APPENDIX.

I.—THE LIMITS OF PHILOSOPHICAL INQUIRY.*

It is not a little hard upon those who now devote themselves to the patient interrogation of Nature, by means of observation and experiment, that they should be counted, whether they will or not, ministers of the so-called Positive Philosophy, and disciples of him who is popularly considered the founder of that philosophy. No matter that positive investigation within the limits which Comte prescribes was pursued earnestly and systematically before his advent, and with an exactness of method of which he had no conception: that many of those distinguished since his time for their scientific researches and generalizations have been unacquainted with his writings; that others who have studied them withhold their adherence from his doctrines, or energetically disclaim them. These things are not considered: so soon as a scientific inquirer pushes his researches into the phenomena of life and mind, he is held to be a Comtist. Thus it happens that there is a growing tendency in the public mind to identify modern science with the Positive Philosophy. Considering how much mischief has often been done by iden-

^{*} Journal of Mental Science, No. 70. The Limits of Philosophical Inquiry. Address delivered to the Members of the Edinburgh Philosophical Institution, November 6, 1868. By William, Lord-Archbishop of York. (Edmonston and Douglas.)

tifying the character of an epoch of thought with the doctrines of some eminent man who has lived and labored and taken the lead in it, and thus making his defects and errors, hardened into formulas, chains to fetter the free course of thought, it is no wonder that scientific men should be anxious to disclaim Comte as their lawgiver, and to protest against such a king being set up to reign over them. Not conscious of any personal obligation to his writings, conscious how much, in some respects, he has misrepresented the spirit and pretensions of science, they repudiate the allegiance which his enthusiastic disciples would force upon them, and which popular opinion is fast coming to think a natural one. do well in thus making a timely assertion of independence; for, if it be not done soon, it will soon be too late to be done well. When we look back at the history of systems of religion and philosophy, it is almost appalling to reflect how entirely one man has appropriated the intellectual development of his age, and how despotically he has constrained the faith of generations after him; the mind of mankind is absolutely oppressed by the weight of his authority, and his errors and limitations are deemed not less sacred than the true ideas of which he has been the organ: for a time he is made an idol, at the sound of whose name the human intellect is expected to fall down and worship, as the people, nations, and languages were expected, at what time they heard the sound of the flute, harp, sackbut, dulcimer, and all kinds of music, to fall down and worship the golden image which Nebuchadnezzar the king had set up. Happily it is not so easy to take captive the understanding now, when thought is busy on so many subjects in such various domains of Nature, and when an army of investigators often marches where formerly a solitary pioneer painfully sought his way, as it was when the fields of intellectual activity were few and limited, and the laborers in them few also.

A lecture delivered by the Archbishop of York before the Edinburgh Philosophical Institution, which has been published as a pamphlet, contains a plain, earnest, and on the whole temperate, but not very closely-reasoned, criticism, from his point of view, of the tendency of modern scientific research, or rather of Positivism, and a somewhat vague declaration of the limits of philosophical inquiry. He perceives with sorrow, but not with great apprehension, that the prospects of philosophy are clouded over in England, France, and Germany, and that a great part of the thinking world is occupied with physical researches. But he does not therefore despair; believing that Positivism indicates only a temporary mood, produced by prostration and lassitude after a period of unusual controversy, and that it will after a time pass away, and be followed by a new era of speculative activity. It may be presumed that men, weary of their fruitless efforts to scale the lofty and seemingly barren heights of true philosophy, have taken the easy path of Positivism, which does not lead upward at all, but leads, if it be followed far enough, to quagmires of unbelief. The facts on which the archbishop bases his opinion, and the steps of reasoning by which he is able thus to couple a period of speculative activity with a period of religious belief, and to declare a system of positive scientific research to be linked inseparably with a system of unbelief, do not appear; they are sufficient to inspire strong conviction in him, but they apparently lie too far down in the depths of his moral consciousness to be capable of being unfolded, in lucid sequence, to the apprehension of others.

To the critical reader of the lecture it must at once occur that a want of discrimination between things that are widely different is the cause of no little looseness, if not recklessness, of assertion. In the first place, the archbishop identifies off-hand the course and aim of modern scientific progress with the Positivism of Comte and his followers. This is very much as if any one should insist on attributing the same character and the same aim to persons who were travelling for a considerable distance along the same road. As it was Comte's great aim to organize a harmonious co-

ordination and subordination of the sciences, he assimilated and used for his purpose the scientific knowledge which was available to him, and systematized the observed method of scientific progress from the more simple and general to the more special and complex studies; but it assuredly is most unwarrantable to declare those who are engaged in physical research to be committed to his conclusions and pretensions, and there can be no question that a philosophy of science, when it is written, will differ widely from the so-called Posi-

tive Philosophy.

In the second place, the archbishop unwittingly perpetrates a second and similarly reckless injustice in assuming, as he does, that modern science must needs accept what he describes as the sensational philosophy. "Thus the business of science," he says, "is to gather up the facts as they appear, without addition or perversion of the senses. senses are our only means of knowledge, and we can only know things as they present themselves to the eye and ear, it follows that our knowledge is not absolute knowledge of the things, but a knowledge of their relations to us, that is, of our sensations." Passing by the question, which might well be raised, whether any one, even the founder of the sensational philosophy, ever thus crudely asserted the senses to be our only means of knowledge, and our knowledge to be only a knowledge of our sensations; passing by, too, any discussion concerning what the archbishop means, if he means any thing, by an absolute knowledge of things as distinct from a knowledge of things in their relations to us, and all speculations concerning the faculties which finite and relative beings who are not archbishops have of apprehending and comprehending the absolute; it is necessary to protest against the assumption that science is committed to such a representation of the sensational philosophy, or to the sensational philosophy at all. Those modern inquirers who have pushed farthest their physical researches into mental functions and bodily organs have notoriously been at great pains

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to discriminate between the nervous centres which minister to sensation and those which minister to reflection, and have done much to elucidate the physical and functional connections between them. They have never been guilty of calling all knowledge a knowledge only of sensations, for they recognize how vague, barren, and unmeaning, are the terms of the old language of philosophical strife, when an attempt is made to apply them with precision to the phenomena revealed by exact scientific observation. The sensorial centres with which the senses are in direct connection are quite distinct from, and subordinate to, the nervous centres of ideation or reflection—the supreme hemispherical ganglia. It is in these, which are far more developed in man than in any other animal, and more developed in the higher than in the lower races of men, that sensation is transformed into knowledge, and that reflective consciousness has its seat. knowledge so acquired is not drained from the outer world through the senses, nor is it a physical mixture or a chemical compound of so much received from without and so much added by the mind or brain; it is an organized result of a most complex and delicate process of development in the highest kind of organic element in Nature-a mental organization accomplished, like any other organization, in accordance with definite laws. We have to do with laws of life. and the language used in the interpretation of phenomena must accord with ideas derived from the study of organization; for assuredly it cannot fail to produce confusion if it be the expression only of ideas derived from the laws of physical phenomena, so far as these are at present known to us. Now, the organization of a definite sensation is a very different matter from, has no resemblance in Nature to, the physical impression made upon the organ of sense, and the organization of an idea is a higher and more complex vital process than the organization of a sensation; to call knowledge, therefore, a knowledge only of sensation is either a meaningless proposition, or, in so far as it has meaning, it is

See pp 18.20.24.

falser than it would be to affirm the properties of a chemical Aud of many compound to be those of its constituents. Were they who a tradition and pursue the scientific study of mind not more thoughtful than 9 th state of the Archbishop of York gives them credit for being, they 4 once to the would have no reason to give why animals with as many some thing senses as man has, and with some of them more acute than his, have not long since attained, like him, to an understand-

ing of the benefits of establishing archbishoprics.

It must be understood that by the assertion of the organic basis of mental function is not meant that the mind imposes the laws of its own organization; on the contrary, it obeys them, knowing not whence they come nor whither they tend. Innate ideas, fundamental ideas, categories of the understanding, and like metaphysical expressions, are obscure intimations of the laws of action of the internal organizing power under the conditions of its existence and exercise; and it is easy to perceive that a new and higher sense conferred on man, altering entirely these conditions, would at once render necessary a new order of fundamental ideas or categories of the understanding. That all our knowledge is relative cannot be denied, unless it be maintained that in that wonderful organizing power which cometh from afar there lies hidden that which may be intuitively revealed to consciousness as absolute knowledge—that the nature of the mysterious power which inspires and impels evolution may, by a flash of intuitive consciousness, be made manifest to the mind in the process of its own development. If Nature be attaining to a complete self-consciousness in man, far away from such an end as it seems to be, it is conceivable that this might happen; and if such a miraculous inspiration were thus to reveal the unknown, it would be a revelation of the one primeval Power. Clearly, however, as positive scientific research is powerless before a vast mystery-the whence, what, and whither, of the mighty power which gives the impulse to evolution—it is not justified in making any proposition regarding it. This, however, it may rightly

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do; while keeping its inquiries within the limits of the knowable, it may examine critically, and use all available means of testing, the claims and credentials of any professed revelation of the mystery. And it is in the pursuit of such inquiries that it would have been satisfactory to have had from the archbishop, as a high-priest of the mystery, some gleam of information as to the proper limits which he believes ought to be observed. At what point is the hitherto and no farther to which inquiry may advance in that direction? Where do we reach the holy ground when it becomes necessary to put the scientific shoes from off our feet? There must assuredly be some right and duty of examination into the evidence of revelations claiming to be Divine; for, if it were not so, how could the intelligent Mussulman ever be, if he ever is, persuaded to abandon the one God of his faith, and to accept what must seem to him the polytheism of the Christian Trinity?

Another error, or rather set of errors, into which the archbishop plunges, is that he assumes positive science to be materialistic, and materialism to involve the negation of God, of immortality, and of free will. This imputation of materialism, which ought never to have been so lightly made, it is quite certain that the majority of scientific men would earnestly disclaim. Moreover, the materialist, as such, is not under any logical constraint whatever to deny either the existence of a God, or the immortality of the soul, or free will. One is almost tempted to say that in two things the archbishop distances competition: first, in the facility with which he loses or dispenses with the links of his own chain of reasoning; and, secondly, in his evident inability to perceive, when looking sincerely with all his might, real and essential distinctions which are at all subtile, which are not broadly, and almost coarsely, marked. If the edge of a distinction be fine, if it be not as blunt as a weaver's beam, it fails seemingly to attract his attention. Whosoever believes sincerely in the doctrine of the resurrection of the body, as taught by

the Apostle Paul, which all Christians profess to do, must surely have some difficulty in conceiving the immortality of the soul apart from that of the body; for, if the apostle's preaching and the Christian's faith be not vain, and the body do rise again, then it may be presumed that the soul and it will share a common immortality, as they have shared a common mortality. So far, then, from materialism being the negation of immortality, the greatest of the apostles, the great Apostle of the Gentiles, earnestly preached materialism as es- land had to sential to the life which is to come. There is as little or less justification for saying that materialism involves of necessity the denial of free will. The facts on which the doctrine of free will is based are the same facts of observation, whether spiritualism or materialism be the accepted faith, and the question of their interpretation is not essentially connected with the one or the other faith; the spiritualist may consistently deny, and the materialist consistently advocate, free will. In like manner, the belief in the existence of God is nowise inconsistent with the most extreme materialism, for the belief is quite independent of the facts and reasons on which that faith is founded. The spiritualist may deny God the power to make matter think, but the materialist need not deny the existence of God because he holds that matter may hatmalim be capable of thought. Multitudes may logically believe that mind is inseparable from body in life or death—that it is the life life born with it, grows, ripens, decays, and dies with it, without or in I hand disbelieving in a great and intelligent Power who has called a fleather it. man into being, and ordained the greater light to rule the day and it is the day and the lesser light to rule the night."

What an unnecessary horror hangs over the word materialism! It has an ugly sound and an indefinite meaning, and is well suited, therefore, to be set up as a sort of moral scarecrow; but, if it be closely examined, it will be found to have the semblance of something terrible, and to be empty of any real harm. In the assertion that mind is altogether a function of matter, there is no more actual irreverence than in

asserting that matter is the realization of mind; the one and the other proposition being equally meaningless so far as they postulate a knowledge of any thing more than phenomena. Whether extension be visible thought, or thought invisible extension, is a question of a choice of words, and not of a choice of conceptions. To those who cannot conceive that any or-

ganization of matter, however complex, should be capable of such exalted functions as those which are called mental, is it really more conceivable that any organization of matter can be the mechanical instrument of the complex manifestations of an immaterial mind? Is it not as easy for an omnipotent power to endow matter with mental functions as it is to create an immaterial entity capable of accomplishing them through matter? Is the Creator's arm shortened, so that He cannot endow matter with sensation and ideation? It is strangely overlooked by many who write on this matter, that the brain is not a dead instrument, but a living organ, with functions of a higher kind than those of any other bodily organ, insomuch as its organic nature and structure far surpass those of any other organ. What, then, are those functions if they are not mental? No one thinks it necessary to assume an immaterial liver behind the hepatic structure, in order to account for its functions. But so far as the nature of nerve and the complex structure of the cerebral convolutions exceed in dignity the hepatic elements and structure, so far must the material functions of the brain exceed those of the liver. Men are not sufficiently careful to ponder the wonderful operations of which matter is capable, or to reflect on the miracles effected by it which are continually before their eyes.

Are the properties of a chemical compound less mysterious essentially because of the familiarity with which we handle them? Consider the seed dropped into the ground: it swells with germinating energy, bursts its integuments, sends upward a delicate shoot, which grows into a stem, putting forth in due season its leaves and flowers, until finally a beautiful structure is formed, such as Solomon in all his glory could not

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equal, and all the art of mankind cannot imitate. And yet all these processes are operations of matter; for it is not a man thought necessary to assume an immaterial or spiritual plant which effects its purposes through the agency of the material structure which we observe. Surely there are here exhibited properties of matter wonderful enough to satisfy any one of the powers that may be inherent in it. Are we, then, to believe that the highest and most complex development of organic structure is not capable of even more wonderful operations? Would you have the human body, which is a microcosm containing all the forms and powers of matter organized in the most delicate and complex manner, to possess lower powers than those forms of matter exhibit separately in Nature? Trace the gradual development of the nervous system through the animal series, from its first germ to its most complex evolution, and let it be declared at what point it suddenly loses all its inherent properties as living structure, and becomes the mere mechanical instrument of a spiritual entity. In what animal, or in what class of animals, does the immaterial principle abruptly intervene and supersede the agency of the ball of matter, becoming the entirely distinct cause of a similar, and while though more exalted, order of mental phenomena? To ap- introduction to peal to the consciousness of every man for the proof of a power within him, totally distinct from any function of the The They had body, is not admissible as an argument, while it is admitted that consciousness can make no observation of the bodily organ and its functions, and until therefore it be proved that matter, even when in the form of the most complex organization, is incapable of certain mental functions. Why may it not, indeed, be capable of consciousness, seeing that, whether it be or not, the mystery is equally incomprehensible to us, and must be reckoned equally simple and easy to the Power full half which created matter and its properties? When, again, we apply are told that every part of the body is in a constant state of change, that within a certain period every particle of it is renewed, and yet that amid these changes a man feels that be mind the

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remains essentially the same, we perceive nothing inconsistent in the idea of the action of a material organ; for it is not on if a standard to suppose that in the brain the new series of particles take the pattern of those which they replace, as they do in thele conti other organs and tissues which are continually changing their substance yet preserve their identity. Even the scar of a wound on the finger is not often effaced, but grows as the body grows: why, then, assume the necessity of an immaterial principle to prevent the impression of an idea from being lost?

> The truth is, that men have disputed vaguely and violently about matter and motion, and about the impossibility of matter affecting an immaterial mind, never having been at the pains to reflect carefully upon the different kinds of matter and the corresponding differences of kind in its motions. All sorts of matter, diverse as they are, were vaguely matterthere was no discrimination made; and all the manifold and special properties of matter were comprised under the general term motion. This was not, nor could it lead to, good: for matter really rises in dignity from physical matter in which physical properties exist to chemical matter and chemical forces, and from chemical matter to living matter and its modes of force; and then in the scale of life a continuing ascent leads from the lowest kind of living matter with its force or energy, through different kinds of physiological elements with their special energies or functions, to the highest kind of living matter with its force-viz., nerve-matter and nerveforce; and, lastly, through the different kinds of nerve-cells and their energies to the most exalted agents of mental function. Obviously, then, simple ideas derived from observation of mechanical phenomena cannot fitly be applied to the explanation of the functions of that most complex combination of elements and energies, physical and chemical, in a small space, which we have in living structure; to speak of mechanical vibration in nerves and nerve-centres is to convey false ideas of their extremely delicate and complex energies,

and thus seriously to hinder the formation of more just conceptions.

In like manner, much barren discussion has been owing to the undiscriminating inclusion of all kinds of mental manifestations under the vague and general term mind; for there are most important differences in the nature and dignity of so-called mental phenomena, when they are properly observed and analyzed. Those who have not been at the pains to follow the order of development of mental phenomena and to make themselves acquainted with the different kinds of functions that concur to form what we call mental action, and who have not studied the differences of matter, are doing no better than beating the air when they disclaim against materialism. By rightly submitting the understanding to facts, it is made evident that, on the one hand, matter rises in dignity and function until its energies merge insensibly into functions which are described as mental, and, on the other hand, that there are gradations of mental function, the lowest of which confessedly do not transcend the functions of matter. The burden of proving that the Deus ex machina of a spiritual entity intervenes somewhere, and where it intervenes, clearly lies upon those who make the assertion or who need the hypothesis. They are not justified in arbitrarily fabricating an hypothesis entirely inconsistent with experience of the orderly development of Nature, which even postulates a domain of Nature that human senses cannot take merified any cognizance of, and in then calling upon those who reject their assumption to disprove it. These have done enough if they show that there are no grounds for and no need of the hypothesis.

Here we might properly take leave of the archbishop's address, were it not that the looseness of his statements and the way in which his understanding is governed by the old phrases of philosophical disputes tempt further criticism, and make it a duty to expose aspects of the subject of which he does not evince the least apprehension. He would, we ima-

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gine, be hard put to it to support the heavy indictment contained in the following sentence which he flings off as he goes heedlessly forward: "A system which pretends to dispense with the ideas of God, of immortality, of free agency, of causation, and of design, would seem to offer few attractions," The question of the value of any system of philosophy is not, it may be observed incidentally, whether it is unattractive because it dispenses with received notions, still less because its adversaries imagine that it must dispense with them; but it is whether it possesses that degree of fundamental truth which will avail to enlarge the knowledge and to attract ultimately the belief of mankind. History does not record that the doctrines of Christianity were found attractive by the philosophers of Greece or Rome when they were first preached there; does, indeed, record that Paul preaching on Mars' Hill at Athens, the city of intellectual enlightenment, and declaring to the inhabitants the unknown God whom they ignorantly worshipped, made no impression, but found it prudent to depart thence to Corinth, nowise renowned at that time as a virtuous city, renowned, indeed, in far other wise. We have not, however, quoted the foregoing sentence in order to repudiate popular attractiveness as a criterion of truth, but to take occasion to declare the wide difference between the modest spirit of scientific inquiry and the confident dogmatism of the so-called Positive Philosophy. Science, recognizing the measure of what it can impart to be bounded by the existing limits of scientific inquiry, makes no proposition whatever concerning that which lies beyond these limto second its; equally careful, on the one hand, to avoid a barren enunciation in words of what it cannot apprehend in thought, and, on the other hand, to refrain from a blind and denial of possibilities transcending its means of research. A tal calm acquiescence in ignorance until light comes is its attithe top tude. It must be borne clearly in mind, however, that this scrupulous care to abstain from presumptuous assertions does not warrant the imposition of any arbitrary barrier to the

reach of its powers, but is quite consistent with the conviction of the possibility of an invasion and subjugation of the unknown to a practically unlimited extent, and with the most strenuous efforts to lessen its domain.

The wonder is-and the more it is considered the greater of course of it seems-that human intelligence should ever have grown to in the power the height either of affirming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of a full and a firming or of denying the existence of the firming of the firming or of denying the existence of the firming of the firming or of denying the existence of the firming of the firming of the firming or of denying the existence of the firming of the firming of the firming or of denying the existence of the firming of th God. Certainly the denial implies, even if the affirmation How can ply does not also, the assumption of the attributes of a God by britty of him who makes it. Let imagination travel unrestrained tom the through the immeasurable heavens, past the myriads of orbs which, revolving in their appointed paths, constitute our solar system, through distances which words cannot express nor mind conceive definitely, to other suns and other planetary systems; beyond these glimmer in the vast distance the lights of more solar systems, whose rays, extinguished in the void, never reach our planet: still they are not the end, for as thought in its flight leaves them behind, and they vanish in remote space, other suns appear, until, as the imagination strives to realize their immensity, the heavens seem almost an infinite void, so small a space do the scattered clusters of planets fill. Then let sober reflection take up the tale, and, remembering how small a part of the heavenly hosts our solar system is, and how small a part of our solar system the earth is, consider how entirely dependent man, and beast, and plant, and every living thing are upon the heat which this our planet receives from the sun; how vegetation flourishes through its inspiring influence, and the vegetation of the past in long-buried forests gives up again the heat which ages ago it received from the sun; how animal life is sustained by the life of the vegetable kingdom, and by the heat which is received directly from the sun; and how man, as the crown of living things, and his highest mental energy, as the crown of his development, depend on all that has gone before him in the evolution of Nature-considering all these things, does not living Nature appear but a small

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and incidental by-play of the sun's energies? Seems it not an unspeakable presumption to affirm that man is the main end and purpose of creation? Is it not appalling to think that he should dare to speak of what so far surpasses the reach of his feeble senses, and of the power which ordains and governs the order of events-impiously to deny the The and existence of a God, or not less impiously to create one in his feels image? The portion of the universe with which man is about syllibrought into relation by his existing sentiency is but a fragment, and to measure the possibilities of the infinite unknown by the standard of what he knows is very much as if the oyster should judge all Nature by the experience gained within its shell-should deny the existence on earth of a human being, because its intelligence cannot conceive his nature or recognize his works. Encompassing us and transcending our ken is a universe of energies; how can man, then, the "feeble atom of an hour," presume to affirm whose glory the heavens declare, whose handiwork the firmament showeth? Certainly true science does not so dogmatize.

Bacon, in a well-known and often-quoted passage, has remarked, that "a little philosophy inclineth men's minds to Atheism, but depth in philosophy bringeth men's minds about to religion; for while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no further; but when it beholdeth the chain of them, confederate and linked together, it must needs fly to Providence and Deity." It is not easy to perceive, indeed, how modern science, which makes its inductions concerning natural forces from observation of their manifestations, and arrives at generalizations of different forces, can, after observation of Nature, avoid the generalization of an intelligent mental force, linked in harmonious association and essential relations with other forces, but leading and constraining them to higher aims of evolution. To speak of such evolution as the course of Nature is to endow an undefined agency with the properties which are commonly assigned to a god, whether it be

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x Nows, Mr M. just go on & apply the same fine reedany to free with & immostality, and you hill just have the architished to he described you with intive firstice. called God or not. The nature, aim, and power of this supreme intelligent force, working so far as we know from everlasting to everlasting, it is plainly impossible that man, a finite and transient part of Nature, should comprehend. To suppose him capable of doing so, would be to suppose him endowed with the very attributes which, having only in part himself, he ascribes in the whole to Deity.

Whether the low savage has or has not the idea of a God is a question which seems hardly to deserve the amount of attention which it has received. It is certain that he feels himself surrounded and overruled by forces the natures and laws of which he is quite ignorant of, and that he is apt to interpret them, more or less clearly, as the work of some being of like passions with himself, but vastly more powerful, whom it is his interest to propitiate. Indeed, it would appear, so far as the information of travellers enables us to judge, that the idea entertained of God by the savage who has any such idea is nearly allied to that which civilized people have or have had of a devil; for it is the vague dread of a being whose delight is in bringing evil upon him rather than that of a being who watches over and protects him. Being ignorant altogether of the order of Nature, and of the fixed laws under which calamities and blessings alike come, he frames a dim, vague, and terrible embodiment of the causes of those effects which touch him most painfully. Will it be believed, then, that the Archbishop of York actually appeals to the instinct of the savage to rebuke the alleged atheism of science? Let it be granted, however, that the alleged instinct of the savage points to a God and not to a devil ruling the world, it must in all fairness be confessed that it is a dim. undefined, fearful idea-if that can be called an idea which form has none-having no relationship to the conception of a God which is cherished among civilized people. In like manner as the idea of a devil has undergone a remarkable development with the growth of intelligence from age to age, until in some quarters there is evinced a disposition to im-

prove him out of being, so the conception of a God has undergone an important development through the ages, in correspondence with the development of the human mind. The conceptions of God affirmed by different revelations notably reflect, and are an index of, the intellectual and moral character of the people to whom each revelation has been made, and the God of the same religion does unquestionably advance with the mental evolution of the people professing it, being differently conceived of at different stages of culture. Art, in its early infancy, when it is, so to speak, learning its steps, endeavors to copy Nature, and, copying it badly, exaggerates and caricatures it, whence the savage's crude notion of a God; but the aim and work of the highest art is to produce by idealization the illusion of a higher reality, whence a more exalted and spiritual conception of Deity.

Brackelly against science, there is hardly one, if indeed there be even of God, while there is notably more than one who has evinced a childlike simplicity of faith. The utmost claim of scientific skepticism is the right to examine the evidence of a revelation professing to be Divine, in the same searching way we can a final as it would examine any other evidence—to endeavor to trace the origin and development and to the origin and development, and to weigh the value, of religious conceptions as of other conceptions. It violates the fundamental habit of the scientific mind, the very principle of its nature, to demand of it the unquestioning acceptance of any form of faith which tradition may hand down as divinely revealed. When the followers of a religion appeal, as the followers of every religion do, in proof of it, to the testimony of miraculous events contrary to the experience of the present order of Nature, there is a scientific fact not contrary to experience of the order of Nature which they overlook, but which it is incumbent to bear in mind, viz.: That eager and enthusiastic disciples sometimes have visions and dream dreams, and that they are apt innocently to ima-

gine or purposely to invent extraordinary or supernatural events worthy the imagined importance of the subject, and answering the burning zeal of their faith. The calm observer and sincere interpreter of Nature cannot set capricious or arbitrary bounds to his inquiries at any point where another may assert that he ought to do so; he cannot choose but claim and maintain the right to search and try what any man, Jew or Gentile, Mussulman or Bramin, has declared x who sacred, and to see if it be true. And, if it be not true to him, what matters it how true it be? The theologian tells him that the limits of philosophical inquiry are where faith begins, but he is concerned to find out where faith does begin, and to examine what sort of evidence the evidence of things unseen is. And if this right of free inquiry be denied him, then is denied him the right to doubt what any visionary, or fanatic, or madman, or impostor, may choose to proclaim as a revelation from the spiritual world.

Toward the close of his lecture the archbishop, breaking out into peroration, becomes violently contemptuous of the philosopher who, "with his sensations sorted and tied up and labelled to the utmost, might," he thinks, "chance to find himself the most odious and ridiculous being in all the multiform creation. A creature so glib, so wise, so full of discourse, sitting in the midst of creation with all its mystery and wonder, and persuading you that he is the master of its secrets, and that there is nothing but what he knows!" It is not very difficult to raise a laugh by drawing a caricature; but it was hardly, perhaps, worthy the lecturer, the subject, and the audience, to exhibit on such an occasion an archiepiscopal talent for drawing caricatures. As we have already intimated, this philosopher, "so glib, so wise, so full of discourse," does not profess to know nearly so much of the mystery and wonder of creation as the archbishop does. There is more flourishing language of the same sort before the discourse ends, but it would be unprofitable to transcribe or criticise it; and it is only right to the lecturer to say that

he is near his conclusion when he works himself up into this vituperative and somewhat hysterical ecstasy. The following passage may be quoted, however, as instructive in more respects than one:

"The world offers just now the spectacle, humiliating to us in many ways, of millions of people clinging to their old idolatrous religions, and refusing to change them even for a higher form; while in Christian Europe thousands of the most cultivated class are beginning to consider atheism a permissible or even a desirable thing. The very instincts of the savage rebuke us. But just when we seem in danger of losing all may come the moment of awakening to the dangers of our loss. A world where thought is a secretion of the brain-glandwhere free will is the dream of a madman that thinks he is an emperor, though naked and in chains-where God is not or at least not knowable, such is not the world as we have learned it, on which great lives have been lived out, great self-sacrifices dared, great piety and devotion have been bent on softening the sin, the ignorance, and the misery. It is a world from which the sun is withdrawn, and with it all light and life. But this is not our world as it was, not the world of our fathers. To live is to think and to will. To think is to see the chain of facts in creation, and passing along its golden links to find the hand of God at its beginning, as we saw His handiwork in its course. And to will is to be able to know good and evil; and to will aright is to submit the will entirely to a will higher than ours. So that with God alone can we find true knowledge and true rest, the vaunted fruits of philosophy."

Was ever before such a terrible indictment against Christianity drawn by a Christian prelate? Its doctrines have now been preached for nearly two thousand years; they have had the aids of vast armies, of incalculable wealth, of the greatest genius and eloquence; they are embodied in the results of conquests, in the sublimest works of art, in some of the noblest specimens of oratory, in the very organization of modern society; thousands upon thousands have died martyrs to their faith in them, and thousands more have been made martyrs for want of faith in them; they have been carried to the darkest places of the earth by the vehicles of commerce, have been proclaimed by the messengers and

backed by the moral power of a higher civilization; they are almost identified with the spirit and results of modern scientific progress: all these advantages they have had, and yet the archbishop can do no more than point to the spectacle of millions of people clinging to their old idolatrous religions, and to thousands of the most cultivated class in Christian Europe who are beginning to consider atheism a permissible or even a desirable thing! Whether it be really true that so many of the cultivated class in Europe are gravitating toward atheism we cannot say; but, if the allegation be true, it may well be doubted whether an appeal to the instincts of the savage who persists in clinging to his idolatry will avail to convince them of their error. It is not very consistent on the archbishop's part to make such an appeal, who in another paragraph of his lecture emphatically enjoins on philosophy not to banish God, freedom, duty, and immortality from the field of its inquiries, adjuring it solemnly never to consent to abandon these highest subjects of study.

Another comment on the passage above quoted which suggests itself is that men have undergone great self-sacrifices, sufferings, and death, for a bad cause with as firm and cheerful a resolution as good men have for the best cause; to die for a faith is no proof whatever of the truth of it, nor by any means always the best service which a man may render it. Atheism counts its martyrs as well as Christianity. Jordano Bruno, the friend of Sir Philip Sidney, was condemned for atheism, sentenced to death, and, refusing to recant, burned at the stake. Vanini, who suffered death as an atheist, might have been pardoned the moment before his execution if he would have retracted his doctrines; but he chose to be burned to ashes rather than retract. To these might be added others who have gone through much persecution and grievous suffering for a cause which the Archbishop of York would count the worst for which a man could suffer. How many Christians of one sect have undergone lingering tortures and cruel deaths at the hands of Christians of another

sect for the sake of small and non-essential points of doctrine in which only they differed—for points at issue so minute as to "be scarcely visible to the nicest theological eye!" Christianity has sometimes been a terrible war-cry, and it must be confessed that Christians have been good persecutors. When the passions of men have worked a faith into enthusiasm, they will suffer and die, and inflict suffering and death, for any cause, good or bad. The appeal to martyrdom of professors is therefore of small worth as an argument for the truth of their doctrine. Pity 'tis that it is so, for, if it were otherwise, if self-sacrifice in a cause would suffice to establish it, what a noble and powerful argument in support of the Christian verities might archbishops and bishops offer, in these sad times of luxury and unbelief when so many are lapsing into atheism!

But we must bring to an end these reflections, which are some of those that have been suggested by the perusal of the archiepiscopal address on the "Limits of Philosophical Inquiry." Though heavy charges are laid against modern science, they are made in a thoughtless rather than a bitter spirit, while the absence of bigotry and the general candor displayed may justify a hope that the author will, on reflection, perceive his opinions to require further consideration, and his statements to be too indiscriminate and sweeping. On the whole there is, we think, less reason to apprehend harm to scientific inquiry from this discharge of the archbishop's feelings, than to apprehend harm to those who are obstinately defending the religious position against the attack which is thought imminent. For he has used his friends badly: he has exposed their entire flank to the enemy; while he would distinctly have philosophy concern itself with the highest subjects-God, freedom, and immortalitydespising a philosophy which forbears to do so, and pointing out how miserably it falls short of its highest mission, he warns philosophy in the same breath that there is a point at which its teaching ends.

"Philosophy, while she is teaching morals and religion, will soon come to a point where her teaching tends. . . She will send her scholars to seek in revelation and practical obedience the higher culture that she can only commence."

The pity of the matter is, that we are not furnished with a word of guidance as to where the hitherto and no farther point is. With brave and flourishing words he launches the inquirer on a wide waste of waters, but without a rudder to guide him, or a compass to steer by. Is he to go on so long as what he discovers is in conformity with the Gospel according to the Thirty-nine Articles, but furl-to his sails, cease his exertions, and go down on his knees, the moment his discoveries clash with the faith according to the Thirty-nine Articles? What guarantee have we that he will be content to do so? In withholding the Scriptures from the people, and shutting off philosophy entirely from the things that belong to faith, the Church of Rome occupies a strong and almost impregnable position; for, if there be no reading there will be no inquiry, and if there be no inquiry there will be no doubt, and if there be no doubt there will be no disbelief. But the union of philosophical inquiry and religious faith is not a natural union of kinds; and it is difficult to see how the product of it can be much different from the hybrid products of other unnatural unions of different kinds-can be other than sterile, when it is not monstrous.

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