable nature, or way of operation, of the secondary law whereby species have been derived one from the other." † "Now, would anybody who had read simply what the Bishop has been pleased to quote from Owen (with the singular addition which we have seen to have been derived from somebody's "inner consciousness") imagine for a moment that Owen fully believed in the variation of species, and only differed from evolutionists as to the means whereby the variation had been brought about? I scarcely think so; and I venture to say that, here again, those who have looked to the learned Lecturer for accurate information and candid reasoning have much cause for disappointment.

Before leaving Owen, I should wish to dwell for a moment on what seems to me an inconsistency in his view. He postulates "an innate tendency" to variation, that innate tendency having been implanted by the Creator. But he also postulates "adequate time." Why? What is adequate time for the working out of a change for which the Creator has made express provision? Unless it is

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\* Anatomy of the Vertebrates—Vol. III. page 793.

† Anatomy of the Vertebrates, Vol. III. page 807.

known beforehand that the Creator requires time, and plenty of it, to make any important change in organic forms, there is no need to postulate time as necessary for His operations. Why should not any one animal form give birth without further ado to any other, by virtue of an "innate tendency" to vary in a predetermined direction? It is easily seen why *evolutionists* postulate time: they know that the changes made by varying conditions of life are made slowly and gradually. Time, therefore, with them is an all-important element; but what time has to do with changes resulting from a divinely-implanted "innate tendency," is not so obvious. It strikes me that here Owen himself gives the case away to the evolutionists.

Resuming the argument from design brought forward in his first lecture, the Bishop instances the human eye as an organ altogether too complicated in its adjustments to have resulted from "natural selection," and speaks of Darwin as himself giving up the point, and pronouncing that *to suppose that the eye could have been formed by natural selection is absurd in the highest degree.* Now anyone who knows anything of Darwin's writings knows that, for that author to have expressed himself thus, would have been to throw the whole argument of his "Origin of Species" out of the window. It is as if one were to quote the apostle Paul as saying, not that the gospel of Christ was "to the Greeks foolishness," but that it was essential foolishness; thus making him bear witness against the very cause to which he had devoted his life. What Darwin says is not that the idea of the formation of the eye by natural selection *is* absurd, but that, to the spontaneous common sense of mankind—that common sense which it is now well recognized cannot be trusted in matters of philosophy or science—it *seems* absurd; that it is "foolishness" to those who know nothing of the development of the

eye in the individual organism, or of the long series of eyes less perfect than the human which a study of nature reveals; but that it is *not* foolishness to those who have this knowledge, and who have duly considered all that the facts imply. I quote in a foot-note Darwin's exact words, so that it may be seen that I have not misrepresented his meaning by one iota.\* The perversion in this case is so gross that I decline to believe it was deliberately perpetrated by the Right-reverend author of the lectures on "Agnosticism." I rather think that he has been himself imposed upon by some garbled account of Darwin's views, such as can only too readily be found in quarters where a business is made of carping at science in the interest of theology. Still, an author is responsible for the materials he uses; and it seems to me most discreditable that the Bishop of Ontario should, *under any circumstances*, have put forward the erroneous representations which we find in these lectures.

And yet this part of my task is not concluded. Mr. Spencer is distinctly charged by the lecturer with teaching that "the only way to deal with men whose mental development is imperfect" is to dress up phantoms and so excite

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\* "To suppose that the eye, with all its inimitable contrivances for adjusting the focus to different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I freely confess, absurd in the highest degree. When it was first said that the sun stood still and the world turned round, the common sense of mankind declared the doctrine false; but the old saying of *Vox populi, vox Dei*, as every philosopher knows, cannot be trusted in science. Reason tells me that, if numerous gradations from a simple and imperfect eye to one complex and perfect can be shown to exist, each grade being useful to its possessor, — certainly the case; if further the eye ever varies and the variations inherited, as is likewise certainly the case; and if such variations should be useful to any animal under changing conditions of life, then the difficulty of believing that a perfect and complex eye could be formed by natural selection, though insuperable by our imagination, should not be considered as subversive of the theory. \* \* \* \* The simplest organ that can be called an eye consists of an optic nerve, surrounded by pigment cells and covered by translucent skin, but without any lens or other refractive body. We may, however, descend even a step lower,

their fears, as the priesthoods of the world have been accused of doing, with a view to keeping them under more effective control. (Vide Second Lecture, page 4.) Now there is only one thing to say about this, and that is that it is a misstatement. There is not one line in Mr. Spencer's writings upon which such a construction can, with a shadow of fairness, be placed. We are referred in support of the indictment to pages 119-122 of "First Principles"; but there is no support for it to be found in those pages nor in any other page or pages that Mr. Spencer ever wrote. One sentence of Mr. Spencer's which the Lecturer quotes asserts that, just "as certainly as a barbarous race needs a harsh terrestrial rule, and habitually shows attachment to a despotism capable of the necessary rigor, so certainly does such a race need a belief that is similarly harsh, and habitually shows attachment to such a belief." There is nothing here about "dressing up phantoms," but a simple assertion of the truth, that the religions which we find established in different parts of the world do, in point of fact, meet, in a greater or less degree, the needs of the races and communities professing them. Supposing that, on the contrary, it were asserted that the religions existing in the world had no relative fitness to the races under their sway, and answered no useful purpose whatever; the question would at once be asked: How do

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and find aggregates of pigment cells, apparently serving as organs of vision, without any nerves, and resting merely on sarcofodic tissue. Eyes of the above simple nature are not capable of distinct vision, but merely serve to distinguish light from darkness. \* \* \* Within the highest division of the animal kingdom, namely the Vertebrate, we can start from an eye so simple that it consists, as in the lancelet, of a little sack of transparent skin, furnished with a nerve and lined with pigment, but destitute of any other apparatus. \* \* \* To arrive, however at a just conclusion regarding the formation of the eye, with all its marvellous, yet not absolutely perfect, characters, it is indispensable that reason should conquer the imagination; but I have felt the difficulty far too keenly to be surprised at others hesitating to extend the principle of natural selection to so startling a length." Origin of Species, American reprint of 6th English edition, pp. 143-146.

you account then for their existence and for the strong hold they have upon those born under them? And the question would be unanswerable. How free Mr. Spencer is from the reproach cast upon him may be seen on one of the very pages to which we are referred ("First Principles," page 122) where he explains why, in spite of the fact that "creeds have an average fitness to their times and places," those who have outgrown them should not hesitate to give expression to their progressive ideas. Then, on the next page, we read the following noble passage, so nobly exemplified in Mr. Spencer's own life: "Not as adventitious, therefore, will the wise man regard the faith that is in him. *The highest truth he sees he will fearlessly utter*; knowing that, let what may come of it, he is thus playing his right part in the world—knowing that if he can effect the change he aims at—well: if not—well also; though not *so* well."\*

Of new argument the Second Lecture on Agnosticism contains little or nothing. The author tries to justify himself for having said that Huxley "discredited" the idea of the possible generation of living from non-living matter; but all he can do is to quote, as before, a passage which signifies nothing more than that the experiments heretofore made to produce life from non-living matter had all proved unsuccessful. He proceeds to arraign the evolution theory as violating that fundamental canon of "exact science" † which requires us to reason from the known to the unknown. The method of evolution, we are told, is the wholly illegitimate one of reasoning "from a *conjecture* to the un-

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\* I am glad to find the author of the Lectures referring us, in connection with the attack on Mr. Spencer, to the Transactions of the Victoria Institute. This would seem to show that the unjust charge which he brings forward did not originate with himself. But, alas! why did he not read the "First Principles" to more profit, if he ever had the work in his hands?

† Geology is classed by the Lecturer among the "exact sciences"—a position not usually accorded to it.

known." What then is the conjecture which evolutionists—poor weak-minded men like Spencer, Huxley, Haeckel and the great majority, as Virchow informs us, of the scientific leaders of the present day—make the starting-point of their reasonings? Why, it is the doctrine that species pass into one another? Well, herein is a wonderful thing. How was it that Huxley, in his New York Lectures on Evolution, did not start from the hypothesis that species pass into one another, instead of laboriously working up to it by a process of induction? The only, but quite sufficient reason why he did not, is that the theory in question *is not the starting-point, but the goal*, broadly speaking, of the system of evolution. The learned Lecturer has mistaken the goal for the starting-point; that is all. The doctrine of evolution finds its starting-point in a great multiplicity of facts of observation. These facts demand explanation, just as in past times the motions of the heavenly bodies demanded an explanation. Evolution brings them all under a common law, and causes them to shed light mutually on one another; just as the Newtonian law of gravitation did for the phenomena of the solar system. Evolution therefore starts from no "conjecture," but from facts,\* and works towards the establishment of a theory, that theory, prior to its establishment representing "the unknown." The learned Lecturer, I think, would do well to take note of this very simple explanation for future use.

Examining the argument of Huxley's New York lectures, the Bishop finds it very inconclusive. The discovery of Protohippus and Pliohippus intermediate between Anchitherium and Equus, and of Mesohippus, Orohippus and Eohip-

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\* These facts are classified under seven distinct heads in Huxley's essay, "Evolution in Biology." See Encyclopædia Britannica 9th edition, or "Science and Culture," page 297.

pus antecedent to Anchitherium, is of no weight in his judgment as establishing the genealogy of Equus. The possession of a less complete series was, however, of much weight in that direction with one of his authorities, Owen ; who also states that this was the precise evidence which Cuvier required Geoffroy St. Hilaire, and the other disciples of Lamarck to produce, before he would admit that they had a logical ground for their belief in the transformation of species. Owen quotes the following from Cuvier to show the stand taken by that great naturalist on the point : “ Cependant on peut leur répondre, dans leur propre système, que si les espèces ont changé par degrés, on devrait trouver des traces de ces modifications graduelles ; qu'entre le Palaeothérium et les espèces d'aujourd'hui l'on devrait découvrir quelques formes intermédiaires, et que jusqu'à présent cela n'est point arrivé.”\* Well this has now been done ; and the question, therefore, as Owen observes, as to “ whether actual races may not be modifications of those ancient races, which are exemplified by fossil remains, presents itself under very different conditions from those under which it passed before the minds of Cuvier and Academicians of 1830.” We may therefore reasonably conjecture that, had Cuvier been presented, as he might be at this day were he alive, with the precise evidence which he himself had called for, he would have abandoned the ground of the immutability of species. The Bishop of Ontario, it is true, is still unconvinced ; but it does not follow from this that the evidence is weak.

An objection is next found to the doctrine of evolution in the fact that the horse, according to Huxley, had in very remote ages a five-toed ancestor. Were the doctrine true the five-toed horse ought, we are told, to be the horse of to-day, and the one-toed horse should have lived in the

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\* See “ Anatomy of Vertebrates ”—Vol. III, p. 789. Note 6.

Eocene period. A criticism of this nature simply shows that if the Bishop of Ontario has studied the writings of evolutionists at all in their original sources, he has studied them to little purpose; otherwise he would understand that the doctrine of natural selection provides equally for an increase in complexity or an increase in simplicity just as one or the other may prove of benefit to a developing form. The Lecturer assumes that the loss of its toes must have been of disadvantage to the horse. But palaeontology shows that the toes gradually dwindled away or became consolidated with the middle toe because they had ceased to be separately of use. Wallace, in his "Geographical Distribution of Animals," says expressly that in Protohippus and Hipparion "the lateral toes are developed, *but are small and functionless.*"\* The theologian asks us to believe that these creatures, with their "small and functionless" toes, were direct and special divine creations. The evolutionist, on the other hand, says: these animals were derived from others in which the toes were better developed; we see in them the toes already superfluous and becoming rudimentary; in a later species we shall see that the toes have vanished altogether. The gradual disappearance of the toes took place concurrently with other structural changes, involving changes probably in the habits of the Genus. The earliest distinctly equine form, Eohippus was an animal not much larger than a fox, with the canine teeth much more developed than in the later specimens of the race. Beginning with this minute form, the type, as Wallace says, "is gradually modified by gaining increased size, *increased speed by concentration of the limb bones*, elongation of head and neck, the canine teeth decreased in size, the molars becoming longer and being

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\*Vol. I, page 135.



coated with cement, till at last we come to animals hardly distinguishable specifically from the living horse.”\*

Human experience might almost suggest a possible explanation of the substitution of a solid hoof for a lot of sprawling toes. What does man do but make a solid hoof of his foot, whenever he encases it in a boot? In so doing he virtually parts with his toes as being, not only of no use, but decidedly inconvenient things to knock about with in this rough world. As we find Wallace remarking, the equine race gained in speed—a most important point for survival—by the consolidation of the limb bones. A further point is that, as weapons of offence and defence, hoofs probably had the advantage over toes. The question, however, as to how one particular structure came, in point of fact, to supersede another is almost too complex a one to enter upon with safety. It would be quite possible to make a dozen plausible conjectures, every one of which, if we only knew the exact facts, would turn out to be wrong. What we know with certainty is, that animals do not survive by virtue of what in them is weak or ill-adapted to surrounding conditions, but by reason of what is strong and well-adapted. The hoof, we may be sure, came in its own good time and for very sufficient reasons.

The Right-reverend author states that he is only concerned with the doctrine of evolution, “so far as it is used as a device to eliminate God from the universe.” This declaration is not very consistent with the actual course of his criticisms. Does it follow that, if Huxley’s genealogy of the horse is correct, God is eliminated from the universe? By no means. Yet he has attacked Huxley’s argument. Does it follow that if the eye was formed by “natural selection,” as Darwin labors to prove, God is eliminated from

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\* Ibid—Vol. I, page 136.

the universe? By no means. There are hundreds and thousands of convinced theists who accept Darwin's conclusions on the point: only, they place God, as Darwin himself seems to have done, at the commencement of the evolutionary process. Yet the doctrine is assailed on this point also. The fact would seem to be that the whole subject is a little new to the Right-reverend author, and that he has not been able to settle quite satisfactorily, in his own mind, what view he should take of it.

My own position in the matter was plainly stated in my last pamphlet, where I said that the doctrine of evolution was simply the form in which the dominant scientific thought of the day was cast. "As a working hypothesis," I added, "it presents very great advantages: and the thinkers of to-day would find it hard to dispense with the aid it affords." I quoted a leading evolutionist as admitting "that the difficulties in the way of the doctrine are many and formidable," and that "the solution of still unresolved problems will very possibly result in important modifications of the theory as now entertained." There was nothing, I think, in this presentation of the subject, which could be considered unduly dogmatic or aggressive. The fact is that the doctrine of evolution is not held in at all an absolute way, even by its leading exponents, with perhaps one or two exceptions. Darwin's statements and reasonings on the subject were always marked by great moderation, and so, it may be said, are Huxley's, when rightly understood.

The general argument from design I shall not enter upon. Those who have grappled with such treatises as Paul Janet's upon "Final Causes," know to what lengths and depths and heights the discussion can be carried. Here I would just remark that the instance, quoted by the Lecturer, of a particular insectivorous plant, proves no more than any simpler

example of apparent adaptation which might be brought forward. The language used in regard to it, moreover, borders on the ludicrous. "A more wonderful, *complicated*, and effective insect trap could hardly be imagined than the pitcher-plant." I have emphasized the word "complicated," in this quotation, to draw attention to it. Does not everyone know that, not complication, but simplicity is the mark of perfection in any device or contrivance? Then as to effectiveness—is the pitcher-plant, *considered as a fly-trap*, really as effective as the wire-gauze ones commonly sold? No reasonable man, we are told, can deny "that the purpose, the design, of the pitcher-plant is to kill flies." Has then Providence made too many flies, that it must set about constructing traps to catch and kill them? I wonder the extreme crudity of the language he has used did not strike a man of the reputed ability of the Bishop of Ontario.

If it could be shewn that the pitcher-plant had started into existence, just as we find it, and that there was, in its case, no gradual development of parts and functions, no preservation, by "natural selection," of useful variations upon earlier forms, our ideas would, no doubt, be thrown into confusion. But nothing of the kind can be shewn; and the evolutionist, who has worked out so many confirmations of his general theory, is entitled to assume that the pitcher-plant combines in itself, to-day, a great variety of adaptations secured by a "struggle for life" continued through long ages. Let any one compare for a moment the two conceptions. First, that of the Bishop—the Divine Being planning to feed the pitcher-plant with flies, and giving the plant the wherewithal to catch them, including, in some cases, the Right-reverend author tells us, "external fringes calculated to lead insects the right way to destruction." Second, that of the evolutionist—the pitcher-plant, like every other

form of life, competing with rivals for the ground it occupies, producing a multitudinous offspring, some specimens of which have slight variations favorable to life and survive ; while others vary, if at all, in the wrong direction, and perish ; the favored specimens transmitting their improved construction to their descendants, some of which carry the improvement further, until, in the lapse of time, forms are found which present the appearance of an intricate, purposive adaptation to special ends. Let anyone, I say, compare these two conceptions, and say which is the more satisfactory to a reasonable mind, which awakens deeper thoughts, suggests more fruitful lines of enquiry, and, generally, promotes a more elevated way of looking at things. The real fact is that the first is almost incompatible with true religious reverence, and leads to absolutely nothing in the way of useful thought. The second furnishes us, or seems to furnish us, with a key to the operations of nature throughout the length and breadth of her realm. It enlarges the mind, by holding out to it indefinite possibilities of knowledge.

My remark that "science does not attribute purpose to nature," is described as a "very dictatorial utterance." That, it seems to me, depends upon whether it is true or not. If it is true, as I maintain it is, it is no more dictatorial than to say that the earth revolves round the sun ; a statement, by the way, which certain bishops and others, in the early part of the 17th century, thought Galileo very "dictatorial" for making. What I meant was that the man of science, in his character as a man of science, cannot penetrate to the designs of nature (if it has any) or of Providence. All he can possibly do, in that character, is to observe and correlate facts, and bring them under some law which serves to render their mode and order of occurrence

intelligible. The test of a scientific statement is that it lends itself to verification, now or hereafter. The test of an unscientific, or extra-scientific, statement is that it does *not* lend itself to verification, either now or hereafter. When, therefore, Professor Owen says—*if* he says it, for the learned Lecturer does not tell us where the quotation is to be found—that “the correlated modifications of the maternal and foetal structures \* \* \* afford, as it seems to me, irrefragable evidence of creative foresight,” he does not speak as a man of science, though, possibly, he may think he does. As a man of science, he has no more knowledge than anybody else of what constitute the marks of creative foresight. The statement he makes is one which, neither now nor at any future time, can be brought to the test of verification. Say that Professor Huxley or Professor Haeckel disagrees with him, who is going to decide? I therefore repeat that “science does not attribute purpose to nature;” and, that, when men of science do it, they speak, not in the name or on the authority of science, but in the name, and on the authority, of their theological or philosophical prepossessions.

I must pass over the effort which the Lecturer makes to break the force of my reply to his contention that those who accept the doctrine of the survival of the fittest should, in consistency, “abolish all hospitals for the idiot and the insane, the blind and the dumb.” I think I made it sufficiently evident that the learned Lecturer did not understand the sense attached to the words “survival of the fittest” by modern scientific writers, and I regret to say that the Second Lecture reveals continued misunderstanding on the point. I certainly cannot congratulate him on the discovery he has made, that some laws of nature are positive and others negative, some saying to us “thou shalt,” and others “thou

shalt not.” It would be very interesting to see all the laws of nature separated into these two categories. Into which would the law of gravitation fall, or the law of the diffusion of heat or the law of the expansion of gases? Unfortunately, when the Lecturer sets to work to illustrate his meaning, the very first law he cites says both “thou shalt!” and “thou shalt not!” \*

To pass on to another point, it is a complete misstatement to say: “All my reviewer’s dissertation on intelligence is irrelevant, as he treats of it as a *condition* of mind, whereas I spoke of it as mind itself.” Any one who will take the trouble to compare the language of my pamphlet with that of the first lecture, will see that I used the word intelligence in a sense precisely similar to that in which it was used by the Lecturer himself. For example: replying to the argument: “It requires intelligence to understand natural laws, and how much more to have established and worked them?” I asked: “What ratio is it possible to establish between the intelligence necessary to discover a natural law and the intelligence necessary to create the law?” Could there possibly be greater congruity than exists between my question and the remark that called it forth? Let any one go over the whole ground, and he will see that there was, on my part, no such illicit substitution of one meaning for another as has been charged; but that it is the author of the lectures himself, who seeks to flit from one meaning to another. The confusion which meets us at this point is indeed lamentable. It is admitted that there is in nature no “background” of unorganized matter, against

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\* When our property is on fire, we *do* see a law of nature at work—the law by which carbon and oxygen combine to form fire; and the knowledge of this law *forbids* our calling it into operation so as to burn our houses, and *commands* us to use it in cooking our food.” Second Lecture on Agnosticism, page 27. Crudity of expression could hardly be carried further than here, where we are told that “carbon and oxygen combine to form fire.”

which we can recognize the distinctly purposive works of the Supreme Mind ; but this is explained away by the observation that the “raw material,” of which such works are formed, lies beyond our ken, human science not having “yet discovered the ultimate structure of atoms and molecules.” Then there exists somewhere—or has existed—some absolutely propertyless form of matter—the real raw material of the universe. Any one, however, accustomed to exact thought knows that the idea of *matter without properties* is self-contradictory. On the other hand, matter endued with properties, however few or simple, is organized matter ; and between the lowliest forms of organized matter and the very highest ones the difference is but one of degree.

We are asked to see proof of a Divine Mind, in the fact that the universe must have had a beginning, and that life in the universe must have had a beginning. Is it not evident, however, as I stated in my first pamphlet, that, the moment we begin to speculate on these subjects, we are left at the mercy of mere hypothesis? All verification fails us, and, when verification fails, enquiry becomes sterile. Say we assume a Divine Mind, are we really helped to understand how nothing became something, or how that which did not potentially contain life, produced life? Not at all. The case, therefore, stands thus : if these are the problems before us, the assumption of a Divine Mind does not really aid in their solution. If these problems are not before us—that is to say, if we do *not* believe that nothing ever became something, or that that which did not contain life potentially ever produced life—the assumption in question is, for intellectual purposes, superfluous. This whole line of thought, however, I judge to be extremely unprofitable, whatever thesis it may be employed to support. Whether we postulate a spiritual origin for all things—supposing that we know what we mean

by the expression—or whether we labor to prove the eternity of matter—supposing we know what that means, what advantage have we?

“The world is what it is, for all our dust and din.”

If there is anything that is clear to the practical intelligence, it is that man has no faculties that fit him to grapple with such questions. He can see things in relation to himself; he can know things by their likenesses and contrasts; he can see where one form of existence conditions and limits another; in a word, his whole knowledge is of the relative. Should he try to transcend his powers, in order to grasp the idea of the absolute, he finds that, after much trouble, he is simply gazing at zero. Should he try to force upon nature as a whole—upon the universe—the analogies of those laws and processes which he has observed *within* nature, he is similarly baffled and defeated. The condition of mind produced by such vain efforts is well described by the artist poet Story:—

“Oh dreadful mystery! thought beats its wings,  
And strains against the utmost bound of things,  
And drops exhausted back to earth again,  
And moans, distressed by vain imaginings.”

But wherefore the struggle? Why not recognize the unreasonableness of seeking a key to the *whole* in the laws of production and succession that obtain between the *parts*. We seek to apply the data of experience to that which transcends experience; is it any wonder that the proceeding fails to give any sure footing to speculation—that it ends only in confusion and disappointment?

If I might venture to characterize, in a very few words, the intellectual aspect of the theistic hypothesis, I should say that it was *the summary assumption of an adequate cause for everything, coupled with an arbitrary determination to make the demand for causes cease with that assumed Cause.*



But as I pointed out in my first pamphlet, there is another point of view from which the idea of God may be considered. If we cannot make it an element in strictly intellectual reasoning, we can, by means of it, symbolize to ourselves the unity of the universe, the unity of truth, and that moral harmony and perfection towards which our natures are ever tending. The poet Shelley was reputed an atheist, yet in his *Adonais* we read that wonderful verse :

“ The One remains, the many change and pass ;  
Heaven’s light forever shines, earth’s shadows fly :  
Life, like a dome of many-colored glass,  
Stains the white radiance of eternity,  
Until death trample it to fragments \* \* .”

Here was the effort of the heart to fix before it a bright ideal of truth and goodness. We see the same effort, the same aspiration, in another poet of very different temper, Arthur Hugh Clough :

“ O Thou that in our bosom’s shrine  
Dost dwell unknown, because divine,  
I thought to speak, I thought to say,  
‘ The light is here, ’ ‘ Behold the way,  
‘ The voice was thus, ’ and ‘ Thus the word, ’  
And ‘ This I saw, ’ and ‘ That I heard— ’  
But, from the lips that half essayed,  
The imperfect utterance fell unmade.  
O Thou, in that mysterious shrine  
Enthroned, as I must say, divine !  
I will not frame one thought of what  
Thou mayest either be or not,  
I will not prate of ‘ thus ’ and ‘ so ’,  
And be profane with ‘ yes ’ and ‘ no, ’  
Enough that, in our soul and heart,  
Thou, whatsoe’er Thou mayest be, art.”

How much more of true religious feeling there is in this attitude and tone of mind, than in the theology which finds a peculiarly striking manifestation of the Deity in the arrange-

ments by which the pitcher-plant catches and kills flies, needs hardly to be pointed out. An ideal enshrined in the heart exerts an influence upon the whole life ; but a Deity whose function is to descend out of the hanging-basket, not to untie, but to cut, every little *nodus*\* that presents itself to scientific enquiry—whether the genealogy of the horse or the development of the eye—is less a source of moral inspiration, than a pretext for intellectual sloth.

Towards the close of the Second Lecture on Agnosticism the author quotes what he calls “the last utterance of the High Priest of Agnosticism, Herbert Spencer.” I need not repeat the sentence. The Lecturer says that it “is a step in the right direction,” but that Mr. Spencer cannot rest there, but must “go on,” and ask certain questions in regard to that “Infinite and Eternal Energy,” the existence of which he recognizes. If the Bishop of Ontario had read Mr. Spencer’s “First Principles,” published twenty-two years ago, he would have known that this “last utterance” marks no new phase of his thought, and no advance beyond the position taken in that work. Any congratulations, therefore, on his having taken a step in the right direction, are altogether untimely. As to the questions he is recommended to ask, they were all asked, in effect, and answered, to the best of Mr. Spencer’s ability, in the work mentioned.† As, however, attention is called by the Bishop to Mr. Spencer’s “last utterance,” it is to be hoped that many of the readers of the lectures will turn to the article in question. They will see there a clear and powerful description of the course of attenuation that theological beliefs undergo, with increasing knowledge and intelligence.

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\* “Nec Deus intersit, nisi dignus vindice nodus”  
Inciderit.” Hor., Ep. ad Pis., 191.

†See “First Principles,” pp. 108-115, where Mr. Spencer fully considers the question of ascribing personality to the Unknowable Cause.

So anxious have I been to do justice to the argument of my opponent, and to place before those who take an interest in this discussion, the means of deciding between the opposite views which he and I represent, that I fear I have left myself but scant space in which to speak, as from the outset I have proposed to do, on the positive aspects of "modern thought." By the narrower sort of religionists, the "sceptic" is figured as a man the whole cast of whose mind is negative. The truth is that it is the religionist whose mind is negative, and the sceptic (if he is at all abreast with the age) whose mind is positive, affirmative, constructive; whose thought is inclusive and comprehensive; and who has conceived the grand idea of a harmony of life, based on what life itself contains, based on the elements of this so-called "wicked world." The religionist, it is true, affirms God and a divine Revelation, and says very hard things about those who cannot join him in doing so; but think what a host of negative and exclusive views have been, and still are, connected with both conceptions! In ancient times the God of the Hebrews was the God of that race only. He fought for them against their enemies, and, except when the latter had iron chariots, enabled them to win great victories. Even in the time of Christ, Jewish usage sanctioned the calling of all Gentiles "dogs;" and, in a vision sent by God to Peter, they were represented by "unclean" animals. Had it not been for Paul, the probability is that Christianity would never have been efficiently preached to the outlying nations; since even Peter, who had received so special an intimation from Heaven, was overborne, as Paul himself tells us, by the prejudices of his Jewish brethren. How exclusive the spirit of Christianity has been throughout the ages, how persecuting it has been towards other forms of religion, how it has refused to recognize any good in them,

every student of history is aware. True, to-day we hear somewhat different accents even from the pulpit ; for the "modern spirit" is more or less everywhere, and certain harsh utterances, which our forefathers could listen to and enjoy, have largely gone out of fashion.

The modern spirit, as I have already said, is constructive and comprehensive. It is in quest of truth, and recognizes it just as gladly on heathen as on Christian ground. Take in illustration a passage from Edgar Quinet's "*Génie des Religions*," (I should like to quote the author's own words, but perhaps a translation will on the whole be better): "In this pilgrimage through the religions of the past, wandering from shrine to shrine, it is no part of our intention, infatuated with our modern superiority, to make a mock of the abandoned gods ; on the contrary we shall question the deserted sanctuaries as to whether they have not, in their day, heard an echo of the life-giving word ; we shall search in the dust of these temples, to see whether we cannot discover some fragment of truth, some trace of a universal revelation." I close the book and I open another, in which I read : "Whoever will be saved, before all things it is necessary that he hold the Catholic Faith, which Faith, except everyone do keep whole and undefiled, he shall without doubt perish everlastingly." This is not the modern spirit.

In declining to be bound by any alleged revelation, modern thought does so, again, in the interest of a more comprehensive philosophy than any revelation heretofore promulgated will allow. What fetters theology has cast upon science in the past, from the days of Anaxagoras down to those of Lyell, whose uniformitarian views were looked upon, not so many years ago, with great suspicion, every one must be aware. Not indeed in physical science only have the cramping effects of theological faith been seen. What

was it that kept alive, until a comparatively recent period, the belief in witchcraft and demoniacal possession? Simply the distinct recognition of both in an alleged infallible revelation. If modern thought sets aside the revelation it is not in a mere spirit of contradiction, but in order that it may be free to judge of these, and a hundred other matters, in accordance with an enlarged knowledge of facts. The one "revealed" doctrine of hell is, in itself, the negation of every instinct of justice and mercy in the human breast. To deny hell is to make the most glorious affirmation possible to the human spirit.

If, finally, modern thought rejects the miraculous, it does so, not for the sake of denial, but because the negation leads to a wider affirmation, that of the uniformity of nature's operations, not only now, but throughout the whole period of human experience; and also because it facilitates, or rather renders possible what, without it, were impossible, the scientific study of universal human history. It should be borne in mind that the point we have arrived at is this: such is our confidence in the uniform action of natural law, that we unhesitatingly discard every vestige of miracle that we discover in the annals of every nation under the sun, *save the Jewish*. We do not ask what evidence the Romans had that their brazen shields, or the Ephesians that their image of Diana, descended from heaven. We pronounce both stories, in the most off-hand manner, fabulous inventions. Well, "modern thought" says that it is not enough to have banished miracle from so-called "profane" history; we must treat all miraculous stories alike, if we wish to be consistent, or to place historical criticism on sure ground. It is too ridiculous, when we approach Jewish legends, to throw aside all the canons of criticism which we have applied with confidence in dealing with similar narratives of every

other nation ancient and modern. I say then, that here again, it is modern thought that is affirmative, as aiming at universality, and the thought of past times (prolonged unhappily into the present) that is negative, as maintaining exceptions, and breaking the authority of a principle which else would be unchallenged. We may be certain that, if the Hebrew and Christian miracles be finally maintained, other miracles will come back to keep them company. The present condition of things, under which an exception is made in favor of Hebrew and Christian legends, while all others that have any miraculous tinge are contemptuously dismissed, is not natural or normal. Either the exceptions must go, or the rule will be discredited ; and all history will be to write over again.

Modern thought, however, is, above all, positive in that it seeks to base both philosophy and conduct on the laws of *the known*. The services of theology in establishing, or rather in giving a powerful sanction to, certain empirical rules of conduct, while the human intellect was yet in a very immature condition, should not be lightly valued. The Ten Commandments do not constitute a code destined for perpetuity ; but that so much of sound ethical precept should have been packed into them was, in relation to the history of the Jewish race, a very fortunate circumstance. The task of moral science in our day is, however, to study the essential qualities of actions, and to place the world in possession of a moral law resting on no personal or arbitrary authority, but on verified experience. I know that here I enter on difficult ground, and that many able writers—prominent amongst whom is Mr. Goldwin Smith—are of opinion that a code based simply on experience, and not on the declared will of a Supreme Being conceived as infinitely holy,

would lack authority. It might possibly for a time, for everything new lacks authority ; but it does not seem unreasonable to believe that, as time wore on, and as illustrations of its fundamental soundness multiplied, it would gather authority, and obtain at least as great an ascendancy over men's minds as any of the "revealed" codes. What has really given momentum to the Christian system hitherto, has been its doctrine of future rewards and punishments—rewards such as it has not entered into the heart of man to conceive, and punishments baffling all imagination in their endless cruelty and horror. Such a stimulus as this might well have produced mighty works, and it has done so ; but there remain greater works yet to be done—the revelation of a self-evidencing moral law, and the bringing home of that law to the minds and hearts of men, the doing away with all that is merely formal in religion or conventional in morality, the rooting out of superstition and all trust in chance, and the implanting in their place of reliance on law, the placing of the individual in right relations to society at large, of nations in right relations to one another, and of our whole present life in right relations both to the past and to the future. Some of these problems are as yet barely conceived by the vast majority of men ; but they all have a real and important significance ; they all await solution in a patient study of facts and laws, apart from all theological prepossessions and restraints.

Now, towards establishing a sound philosophy and religion of human life, the doctrine of evolution promises to be of great assistance. At the very outset, it unifies the whole system under which we live. Theology, it is true, asserts the common Divine origin of all things, but evolution asserts that the *things themselves* blend into one another. Moreover theology, as we see from these very lectures on Agnosticism, makes it a pious duty to believe that there are

innumerable breaks in the continuity of nature's operations, so that we may have the opportunity of saying, when we see a pitcher-plant or a horse, "Lo here! and Lo there!" As an aid to education, the doctrine in question is of the highest importance. "Both teachers and pupils," says Haeckel, "will take infinitely greater interest in the subject matter of instruction if, first of all, they put to themselves the question, 'How did this thing come into existence—how did it develop?' The knowledge of the simple general causes to which phenomena the most diverse and the most complex are referable, at once simplifies and deepens our instruction. The understanding of causes changes a dry science into one of vivid interest."\*

The moral effect of that revelation of unity which the evolution theory affords, cannot fail also to be beneficial. It will give such an idea of the supremacy of law as the world has never yet had.† We shall see ourselves included in a vast and practically infinite system of cause and effect; and what are we; that we should rebel against the very conditions of our being? It will be felt that it is a matter of

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\* Address delivered at Munich, October, 1877. See *Popular Science Monthly Supplement*, February, 1878.

† "Think only," says Prof. Max Muller, "what it was to believe in a Rita, in an order of the world, though it be no more at first than a belief that the sun will never overstep his bounds. \* \* \* How many souls even now, when everything else has failed them, when they have parted with the most cherished convictions of their childhood, when their faith in man has been poisoned \* \* \* have found their last peace and comfort in a contemplation of the Rita, of the order of the world, whether manifested in the unvarying movement of the stars, or revealed in the unvarying number of the petals and stamens, and pistils of the smallest forget-me-not! How many have felt that to belong to this kosmos, to this beautiful order of nature, is something at least to rest on, something to trust, something to believe when everything else has failed. To us this perception of the Rita, of law and order in the world may seem very little; but to the ancient dwellers on earth, who had little else to support them, it was everything: better than their bright beings, their Devas, better than Agni and Indra: because, if once perceived, if once understood, it could never be taken from them." Lectures (Hibbert) on Origin and Growth of Religion—Am. Ed., page 242.



the utmost moment to discover the true laws of life—those by conformity with which happiness is to be secured for ourselves and others. Instead of trusting to outside influences to repair the errors we may make in the conduct of life, we shall feel that the only forces available are the very ones against which we have transgressed. Instead of trusting to prayer to deflect, in our interest, the natural line of the succession of phenomena, we shall assume that that line is never deflected; and we shall labor the more assiduously to understand the conditions upon which we can obtain, from the working of natural laws, the results we desire. Instead of asking for miracles we shall make a duty of submission.

“A duty!” those who think, with the Bishop of Ontario, that “resignation is an utterly unmeaning word in the mouth of an Agnostic,”\* will here exclaim. Yes, a duty; why not? We have the choice of two courses. One is to rail and fret at an order of things that we cannot alter; the other is to accept that order and summon all our powers to make the best of it, to lighten the incidence of such evils as it may entail, to augment the benefits—always more numerous—that it bestows. One is to waste our strength in angry and fruitless struggle; the other is, by submission, to husband our strength for the duties that yet lie before us. One is to destroy the unity of our moral nature by rebellion, the other is to perfect it by the contemplation of those larger and abiding interests which the constancy of natural law promotes. It seems to me that I see a duty emerging here—the duty of submission, of resignation—if it can ever be a duty to choose the better, and turn aside from the worse, of two lines of action. I feel, indeed, that resignation

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\* Let it be fully understood that I quote this word everywhere, when applied to myself, under protest.

on these grounds is a much nobler and purer thing than resignation in the Christian sense, which is simply a matter of personal submission to an irresistible will, coupled with the hope that all will be made right some day.

It should now, I think, be sufficiently evident why I entirely refuse for myself the designation of "Agnostic." \* To my mind the whole virtue of modern thought lies in its positive teachings and constructive tendencies. I am, indeed, much more struck by the agnosticism of church members, and even ministers of the Gospel, than by that of the so-called agnostics. The amount of don't-know-what-to-say-about-it feeling which one discovers on the part of men who are pillars of the churches is amazing. They don't like the doctrine of eternal punishment, but will not say distinctly whether they believe in it or not. They find the notion of Satanic agency rather barbarous and repulsive, yet they feel that if Satan goes, other things will have to go with him. They begin to recognize an extraordinary and uncomfortable likeness between the Jewish miracles, which orthodoxy requires them to believe, and the heathen miracles which sanity requires them to reject. Whether the demands of sanity are fully met by the rejection simply of the heathen ones, is a difficult and painful question. It is hard to understand why it should be so very false that Orpheus piped up the walls of Troy, and so very true that Gideon blew down the walls of Jericho; so utterly absurd that an ox should have discoursed in Latin at a grave crisis in the affairs of Rome, and so reasonable that an ass should have addressed Balaam in good Hebrew; so preposterous that Arion should have made a sea voyage on the back of a dolphin, and so thoroughly credible that Jonah should have made

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\* See "Defence of Modern Thought," page 5.

one in the belly of a whale. Then comes up the question of the infallibility of the Bible, whether it extends to everything contained in the sacred volume, or only to certain parts ; if the latter, where and how and on whose authority, the line is to be drawn. On all these points thousands are sadly at sea ; and the general refuge is a kind of agnosticism which exclaims : “ We don't know, we can't know—what's the use of bothering ? ”

Well, to a world halting between two opinions, and more or less sensible of the confusion into which its moral ideas are being thrown by the uncertainty existing as to the final and authoritative standard of conduct—supernatural revelation, or the laws of life as ascertained and formulated by human reason?—“modern thought” comes with an invitation to try the methods of science, to taste and see whether the laws of the finite are not sufficient for finite man. The offer is met by many with scorn, and by none with a fiercer scorn than by the helpless devotees of a mere formalism in religion. But there is much in it, nevertheless, that is worthy of serious attention. It is an offer of wholeness in thought, and of freedom from all entanglements unfavorable to the most active and unrestrained exercise of the intellectual powers. No need any longer to turn away the eyes from the spectres of strangled doubts—doubts that came as servants and forerunners of the truth, but that were treated as the wicked vineyardmen treated the messengers of the lord of the vineyard. No more of pulpit sophistry and triviality ; no more weak and trashy sentimentalism in religion ; no more conflict between the intellect and the heart of man ; but a steady and harmonious advance of the whole man towards such perfection as he is capable of. And if it be asked, whether all this involves the definitive turning away of humanity from the idea of God, I would

answer, in the words of Professor Max Muller : "There is an atheism which is unto death ; there is another atheism which is the very life-blood of all true faith. It is the power of giving up what, in our best and most honest moments, we know to be no longer true ; it is the readiness to replace the less perfect, however dear, however sacred it may have been to us, by the more perfect, however it may be detested as yet by the world. It is the true self-surrender, the true self-sacrifice, the truest trust in truth, the truest faith. Without that atheism religion would long ago have become a petrified hypocrisy ; without that atheism no new religion, no reform, no reformation, no resuscitation would ever have been possible ; without that atheism no new life is possible for any one of us." \*

The "atheism" that is wanted to-day is that which will strike from the Christian conception of God all—and there is much—that is oppressive to the heart, the conscience and the intellect. But, the more strictly and courageously this duty is performed, the more devoutly shall we cherish whatever in that conception can nourish our moral life, and build us up to the full stature of perfect men.

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\* Hibbert Lectures, Am. edition—page 297.

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## APPENDIX.

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Although I might be excused for confining myself entirely to the rejoinder of the Bishop of Ontario, with whom alone I have entered into any discussion, it may be well that I should say a word or two in regard to the pamphlet of "Vindex." The writer of that pamphlet is understood to be a highly-respected Presbyterian clergyman of this city. I would not refer to the question of authorship, did it not seem to have a practical bearing, I shall not say on the merits, but on the significance, of the pamphlet itself. For example, "Vindex" objects to my remark about the priest-hoods of the world laboring "to put back the thoughts of men, so that all that was credible to their forefathers may be credible to them;" and claims, for his own part, to belong to a class of persons who are laboring, in their own way, to put forward men's thoughts. I should be sorry to deny that "Vindex" and others like-minded are employed as he says; but I think that, if it were distinctly understood that he and they were laboring to put forward men's thoughts *within the limits*, say, *of the Westminster Confession*, the force of my remark would not be very much impaired. When I spoke of making everything credible to the men of to-day that was credible to their forefathers, I meant simply making the grossest forms of the miraculous credible; and so I imagine intelligent readers for the most part understood me. It is easy of course for shallow critics to carp and say that nobody is proposing to teach over again the *Metamorphoses* of Ovid; the point is that we might just as well believe the *Metamorphoses* of Ovid, as believe what theologians who stand by miracles ask us to believe. I would give nobody 'thank you' for exempting me from believing the story of Daphne's transformation into a laurel-tree, if he required me to believe in Satan's transformation into a serpent (involving the unhappy serpent in severe condemnation) or Nebuchadnezzar's transformation into a strange kind of grass-eating beast, with hair like eagle's feathers and claws like a bird.

“Vindex” apparently mistakes entirely the standpoint from which my “Defence of Modern Thought” was written. He seems to think that I offer the doctrine of evolution as a substitute for the theological doctrine of creation. By no means. I would, at the most, offer it as a substitute for the non-natural views of the actual course of events on the earth which theology teaches. I prefer evolution to the *special* creation, hypothesis; but as to asking evolution to undertake the task of bringing the universe into being—I would rather not. I prefer to postulate the universe, and run all the risks of that rash act. I may remark at this point that I notice the same looseness of expression, on the subject of evolution, in the pamphlet of “Vindex” as in the lectures of the Bishop. We are told that “it is necessary in order to establish Darwinian development to give a sufficient explanation of the origin of life.” On the contrary *Darwinian* development has nothing to do with the origin of life; and “Vindex” himself quotes Darwin as saying that the problem of the origin of life is a “hopeless” one! Again, I find him (page 5) using the phrase, “survival of the fittest,” precisely as the Bishop used it, in the sense of survival of what is intrinsically the best. We have not so learned either Darwin or Spencer.

“Vindex” talks of “well-worn sneerings at the miracles of the Old Testament.” It might have occurred to him that the phrase is perhaps even better-worn than the sneers; and I doubt not he is fully aware that many have used it, whose own minds were in a state of great uncertainty about those same miracles. Somehow I never hear that smooth, pebbly phrase, “well-worn sneers,” without being reminded, I scarcely know how, of a remark made by the Rev. Phillips Brooks, of Boston: “There is nothing so terrible as the glimpses we get occasionally into a minister’s unbelief; and sometimes the confusion which exists below seems to be great, just in proportion to the hard dogmatism which men see upon the surface.” I do not seek to apply this to “Vindex,” but its application to the matter in hand is obvious. This unbelief of which Mr. Brooks gets glimpses from time to time relates, it may reasonably be supposed, to just such matters as the miracles

of the Bible. It is also thoroughly known that, amongst the laity, the belief in miracles has been greatly undermined. Such being the case, we should expect that clergy and laity would be laboring together, to find out just what ought to be believed under this head. Instead of this, there is a general, and as it were concerted, avoidance of the subject : and when anyone takes it up openly, and treats the miracles as things in which he does not believe, he is at once credited with indulging in "well-worn sneers;" or, if he is too serious for that, then in "well-worn arguments." The question is, how do the arguments stand the wear? I fancy they are standing it better than the miracles. The door through which witchcraft disappeared is still open, and other things are making towards it.

As a preliminary to discussing the sudden collapse of the walls of Jericho and other incidents of a like nature, my critic would wish to go into the evidence for the resurrection of Jesus, holding apparently that the former fact would become much more probable if the latter could be proved. It is doubtful how far this is wise policy. To tell people before hand that, if they once admit the resurrection, they will be forever estopped from questioning any marvel, however grotesque, that may be asserted to stand in any kind of relation to it, is perhaps not the best way to secure a perfectly unprejudiced consideration of such evidence as may be adducible for the central miracle. Moreover, there are those who believe the miracle of the resurrection, who do not believe that of Jericho. There are clergymen who hold that there are miracles and miracles, even in the Bible ; and, for all that distinctly appears in his pamphlet, "Vindex" may be one of them. If, instead of saying what he would like to see done as a preliminary to the discussion of miracles in general, "Vindex" had stated, in a brief, direct and unmistakable way, that he himself fully and firmly believed that all the miracles of the Old and New Testaments took place precisely as recorded, the effect would, I humbly submit, have been better. In these days people like something they can lean upon. When "Vindex" states that the resurrection of Jesus "survives, a clearly-attested fact of history," what he must mean is that the *belief* in it survives.

As to the attestation it is neither clear nor satisfactory to a great many of the best judges of evidence; as is amply proved by the ever increasing number of intelligent men and women who do not believe in miracles at all. The evidence is just of this character, that if one wants to believe in the alleged fact he can find plausible grounds for doing so; to say that it is of a nature to convince those who are not, antecedently, believers in miracle, is quite to overstate the case.\*

“Vindex” speaks in a very earnest manner of the practical value of Christianity; but, did space permit, I think his statements might advantageously be submitted to analysis. If there is life in the churches, there is deadness also, and more of deadness than of life. There is much of religious sentiment, but very much less of that subjection of the life to law in which the essence of religion consists. There is practical activity, but not always, if often, associated with any truly elevated feeling—resorted to sometimes, I think, as an escape from the demands of thought. The fact is that Christianity, like every other religion that ever existed, has its limitations. It sets out to do certain things and those things are exclusive of certain other things of equal importance. To my critic’s remark that “there is no motive or plea or influence for good in this creed of materialism which is not at the service of Christianity,” I reply: first, that I have never professed “a creed of materialism,” and second, that in the “creed,” if such it may be called, of which the barest outline sketch is given in the preceding

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\* I find a very timely, and somewhat striking, confirmation of the position I here take up, in Dr. Heinrich Geffcken’s article on “Contemporary Life and Thought in Germany,” in the April number of the *Contemporary Review*. Noticing the 3rd and 4th volumes of Leopold von Ranke’s “Universal History,” just issued, Dr. Geffcken observes: “Ranke abstains from entering into the details of the life of Christ; he simply sketches the characteristic features of his person and doctrine as surpassing all, and opposed to all, the world had yet seen. The Christian wants to form a definitive judgment on the resurrection; the historian is satisfied to state the fact—undeniable even to the hardest sceptic—that the disciples firmly believed in it, and that the belief became the foundation of the Church.” But why, if the resurrection is “a clearly-attested fact of history,” does the veteran historian shirk the responsibility of recording it as having actually occurred, and confine himself to saying that the disciples believed it? It is not so that he treats the battle of Salamis, another “clearly-attested fact of history.”



pages, there is much that Christianity, as a system, has never availed itself of—there are lines of thought, and lines of influence which are just as unknown to the vast majority of Christians as the Vedic poems. This I claim to know by experience. Christianity has made choice of supernaturalism, with its powerful modes of appeal to human hopes and fears. In that lot it will abide; but in that lot it will *not* do justice to the *natural* order, the proper interpretation and use of which belongs to the religion of the future.

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### LAST WORDS.

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The preceding pages have not, I think, been lacking in frankness. No one is likely to accuse me of having beaten about the bush, or having hinted at that which I was afraid to utter. What I would fain be sure of now, is that they have not been lacking in charity. I can only say that I have not meant to treat any one with unkindness. Towards my chief opponent, across whose hearth so dark a shadow has lately fallen, my profoundest sympathies have gone forth; and could I, in justice to those who have followed the discussion up to the present point, have withheld my answer to the Second Lecture on Agnosticism, I would gladly have done so. Both the Bishop of Ontario and "Vindex," are, I fully believe, defending views which they sincerely hold to be of the greatest importance to mankind, and I respect them unfeignedly for the stand they have taken.

I would wish, however, to say further that it has been very far from my intention to wound the feelings of any portion of the community in which my lot is cast, and in which I find myself treated, on all hands, with unvarying kindness. The very heart of my life has been spent in this city—eighteen better years than will perhaps come to me again—and I entertain, for the public of Ottawa, feelings of regard to which I should do great injustice, were I to write aught that would cause to any number of persons, needless pain or distress. This controversy was not of my seeking. The first lecture of the Bishop of Ontario was repeatedly

flung in the faces of the so-called "agnostics" of Ottawa, as a document to which they could find no answer. Under the circumstances it became a duty to try and answer it, or else to acknowledge it unanswerable. The latter we could not do; the former course alone was left. It has therefore been my purpose to state briefly, but clearly, what a certain number of those who do not share the prevailing theological opinions really think and feel. If we cannot agree in opinion, I say, let us at least understand one another, let us be candid and charitable with one another, let us talk together as those who have a common interest in arriving at the truth. Let us remember that our differences must, after all, be superficial in comparison with our agreements. The former lie in the region of the intellect, the latter in the deeper region of the heart. There it is that we dream our dreams of good, there that, spite of all errors, we worship the truth, there that we cherish hopes for the future of humanity. Our intellectual differences will not be permanent; I believe they are fading already. "The law," the Apostle Paul said, "was a schoolmaster to bring us to Christ," and Christ, few will be found to deny, has been leading us onward to another and higher law. The first law was simply a check put upon the spontaneous activities and propensities of man, at an early period of his development, quite analogous to the checks and restraints, with which, for their safety, we surround little children. Under Christianity the moral and emotional nature of man was warmed into life; and now we enter, as I conceive, upon the adult stage of human development, where we come in sight once more of law, but of law transfigured and glorified—no longer a mere prohibitory code, but the ever-widening interpretation of the universe. And when that vision has once burst upon the human spirit, what more can be desired? It is an eminent Christian apologist, Joseph Cook, who says that, "in a better age, science \* \* will teach that natural laws are literally God—who was, and is, and is to come. Science does this," he adds, "already, for all who think clearly." When it has come to this, there should surely be little left for men to dispute about.

May, 1884.

