

# ANTI-DARWINISM:

BY THE

REV. JAS. M'CANN, D.D.,

F.R.S.L., F.G.S., MEM. VIC. INST.

INCUMBENT OF ST. JUDE'S ENGLISH EPISCOPAL CHURCH, GLASGOW.

WITH

PROFESSOR HUXLEY'S REPLY.

M.

GLASGOW:

DAVID BRYCE & CO., 129 BUCHANAN STREET.

EDINBURGH: JOHN MENZIES AND ANDREW ELLIOT.

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## P R E F A C E .

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THE following Paper was read at the Meeting of the BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, held in Exeter, and is now published in accordance with the request of many who heard it. It was then entitled "Philosophical Objections to Darwinism or Evolutionism." It is now changed to the more popular, but equally correct, title of "Anti-Darwinism." I also add the attempted reply of Professor Huxley, copied from the *Western Times*. But as neither that, nor any other paper, had the fairness to report my concluding criticism, I am forced to write a fresh one. This is a good illustration of the unfair and dishonest manner in which some scientific men and their partisans of the Press treat all who venture to oppose their pet theories. The clergy are often taunted for not coming forward in defence of the doctrines they teach; but when they do come forward, they are rewarded with misrepresentation and calumny. Why should this be so, if our opponents be not afraid that the fallacies of their theories may be exposed? It looks as though they felt they had no sure footing, and must resort to slander, in the absence of argument. For example, the *Western Times*, while reporting the Professor's remarks in full, prudently omits mine, and yet this same paper speaks of "Huxley's Castigation" of myself and others. Why did it not give the public an opportunity of judging for themselves whether the castigation was not of, rather than by, the Professor? But a clergyman has not the slightest chance of fairness from a paper notorious for

its hostility, which heads an account of some prayer meetings —“The Praying Section,” and which accuses the clergy of holding certain doctrines from “*self-interest* and other motives.” Other papers gave only a few lines of my communication, but the whole of my opponent’s observations on it. Could anything be more thoroughly unjust? And then, having suppressed all that would expose the falseness of their flattery, they praise Huxley, and sneer at the clerics. Nay, they go further than this, for they convert derisive laughter at some of his statements into “applause.” The Correspondent of the *Glasgow Herald* says that “great enthusiasm was excited by some of the keen incisive home-thrusts which were given to Dr. M’Cann,” but it does not condescend to tell its readers what those home-thrusts were, or how I showed in my reply that they were no thrusts at all, and had no home to go to. But all this is surpassed by the cool insolence of the *Pall Mall Gazette*, which writes,—“An Archdeacon and a clergyman or two of lesser note have ventured to attack Darwinism before the Members of the British Association at Exeter. *As might be expected*, whether right or wrong as a matter of fact, they got the worst of it in argument.” We have yet to learn that scientific men are to be allowed to promulgate any fancies they may choose, which are to be held so sacred that no disbeliever may venture to attack them. We have also to learn that the advocates of Darwinism are such profound philosophers, and such accurate logicians, that all opponents *must* get the worst of it in argument. We could not well get the worst of the argument at Exeter, as there was little or no *argument* brought against us. For my own part, I leave the following pages to show whether the “matter of fact” of the *Pall Mall* is not a matter of fiction. It is also unfair to represent the clergy as being hostile to *Science*. We are not; we welcome it as an interpreter of one volume of God’s revelation to man; but we

are opposed to hasty generalizations and fallacious crudities, which are neither science nor scientific, being forced on the belief of men by pertinacious reiteration, and the authority of great names. Such hypotheses, when they are opposed to man's progress, I shall ever combat; and no amount of sneering, calumny, or evasion shall ever turn me from my purpose of forcing my antagonist either to reason, or to say that he cannot, or will not.

GLASGOW, *September, 1869.*





## ANTI-DARWINISM.

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IN stating my objections to the hypothesis popularly known as Darwinian, I am not about to base them on natural history considerations, however important such considerations may be deemed; but on the principles of philosophy, because those principles may be explicitly stated, and from them may be derived definite and sure results. Before doing so, however, it will be necessary for me to defend my right to use philosophy as a weapon in this warfare, because a President of this Association said in his address at Norwich—"The scientific writers who have publicly rejected the theories of continuous evolution, or of natural selection, or of both, take their stand on physical grounds, or metaphysical, or both. Of those who rely on the metaphysical, their arguments are usually strongly imbued with prejudice, and even odium, and, as such, are beyond the pale of scientific criticism." "Usually prejudiced" did not mean universally prejudiced, and, consequently, those metaphysical arguments not so prejudiced ought to have been replied to, if possible. But the fact that an argument contains prejudice or odium does not, I submit, place it beyond the pale of scientific criticism. The function of criticism is to test the validity of the argument itself, disregarding these two objectionable intruders as having no bearing on the question at issue. But if the reasoning of Dr. Hooker be correct, then I maintain that the theories of geology and of evolution must share the same fate as philosophy, inasmuch as their claims are advanced with equal

prejudice and odium, as are the objections of philosophy. For example, Dr. Page says, in effect, that no clergyman can be an unbiased investigator of the truth, or an unprejudiced judge of the opinions of others—that he must be intolerant of the honest convictions of other inquirers. Would not Buckland, Sedgwick, Whewell, and a host of others, call this odium, especially when coupled with such phrases as “ignorant jibing” and “bigoted calumnies” to be found in the same work. Therefore, according to the teaching of Dr. Hooker, on account of these few phrases, the work of Dr. Page is “beyond the pale of scientific criticism.” But even were philosophers more prejudiced in their arguments than are naturalists, they have much to plead in extenuation. For, while a belief in evolution means materialism, with its necessary consequent, a denial of soul and immortality to man, and the upheaval of a genuine morality, a denial of it is of little practical consequence, and cannot inflict moral injury on any one.

I am aware that Dr. Page writes—“The outcry of materialism, atheism, and the like, by which the development hypothesis has sometimes been assailed, is utterly pitiable, and all the more that it is most frequently raised by those who, from their professional calling, ought to know best that the cause of truth can never be advanced by misrepresentation.” Surely we have good reason for the charge of materialism when Professor Huxley himself says, in a lecture on what he calls the Physical Basis of Life—“I purposed to lead you through the territory of vital phenomena to the *materialistic slough* in which you find yourselves now plunged, and then to point out to you the sole path by which, in my judgment, extrication is possible.” The failure of this path we shall see presently. Even the charge of Atheism is justified by his most definite statements. “Atheism,” he writes, “denies the existence of any orderly progress and governance of things.”\*

\* “Evidence as to Man’s Place in Nature,” p. 58. T. H. Huxley, F.R.S.

ture already alluded to he says—"I take it to be demonstrable that it is utterly impossible to prove that anything whatever may not be the effect of a material and necessary cause."

Is not this denial of *governance*? Material causes do not govern. In fact, he explicitly denies governance when he adds, "that the notion of *necessity* is something illegitimately thrust into the perfectly legitimate conceptions of law." Law, according to him, meaning only a happening. This is as pure Atheism as any man could teach. It is, consequently, not the cry that is pitiable, but the teaching that renders such a warning cry needful.

Philosophers are also compelled to be very wary in accepting theories, when they find scientific men so at variance amongst themselves, and proclaiming their own theories to be mere temporary expedients. Sir W. Thomson writes: "It is quite certain that a great mistake has been made—that British popular geology at the present time is in direct opposition to the principles of natural philosophy." It is true that Professor Huxley writes of Sir W. Thomson, with a questionable good taste: "We have exercised a wise discrimination in declining to meddle with our foundations at the bidding of the first passer-by who fancies that our house is not so well built as it might be." I will say nothing of the logic of calling a man a passer-by for the sole reason that he will not pass by. But what does the Professor himself say of geological theories? "I have said that the three schools of geological speculation, which I have termed Catastrophism, Uniformitarianism, and Evolutionism, are commonly supposed to be antagonistic to one another; and I presume it will have become obvious that, in my belief, *the last is destined to swallow up the other two.*" Really, however, it seems not to matter much which theories swallow, and which are swallowed, if all geologists theorise as Dr. Hooker says Sir C. Lyell does,

whose highest praise is, according to him, that his conclusions are wholly independent of his premises; or, as he puts it, his superstructure independent of his foundations. Nor should we forget the fact that very recently we were laughed at for believing the Biblical statement, that all mankind sprung from one pair. Hair, and skin, and bones were brought forward as witnesses that it *could not* be so, and that we were behind the age for thinking otherwise. But now our scientific brethren find that these were not trustworthy witnesses after all, and that, consequently, the Bible is right on that point, and we are not behind the age in believing it to be so. Philosophy, therefore, has a right to be heard on this subject, not only on account of the greatness of the issue, but also by reason of the uncertainties of Science, its own methods being precise and definite, and alone capable of arriving at fundamental truth. So long as Science confines itself to the discovery of facts, it may proceed alone with comparative safety; but the moment it begins to draw inferences and to construct theories, Philosophy alone can guide it, if it is to proceed logically and surely.

Evolutionism has forsaken philosophy, and the result is error on fundamental points, as I shall now try to demonstrate. The principles I shall use for my purpose are affirmations of consciousness, because their existence is undeniable, and they are necessarily true. I need not stay to prove that there are such affirmations; no sane man would deny that he was conscious of his own existence, or that he was conscious of knowing and feeling. But every affirmation of consciousness must be true, for if not, it may be false; and if one be false, all may be false; and if all be false, it is evident that reasoning on any subject is a mere waste of time, inasmuch as one cannot prove their own existence, much less the existence of any other one. As it is of the utmost importance rightly to apprehend this

principle, I make no apology for quoting a few lines from a very able writer on philosophy (Rev. John Moore, in the *London Quarterly* for April, 1868). "Sceptics, no less than others, are compelled to assume the veracity of consciousness. Even if we admit that they really doubt the existence of all that they perceive to exist, we know that it is not possible for them to doubt that they doubt. Hence the question relating to the trustworthiness of consciousness cannot be discussed at all. All arguments, either for or against the veracity of consciousness, necessarily assume its veracity to begin with." If, then, evolutionism contradict any fact of consciousness, evolutionism must be false in that particular. In now proceeding to show that it contradicts several, it becomes my duty, first, to state what I mean by evolutionism; and, secondly, what are the facts contradicted by it. Lest I should in any way misrepresent this hypothesis, I shall take the statement of its final issue (and with that alone am I at present concerned), as given by Professor Huxley in his lecture "On the Physical Basis of Life." That lecture does not detail the modes by which the atom becomes the man, but it clearly enunciates the principles and final results of these modes. "Protoplasm," he writes, "simple or nucleated, is the formal basis of all life." Again: "Traced back to its earliest state, the nettle arises as the man does, in a particle of nucleated protoplasm." Regarding the material character of the protoplasm, he writes—"Under whatever disguise it takes refuge, whether fungus or oak, worm or man, the living protoplasm not only dies and is resolved into its mineral and lifeless constituents, but it is always dying, and, strange as the paradox may sound, could not live unless it died." This is sufficient for my purpose. *Evolution is the development of man, who is nothing but matter, from a nucleus which is nothing but matter.* To use his own words—"Most undoubtedly the terms of the propositions are distinctly

materialistic." Still the Professor asserts that he is not a materialist, for he believes materialism to involve grave philosophical error. I must now examine his mode of extricating himself, in order to see whether the materialistic propositions of evolutionism do not necessarily teach materialism, or "grave philosophical error." He tries to extricate himself by denying the reality of either matter or spirit. His words are—"Matter and spirit are but names for the *imaginary* substrata of groups of natural phenomena." Again: "In itself it is of little moment whether we express the phenomena of matter in terms of spirit, or the phenomena of spirit in terms of matter." This notion, that there is neither matter nor spirit, he repeats in a variety of forms. Need I urge the utter impossibility of thinking that *phenomena* alone exist in this world? That extension is the extension of nothing. That resistance is nothing resisted by nothing, or is non-resistance. That consciousness is consciousness of nothing by no one, or is non-consciousness. He, however, speaks of *our* consciousness. But who are we? We are "imaginary" only. All this is no doubt very absurd, but the absurdity is not mine, but that of our lecturer, who saves himself from materialism by the denial of all substantial existence, including his own. Regardless, however, of all that he says in this strain, and in direct contradiction to it, I find him stating that the history of science means "the extension of the province of what we call matter and causation, and the concomitant gradual banishment from all regions of human thought of what we call spirit and spontaneity." That is, there is in reality neither matter nor spirit; or if there be, we know nothing about them; and yet they are so antagonistic that the extension of the one involves the banishment of the other. We may safely say that Professor Huxley has utterly failed to extricate himself by this series of contradictions from the "materialistic slough" into which he plunged his hearers. Evolutionism,

therefore, or the hypothesis that a material man may be evolved from a material atom, is materialism, without any possibility of escape.

What are the facts of consciousness to which this is opposed? It is opposed to consciousness of self. I am conscious of myself as existing, not of myself as a thought, or as a feeling, but as a person who thinks and feels. I do not say I am thought, but, I think. This is personality. I am also conscious of myself as existing continuously. I abide amid all mental moods and all material changes. However frequently the matter of the body may be altered, we are conscious that we are the same identical persons still. The body does not remain identically the same for two successive hours; matter is being continuously added to it, and as continuously being abstracted from it, so that in a period of about seven years it is supposed to be wholly renewed. But *we* do not thus come and go—we do not suffer diminution and increase. The soul remains intact, and unchanged in substance, amid all the material fluctuations by which it is surrounded. The teaching that atoms leave their impressions as legacies to other atoms falling into the places they have vacated is contradictory of the utterance of consciousness, and is therefore false; but it is the teaching necessitated by evolutionism—consequently the hypothesis is a false one.

We are also conscious of knowing both matter and spirit. This is denied by many, who say that we know nothing but phenomena; that we can know the quality of a thing, but not the substance of a thing—or that we do not know the thing *in itself*. But what is the meaning of these phrases? If it be meant that we do not know the substance *apart* from its qualities, I grant it—how could we? How could I know an apple apart from all the qualities of an apple, or mind apart from all the qualities of mind? But if it be meant that we do not know the substance *by* its qualities, I deny it. “We

never know quality without knowing substance, just as we cannot know substance without knowing quality." By one set of qualities we know one substance, which we call matter; and by another set of qualities, differing in every particular, having nothing in common with the former, we know another substance, which we call spirit. Evolutionism, contradicting this by the affirmation that we neither know matter nor spirit, or else know matter only, must consequently be false.

They are also at variance on the subject of causation. In the words of Professor Bain, "To express causation we need only name one thing, the antecedent, or cause, and another thing, the effect; a flying cannon shot is a cause—the tumbling down of a wall is the effect." Professor Huxley writes—"The notion of necessity is something illegitimately thrust into the perfectly legitimate conception of law." This is quite in accord with Bain, who ridicules the word power. Causation, therefore, is only a happening. There is no necessity for the happening, and nothing to produce it, only somehow it generally does happen. The cannon ball has no power to tumble down the wall, there is no necessity for the wall to fall, only it just happens to fall at the right moment. Force seems wholly lost sight of. Antecedent, or happening before, is cause; consequent, or happening after, is effect, we are told. Day is antecedent, night is consequent; does day cause night? The rising of one star is antecedent, the rising of another is consequent; is the rising of the former the cause of the rising of the latter? This account of causation is in fact a denial of it, for it is impossible to think of cause without believing that it has some more relation to its effect than mere frequently-observed coincidence; and coincidence is not causation. I am glad to be able to add, in confirmation of what I say, a quotation from one who is not a professed philosopher, but a leader in the world of science, Dr. Tyndall. His words will have all the more weight, because he is not



working out any particular theory, but expressing those irresistible convictions which he has in common with every human being. He writes—"The scientific mind can find no repose in the mere registration of sequences in nature. The further question intrudes itself with resistless might, Whence comes this sequence? What is it that binds the consequent with its antecedent in nature? The truly scientific intellect never can attain rest until it reaches the *forces* by which the observed succession was produced."

The explanation of law given by Professor Huxley is equally fallacious; for, according to him, the *statement* that "unsupported stones fall to the ground" is called a law of nature. But how can a statement of facts be a *law*? I do not think a single human mind can rest satisfied with such bald statements as these, for every utterance of our consciousness rises in antagonism against them. The youngest child has the intuitive conviction that every change has been caused by some person or thing able to produce it, and it manifests this conviction by searching for that person or thing. But a knowledge of the uniformity of nature, which is erroneously said to produce the notion of causation, is the result of long observation, and is distinct from the idea of causation; for if no uniformity were observed we should still believe that all changes were caused, and that too by a conscious agent. The convictions of consciousness always lead us back to mind as the real cause. In the case of the cannon ball, we ask who started it, and we consider him as the cause of the wall having been thrown down, and the flying ball only as the condition under which it fell. And as regards law, we know that it is not, and cannot be, a series of regular phenomena, or a statement of them. This series may be an *evidence* of law, but is not the law itself, any more than the successive arrests of thieves is the law against theft. Only one affirmation harmonises with our primary conviction,

and that is, that "*law is a rule of action for an agent*. It can exist only as a thought in the mind of an agent, constituting a rule in harmony with which he may choose or refuse to exercise his power" (Rev. J. Moore). Evolutionism asserts that causation is but a series of non-necessary, but perhaps regularly successive, happenings, and law is the statement of them. But consciousness affirms that we have an intuitive conviction—a conviction not conditioned on observation or experience, but inherent and irresistible—a conviction which "may be denied in words, but which is always mentally admitted by every sane mind"—that "everything which begins to be has been produced, originated, or determined to exist by some intelligent being." Once more, evolutionism being contradictory of consciousness, evolutionism must be false.

Nor does it fare better when we contrast its dogmas with the phenomena of will. To quote again from Professor Huxley—"It may be truly said that the acts of all living things are fundamentally one." The only qualification he makes to this is, that the protoplasm of plants can manufacture fresh protoplasm out of mineral compounds, whereas animals are obliged to procure it ready made. Man consequently has no more actual control over his actions, his words, his thoughts, than has a tree over the putting forth of its leaves. The one, according to this teaching, is nothing but antecedence and consequence; so likewise is the other. No power to arrest an action, or to originate it; no power to prefer one action to another. Man is but a stage over which the actors antecedence and consequence pass. "As surely," he again writes, "as every future grows out of past and present, so will the physiology of the future gradually extend the realm of matter and law, until it is co-extensive with knowledge, with feeling, and with action." It seems scarcely credible that at this day men could be found teaching that a man knowing

or feeling, has no power to originate action; that his knowledge of suffering does not produce sympathy; that sympathy, if it accidentally should be present, has no power to suggest assistance; that if these things happen to be following each other, it is merely as two or three stars follow each other in the heavens, or as night follows day!

“The speciality of voluntary action,” writes Professor Bain, “as compared with the powers of the inanimate world is, that the antecedent and consequent are conscious or mental states.” We cannot be sufficiently thankful to Professor Bain for this concession that there is a difference of any kind between the voluntary actions of a man and the involuntary actions of a tree. Still we do not see how he could easily have denied the only distinction he admits, which is, that we are conscious of our successive states, while the tree is not! With this exception, however, all actions of all beings, animate and inanimate, are on a level. No more right to praise a man for a noble action than a flower for a beautiful tint or perfume! No more right to censure a man for vice, than an engine for breaking down! When Professor Bain, or some disciple of the same school, invents a new dictionary, for one will soon be needed by them, they must not forget that the meaning of the word voluntary is—conscious, or mental. It certainly is a novel meaning, and conveniently oblivious of the derivation of the word; but what of that? Surely if animals may change their forms to adapt themselves to circumstances, it is not too much to ask that words may do the same. Need I point out how utterly this is opposed to every utterance of consciousness. If we are conscious of anything, it is that we can originate and determine the existence of effects, which, but for the exercise of our power, would have had no existence. Everyone here is conscious of the power to will his continued presence in this room, or to will his absence from it. I was conscious of the power to choose

whether I would write this paper, or abstain from it. But it is utterly futile to argue this point, for whatever the exigencies of theories may demand, the fact remains the same to all—a consciousness of freedom. Even while Mr. Bain argues against it he admits it, when he says: “For the *fact* of liberty we have immediately or mediately the evidence of consciousness.” He urges that we cannot explain the fact, but are constrained to admit its existence. Evolutionism, then, necessarily denies all choice, preference; origination, or freedom of will; consciousness affirms them, therefore the former is again proved false.

Closely associated with this is the question of morality, but into that I cannot now enter, but shall content myself with remarking that evolutionism, in denying freedom, necessarily denies responsibility and morality; because, apart from freedom, there cannot be responsibility. But consciousness affirms the existence of a right and a wrong; it does not determine in all cases what is right or wrong, but merely that there exists such a quality in actions, and in this point also proves the former to be erroneous.

But even did not consciousness put the hypothesis out of court, I would still object to its being offered for general acceptance, on the ground of its incompleteness and acknowledged incompetency to explain appearances; for, as Professor Huxley correctly remarks, “a true physical cause is admitted to be such only on one condition, that it shall account for all the phenomena which come within the range of its operation.” The supposition of this hypothesis is that, to speak of the last step only, man has been developed from the family of apes. But what does he say on the page preceding that from which I have quoted? “In the present creation at any rate, no intermediate link bridges over the gap between *Homo* and *Troglodytes*.”

But, according to the supposition, between known *homo* and

known *troglydites* there must have lived for many ages intermediate forms—the inconceivably gradual development of the monkey into the man. Where are they? Not a living specimen, or the bone of a dead one. The lower forms are still existing, but they ought to have been displaced by the more perfectly developed ones. These latter, whose higher developments were to have enabled them to fight the battle of life successfully, that could not otherwise be fought, else no selection would have been necessary, these have been so completely conquered, that not only have they been driven from the battle-field, but they have not left a trace behind; whereas those poor unfortunates who were not naturally selected are fighting the battle still, and seem able to fight it for some time longer.

But this fact—for fact it is—is wholly inconsistent with the theory. “The very process of Natural Selection,” says Mr. Darwin, “constantly tends, as has been often remarked, to *exterminate the parent forms, and the intermediate links*” (187). And again, “All the intermediate forms between the earlier and later states, *as well as the original parent species itself*, will generally tend to become extinct.” I hold, therefore, most strongly that the continuous existence of the non-selected, or lowest forms, with the total disappearance (supposing them even to have existed) of the selected, or higher forms, is fatal to the supposition of continuous evolution by Natural Selection or by any other means.

The records of geology are equally hostile, for there the gaps are found most abundantly; but, alas! no intermediate links are found. And, speaking of the non-discovery of fossiliferous rocks older than the Silurian, which, if this theory be true, must have existed, Mr. Darwin himself says: “The case at present must remain inexplicable, and may be truly urged as a valid argument against the views here entertained”—

(p. 334, 3rd edition). Mr. Darwin is elsewhere still stronger in his utterances against himself, when he writes: "A difficulty has been advanced, that, looking for the dawn of life, when all organic beings, as *we may imagine*, presented the simplest structure, how could the first steps of advancement in the differentiation and specialization of parts have arisen? I can make no sufficient answer, and can only say that, as we have no facts to guide us, all speculation on the subject would be baseless and useless."

Again: "Undoubtedly, many cases occur in which *we cannot explain* how the same species has passed from one point to another." "It would be hopelessly tedious to discuss all the exceptional cases of the same species now living at distant and separated points; nor do I for a moment pretend that *any explanation could be offered of many such cases*" (pp. 383-84).

I will give a very few passages as illustrations, however, of the mode by which he does sometimes attempt to explain transitions.

"We do not see the transitional grade through which the wings of birds have passed; but what special difficulty is there in believing that it might profit the modified descendants of the penguin, first to become enabled to flap along the surface of the sea, like the logger-headed duck, *and ultimately to rise from its surface and glide through the air?*" (p. 329).

"The tail of the giraffe looks like an artificially constructed fly-flapper; and it seems at first incredible that this should have been adapted for its present purpose by successive slight modifications, each better and better, *for so trifling an object as driving away flies*; yet we should pause before being too positive even in this case, for we know that the distribution and existence of cattle and other animals in South America absolutely depend on their power of resisting the attacks of insects; so that individuals which could by any means defend

themselves from these small enemies would be able to range in new pastures, and thus gain a great advantage. A well-developed tail having been formed in an aquatic animal, it might subsequently *come to be worked in for all sorts of purposes*—as a fly-flapper, an organ of prehension, or as aid in turning, as with the dog” (p. 215).

“All physiologists admit that the swim-bladder is homologous, or *ideally similar*, with the lungs of the higher vertebrate animals;’ hence there seems to me to be *no extreme difficulty in believing* that Natural Selection has actually converted a swim-bladder into a lung. On this view it may be ‘inferred that all vertebrate animals having true lungs have descended by ordinary generation from an ancient prototype, OF WHICH WE KNOW NOTHING, furnished with a floating apparatus or swim-bladder’” (p. 210).

The following is his explanation of the beauty of the birds of paradise, peacocks, &c. :—

“The birds of paradise and some others congregate, and successive males display their gorgeous plumage, and perform antics before the females, which, standing by as spectators, *at last choose the most attractive partner*. Sir R. Heron has described how one pied peacock was eminently attractive to the hen birds. *I can see no good reason to doubt* that female birds by selecting, during thousands of generations, the most melodious or beautiful males, according to their standard of beauty, might produce a marked effect. Thus, then, I believe that when males and females of any animal differ in structure, colour, or ornament, such difference has mainly been caused by sexual selection; that is, individual males have had, in successive generations, some slight advantages over other males in their weapons, means of defence, or CHARMS, and have transmitted these advantages to their offspring” (p. 94). And when all explanation fails him, and he does not wish to confess ignorance,

he calls in the aid of faith, as in the following sentences, which are almost numberless in his writings. "In order that any great amount of modification should in the course of time be produced, *it is necessary to believe* that when a variety has once arisen, it again varies, after perhaps a long interval of time, and that its varieties, if favourable, are again produced, and so onwards" (p. 89). "I see no great difficulty in *believing*." "We must *believe*." "It is necessary to *believe*," &c., &c.

But how is it that Professor Huxley can believe in Darwinism, while it leaves so many phenomena unexplained, is in contradiction to so many other phenomena, and calls generally for so large an amount of faith, or rather credulity, and yet be consistent with his own statement, "that a true physical cause is admitted to be such only on one condition—that it shall account for *all* the phenomena which come within the range of its operation?" Only on the supposition that what he accounts an explanation of phenomena, others account an evasion; and that this really is a fact, the following quotation will, I think, establish:—

"Brought face to face," he says, "with these blurred copies (the apes) of himself, the least thoughtful of men is conscious of a certain shock, due, perhaps, not so much to disgust at the aspect of what looks like an insulting caricature, as to the awakening of a sudden and profound mistrust of time-honoured theories and strongly-rooted prejudices regarding his own position in nature, and his relations to the under-world of life." In plain English, when I look at a monkey with disgust, I am not, in fact, disgusted with the monkey, but with myself for believing in the first chapter of Genesis! This explanation may satisfy the intellect of Professor Huxley; but, if so, I hope he is unique in the exquisite simplicity of his conceptions.

This inability to explain phenomena is equally apparent, whatever form of evolution we adopt. If we prefer that of



Murray, we do not in any way improve our condition, for he writes—"The origin of marine animals by descent, in other words, their derivation or parentage, has always appeared to me one of the most difficult problems to solve. How a terrestrial animal could ever give birth to a seal or a whale, how it could ever nurse or feed it, naturally makes us pause and wonder. The very first and most essential qualification of a common medium seems wanting; when we come, however, to think of the steps and processes by which this creation may have been affected, we find ourselves wholly at sea, without compass or rudder. We do not even know at which end to commence our speculation. Were the aquatic animals descended from the terrestrial or the terrestrial from the aquatic? Although the probabilities seem in favour of the former, there is no fact known which shuts out the possibility of seals having been in existence before the carnivora. The latter is the most natural theory, because it stands to reason that the exceptional form should be derived from the normal rather than the reverse; although if pressed for a reason why one should be considered more normal than the other, I must cordially confess that I have none to give, except the very lame one, that now the one is more numerous than the other." He, however, seems to decide that the seal was the descendant of the bear; but as the polar bear mostly feeds on seals, it must have been rather at a loss until it had some of its own descendants on which to stay the pangs of hunger. But on Mr. Darwin's system, the whale is the descendant of the bear! Perhaps it produced both. When we turn to Dr. Carl Vogt we find equal confusion.\* He writes—"From the Vertebrata to the Invertebrata I can find no guide, nor have I any idea by what adaptation or intermixture intermediate forms can arise, which may lead from

\* Quoted from an able work against Darwin by a Graduate of the University of Cambridge.

the Mollusca and Articulata to the Vertebrata. It is, moreover, well known that the lowest Vertebrate we are acquainted with, the *Amphioxus Lanceolatus*, is, as regards the development of all its organs, so far behind that of the higher Mollusca and Articulata, that the transition from one of these better-developed types into that of this Vertebrate would include a series of retrogressions from which, nevertheless, *is said* (by Darwin) to have issued the beginning of a structure capable of the highest development. In other words, I see here the Vertebrate type, with man as its highest development, commencing with an animal which, as regards the perfection of its organs, is excelled by most worms, and much more so by the Mollusca and Articulata, which in some instances attain the highest development of which the structural plan of the Articulata is capable. *I should thus find myself face to face with an insoluble enigma*, if I were not permitted to recur to the conclusion I have arrived at, namely, the assumption of an *original difference in the primary germs from which the animal kingdom has been developed.*"

In the August number of the Journal of Botany is an interesting paper by Professor H. R. Göppert, translated from the Nova Acta of the Imperial German Academy Naturæ Curiosorum.

The title of this essay is "On Aphylostachys, a new genus of fossil plants of the Calamites group, and on the relation of the Fossil Flora to Darwin's Theory of Transmutation."

The learned Professor first notices Dr. Hooker, who, in his "Tasmanian Flora," has adopted the Theory of the Transmutationists. Nevertheless, Dr. Hooker, it seems, does not find much to encourage him in his floral studies. "He holds that, regarded from the classificatory point of view, the geological history of plants *is not so favourable* to the Theory

of Progressive Development as that of animals, because the earliest ascertained types are of such large and complex organization, and because there are no known fossil plants which can certainly assume to belong to a non-existing class, or even family, and none that are ascertained to be intermediate in affinity between recent classes and families."

Dr. Hooker also acknowledges the absence of genuine monocotyledonous plants in the ancient Flora; and all this from an advocate is a serious admission.

Professor Göppert holds that "our knowledge of fossil plants is amply sufficient to supply decided proofs" that there are no genetic relations in the geological history of plants such as the Transmutationists would require. He urges, also, that a high importance must be accorded to those species of plants and to the more numerous animals which have passed from the Tertiary period to our own time, and still more to those which have existed unaltered through *three* periods, as the Neuropteris Lostici, which ranges from the Lower Coal formation, through the Upper to the Permian. "If we add to this," says the Professor, "the numerous families and genera which have remained unaltered since their first appearance, so that the same characters can be used for the definition of the different species that occur in all the geological periods, *it is difficult to perceive where the mutations are to be found* which the different species are said to have undergone."

The Professor then urges "that in the very earliest times of the land Flora certain groups of plants—for instance, the Ferns—appear in a degree of perfection, previous to the gradual development of which an enormously long range of time and numberless antetypes (which, however, are entirely wanting) would be required in the Darwinian Theory." Besides this, some groups become extinct at very early geological periods,

leaving to subsequent periods only faint remnants or indications of their former degree of perfection.

A few orders and families attain, on their first appearance, a high degree of development, and retain this down to the present time; this applies to *the oldest family*, the Algæ. Other orders, as, for instance, the Coniferæ, which began with the Abietinæ as early as the Palæozoic period, appeared in such diversity of form and high internal structure *as in no subsequent period*.

The Cycadæ also, of the Permian formation, attained an organism of a higher stage of development than is observed in any Cycad before or since that time.

Quite isolated are the Sigillariæ, and even without any further evidence they are quite sufficient, says the Professor, to support the dictum that certain forms were created only once, in certain geological periods, without the creative power being solicitous, as Darwin everywhere assumes, to ensure their further development.

He then observes that the vegetation of our globe commenced with Algæ, "but one would make a mistake in supposing that the lowest forms appeared first and isolated." This is by no means the case, for with the lowest unicellular Algæ, the higher Floridæ co-existed, and even a Callithamnion.

The Fungi are of a lower grade than the Algæ, and we meet with them first on Ferns of the Coal period. The other cellular plants are entirely wanting in Palæozoic strata; they make their appearance only in the Tertiary period, and perhaps they have not existed earlier.

"In a strict succession, according to the Theory of Progressive Development, there is here a serious break-down."

All the lower stages of the vegetable kingdom, cellular plants, higher Cryptogams, Monocotyledons, and even Gynospersms, already existed in the Palæozoic period, but the

appearance of genuine Dicotyledons has still to be discovered. In the Cretaceous formation, however, genuine leaf Dicotyledons appear, and there is from that time a constantly increasing approximation towards the Flora of the present time; and this proceeds until, in the Tertiary period, the balance is turned, and the living forms predominate.

“If, as I believe, nothing can be said against the correctness of these views—based, as they are, not upon conjecture or mere examination of external appearances (most deceptive in fossil plants), but upon internal structural differences—one is at a loss to comprehend how all these very different forms can have descended in a direct line from each other, and, as a necessary consequence of such a theory, from one primordial form; or how they can have been developed into the present diversified form of life by undergoing a constant mutation of hereditary peculiarities, by individual variations, by struggles for existence, and by Natural Selection—the principal dogmas of the Darwinian Theory.

“Under these circumstances, it will be granted that the doctrine of Transmutation receives no more support from Fossil Flora than it does (as Reuss has shown most convincingly) from the Fossil Fauna.”

But I object to these hypotheses on still more important grounds. I object to them because, being at variance with man's nature, they are opposed to man's progress. Professor Huxley rightly observes that “we live in a world which is full of misery and ignorance, and the plain duty of each and all of us is to try and make the little corner he can influence somewhat less miserable and somewhat less ignorant than it was before he entered it.” This is all most true, but how does the Professor propose to lessen this misery. “To do this effectually,” he observes, “it is necessary to be fully persuaded of only two beliefs—the first, that the order of nature is ascertainable by

our faculties to an extent which is practically unlimited; and the second, that our volition counts for something as a condition of the course of events!" Had an opponent of the Professor written this I would have thought it a caricature, but as he says it himself we are bound to accept it as his deliberately expressed opinion. Yet surely it seems the veriest mockery of woe, that the possession of these two beliefs will suffice to drive back misery and ignorance, and that *effectually*; that is, altogether and for ever! And what are these two so potent beliefs? One is, *that the order of nature is ascertainable*. I, for example, see want, squalor, and poverty requiring relief. I know a man who has the means of relieving it. I go and appeal to him by trying to persuade him—of what? That it is his duty as a wealthy man to aid his poorer brother? Am I to appeal to his sympathies, and try to arouse his compassion for the sorrowing? No, I am to try and convince him that the order of nature is ascertainable! But if he be already convinced of that, then I am to show him, further, that his volition will count for something as a *condition* of the course of events; or, in other and simpler words, that a certain state of mind, if it happen to be present, will probably be succeeded by a certain action, and this action by some new happening beyond himself. And these two beliefs are all that are necessary to enlighten and make happy—the world, according to the express teaching of Professor Huxley! Can it be for one moment maintained that every man having these beliefs is effectually doing what he can to influence his "little corner?" If not, it is at once manifest that some other belief than these is needed. That system is unphilosophical and inimical to the best interests of man that would banish the conceptions of duty, obligation, and moral responsibility; would prevent the philanthropist from appealing to a man's sympathies or his conscience, or from enforcing his appeals by a reference to a moral governor. Professor Huxley would reform the world

by a belief in the possibility of a knowledge of the sequence of events, the philosopher by the principle "Thou shalt love the Lord thy God with all thine heart, and thy neighbour as thyself," asking men as moral agents, "What doth the Lord require of thee but to do justly, and to love mercy, and to walk humbly with thy God."

The hypothesis of evolution therefore must be false, whichever supposition we adopt of the only two that are possible. We may suppose the existence of only one substance; some may believe it to be matter, some to be spirit; but if there be evolution there can be only one substance, of whatever sort it be. From one it starts, and with the same it must end. But this is contradicted by the phenomena or facts of consciousness, and therefore must be false. We may, however, adopt the other supposition, that there are two substances, matter and spirit, as indeed seems most inconsistently to be done by many disciples of this school; but then this gives up *evolution*, for if we start with *matter*, where does the *spirit* come from? Spirit cannot be evolved from matter. One *form* of matter may possibly be evolved from another form of matter; but from the substance matter cannot be evolved the essential distinct substance spirit. If, therefore, spirit be present in man, it must be an *addition*, and consequently the evolution of man from protoplasm or primordial germ *could* not take place, and so the hypothesis, being contradictory of the phenomena, is false. It will not do to say that nothing is known of these substances, that phenomena alone are studied. All the phenomena of the sentient being are not equally treated. There are the phenomena of consciousness, and I demand that they receive as full, as searching, and as fair an investigation as those of the growth of bones, muscles, and nerves. Men will persist in considering the study and explanation of conscience, memory, and will, as im-

portant as the study of the variations in the forms of pigeons, dogs, or apes.

Philosophy, therefore, asserts her right to a place on this biological platform, not for the purpose of curbing the exertions of naturalists, nor of dimming the lustre of true discoveries, nor of preventing the formation of well-considered theories—far from it. She asserts her authority in the interests of science, of morality, and of truth, that she may banish fallacy from reasoning, extravagance from conjecture, and prejudice from thought. She would, in a word, take lovingly by the hand every student of every page of the volume of the universe, and lead them to that throne where all can kneel in harmony together and say “Our Father.”

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## DISCUSSION.

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I had better mention, for the information of those persons who are not familiar with the arrangements of the British Association meetings, that there are "Sections" for the separate branches of Science; as the Mathematical, the Chemical, Geological, &c. The preceding Paper was read in the Biological Section. After each communication is read, it is customary for the President to invite the members present to make any remarks on it, or discuss it if they wish. My paper having been read, the President, Professor Busk, "observed that the paper, however eloquent, was hardly within the scope of the Biological Section, and what it had to do with Darwinism he was at a loss to perceive. It was easy to set up a kind of idol, and knock it down, calling it Darwinism. But really it had nothing to do with a theory of Darwin's."

The President, when he stated that it "was hardly within the scope of the Biological Section," must surely have forgotten the meaning of biology, which is the science of the facts of life. I had been treating of facts of consciousness. If facts of consciousness are facts of life, then my paper was strictly biological. The further objection that "it had nothing to do with a theory of Darwin's" was equally fallacious. I had defined Darwinism as the evolution of a material man from a material basis. If this definition were incorrect, it was his duty to have pointed out the error; but if it were correct, then all my deductions

followed necessarily. All the details by which the monad became the man were apart from the point I was discussing. It matters not to the dual nature of man whether he is said to have the ape, the horse, or the whale for his grandfather. I was combating the fundamental principle of all evolutionism. But no doubt Professor Busk had not read much about the phenomena of consciousness in the works of Darwin, and being more familiar with physiology and anatomy than with philosophy, could not see how there could be anything philosophical about Darwinism, and perhaps he was right. At the conclusion\* of the discussion he remarked that not any one of the three authors had "shown any knowledge of what the Darwinian theory really was. The general notion that it taught that man was descended from the apes was quite false, since it did nothing of the kind."

This statement did not astonish me more than it did Professor Huxley himself, I think, who most assuredly teaches the "general notion." I had his work "Man's Place in Nature," beside me, and the frontispiece of that consists of five skeletons—the gibbon, orang, chimpanzee, gorilla, and *man*. Mr. Busk must have made some great mistake, or else he is certainly alone in his belief.

Professor Huxley was the next speaker:—

"Of the last paper read, he said he trusted he should deal with it properly; certainly he should not endeavour to speak in that tone of brotherly love which so very frequently in the hands of a Doctor of Divinity took a shape so different from the original emotion, and which led one to doubt sometimes whether the first D.D. might not have been Cain, and the first man of science Abel."

The Professor commenced his reply by dragging in my theo-

\* Two other Papers were read against Darwinism at the same sitting, one by the Ven. Archdeacon Freeman, and the other by the Rev. F. O. Morris, but I confine my defence to what was said against myself.

logical character for the express purpose of insulting theology. I had reasoned only as a philosopher, and not as a theologian, and as a philosopher I ought to have been answered. If he will persist in voiding his spleen against theology and theologians, men will think that the only meaning his comparison will bear is, that he, as a descendant of Abel, not being competent to stand before the D.D. as a descendant of Cain, tries to avenge the completeness of his defeats by the virulence of his invective.

“Concurring with Dr. M'Cann that philosophy was of paramount importance, he demurred at the assumption that in the meetings of the British Association there was any divorce between philosophy and science. Science divorced from philosophy was no science at all. In Dr. M'Cann's paper philosophy was most conspicuous by its absence. It did not betray an acquaintance with the great problems of philosophy that have been discussed by the men of the greatest sense, and he protested in the name of philosophy against the shallow caricature of philosophical doctrine to which they had been listening. If Dr. M'Cann had read the great English writers on philosophy, he would not have represented conclusions at which the pious and orthodox Bishop Berkeley had arrived, as tending to atheism and infidelity. Why did not Dr. M'Cann know what every school-boy knew, that it was Bishop Berkeley who denied the existence of substance and matter, and that his argument really cut against that excellent and orthodox divine?”

Philosophy conspicuous by its absence in my paper! A weighty objection to be brought against anything entitled “Philosophical Objections.” But is it true, or what does it mean? I had been founding my arguments on the basic principles of all philosophy, the veracity of facts of consciousness, those principles that underly and ramify through every system, and without which philosophy were impossible, and yet philosophy is absent! The only way I can account for such a random assertion is, that being alarmed at the introduction

of facts, in his terror he developed them into some unphilosophical fictions, and then made the mistake of attributing them to me. But beyond the deep a lower depth. "It did not betray an acquaintance with the great problems of philosophy," &c., we are told. Professor Huxley is quite correct here. My paper neither *betrayed* an acquaintance, nor manifested one, with the great *problems* of philosophy. I had nothing to do with problems, but with facts. Doubtless the Professor would much rather I had introduced problems than facts, as they are more easily played with, the latter being stubborn a little; but I must confess I studied the necessities of my argument, rather than his preferences. The "great problems of philosophy" are very familiar acquaintances; but I did not "betray" them by an introduction on the present occasion, because they would not have been of the slightest use to me. "Shallow caricature of philosophical doctrine." The accusations are deepening in intensity—and folly. Where are these caricatures? He dared not deny any one doctrine I stated. The only one he named was assented to, and yet he talks about caricature! Had he condescended to say which of the doctrines had been caricatured, I might have dealt with it more explicitly; but he evidently thought "discretion the better part of valour." Instead of replying to my arguments, he told us, with much uncalled for self-laudation, how many books on philosophy he had read, and how learned he was. If so, these caricatures must be familiar to him, as they are the philosophical creed of our best philosophers. How very convenient he must find words to be—when he has nothing to say.

He next introduces the "pious and orthodox Bishop Berkeley." Berkeley must be a favourite; it is rare that he grants these qualities to a D.D. It is therefore quite possible for an "excellent and orthodox divine" to be descended from Cain. But I am told that I represent conclusions at which Berkeley

arrived "as tending to atheism and infidelity." I have never done anything so foolish as to charge any man with atheism for denying the substantial existence of matter. This is an exceedingly convenient, but not exceedingly honourable, way of evading a charge. I did charge the Professor with atheism; I gave him my reasons for doing it. Those reasons were either true or false; if true, my accusation was also true; if false, why did he not expose the falseness, if he could, instead of trying to hide himself beneath the bishop's lawn? Huxley flying, and that too under false pretences, to a D.D. for refuge must be an edifying sight to his admirers.

"He charged Dr. M'Cann in his argument on consciousness, that he was reviving the Cartesian doctrine, which was exploded."

Reviving the Cartesian doctrine *Cogito, ergo sum!* I never alluded to it, either directly or indirectly. What I said was, that every man was conscious of his own existence. Is that doctrine exploded? Are we not conscious of our own existence? What can he mean by such wild assertions? Could he mean anything, or are his charges only sound and fury—signifying nothing?

"In the presence of a mixed assembly it was very easy to make an abstract subject appear ridiculous. If he were to tell them that Euclid laid down that the three angles of a triangle were equal to two right angles, and were to ask—was not that a ridiculous supposition; and if he were to put it to them in a properly modulated tone, and with a sufficient infusion of brotherly love—would they not think Euclid wrong? Some of the passages in the Doctor's address which excited the hilarity of the meeting, struck him in that way."

Here the Professor is quite correct. It is easy in the presence of a mixed assembly to make an abstract subject appear ridiculous, although what "brotherly love" has to do with Euclid, it

would be difficult to surmise. But what has all this to do with *mé*? I was not trying to make an abstract subject ridiculous. That which I exposed was his foolish manner of treating a very practical subject—the alleviation of the world's ignorance and misery. If I misrepresented any of his statements while expressing them in other words, why did he not expose it? But if the audience laughed at his doctrine the moment they understood it, the blame must lie wholly at the door of him who taught it.

“No doubt the sole foundation of certainty that they had was in consciousness. No one denied that. But beware how you step one line or iota beyond the limits of that plain proposition. It was one thing to say that of consciousness they were absolutely certain, and another thing to say that any conclusion drawn from consciousness was certain. If, for instance, he said he had a particular feeling of brotherly love, of the feeling he was certain, but his consciousness might be at fault in regarding it as really brotherly love. If they looked at a marble placed before them, they were conscious that there was but one, but if they crossed their fingers over the marble, consciousness would report that there were two, in contradiction of the fact.”

This paragraph deserves attention, as it must have required considerable ingenuity to compress such contradictions into so small a compass. Firstly, he assents to my fundamental position, which was the veracity of consciousness. So he has at last found some philosophy in my paper, which was not “conspicuous by its absence.” He next asserts that in which I perfectly agree with him, that we must beware how we step beyond that proposition. I had stepped beyond it and asserted that certain mental states were facts of consciousness. His duty was either to grant that my steps were truly taken, or else to show that what I assumed as facts were not facts, and thus overturn my whole train of reasoning. But not one syllable did he utter in

opposition to what I had stated. He shirked the whole subject in a manner that was insulting to his opponent, and his audience. It was the veriest trifling to bring forward his two illustrations of love and marbles, to prove what no sane man ever denied, that *conclusions* drawn from consciousness might be false, and which had as much connexion with my subject as brotherly love has with two marbles. But even in these useless illustrations, he contradicts himself hopelessly; for after having asserted that consciousness was true, he here asserts that consciousness would report a fallacy. Almost in the same breath he states that consciousness is absolutely certain, and yet that it tells lies! Had he said that we are conscious of a *belief* in the existence of two marbles, he would have given the fact and saved his own consistency. But perhaps his knowledge of philosophy is so profound, that a simple distinction of this kind was unworthy his notice.

“In the same way that Darwinism had been caricatured by Dr. M'Cann, his (Professor Huxley's) opinion had been caricatured, he was going to say, only one must understand opinions in order to caricature them. He had shown a strange want of appreciation of his (Professor Huxley's) line of arguments, and had omitted passages which really expressed his opinions. Dr. M'Cann ought to have read what he had said in print—that in his opinion the problem of free will was one that must remain beyond the limits of the human mind. With that passage in print, it was not competent for any man to say that he was a necessarian or a materialist. For the work in which that passage occurred some of his friends had said that it was so orthodox he ought to receive the best gift it was in the power of the Church to bestow.”

When any one enters into controversy with such as Professor Huxley, he must be prepared for a certain amount of abuse and misrepresentation instead of refutation; but in the first sentence of this paragraph he has so far passed all usual limits, that self-

respect forbids me descending to the same level. I would only remind him that vulgarity lowers the vulgarian, but no one else. What does he mean by saying that I "omitted passages which really expressed his opinions." Does he mean that the passages I quoted did not express his opinions? If so, why did he write them? How am I, or any one, to know which passages express his opinions, and which do not? If he desire to be an honest teacher he should never write passages that do not express his opinions. Again, I ask, why did he not expose any unfairness of which I might have been guilty, or supply the passages I ought to have read? I had his lecture beside me, and would gladly have given it to him for the purpose. He often accuses, but never adduces one tittle of evidence in support of his accusations. He then refers to his article against Comte which I had read, but even with that in print—having his lecture on the "Physical Basis of Life" before me—I had no alternative but to say that he was both a necessarian and a materialist. And this is his whole reply to my paper, only one of all my points even touched, and that for the purpose of agreeing with it! And this is what is called by the *Pall Mall* getting the better of it in argument, and characterised by others as a castigation, &c.! A more miserable failure could not well be conceived. If the papers dare not give the clergy fair play, they at least should be a little truthful. As for the Professor himself he is perfectly consistent: he is acting in accordance with his openly avowed principles, when he substitutes wit, &c., for reasoning; for, in his address to the Geological Society of London, he maintained that it was quite allowable that when ignorant of the questions in dispute, to gain your cause if possible "by force of *mother-wit* and common sense, aided by some training in other intellectual exercises." A man who condescends to cover his ignorance or his error by wit when truth is at stake, is one who should be despised in victory, and



ridiculed in defeat. Such is Professor Huxley by his own confession. I now leave him with the advice to confine himself to those natural history observations in which he is undoubtedly a master, and relinquish the construction of hypotheses in which he is as undoubtedly a novice.

I very much regret that Professor Huxley has compelled me to attack him so severely, because he is a student of nature, a student of one volume of God's revelation of himself, and as such I would most gladly hail him as a brother, and wish him "God speed;" but when truths the highest and the holiest which man can rest on are assailed, I feel that I have no alternative but to lay aside all personal considerations, and do battle for those grand old verities which every man should hold dearer than his life.

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