In an after-dinner speech, when Mr. Huxley must have been in good humor, and certainly was not much less clear-headed than usual, he said,—

In the interests of fair play, to say nothing of those of mankind, I ask, why do not the clergy as a body acquire, as a part of their preliminary education, some such tincture of physical science as will put them in a position to understand the difficulties in the way of accepting their theories, which are forced upon the mind of every thoughtful and intelligent man who has taken the trouble to instruct himself in the elements of natural knowledge? In fact, the clergy are at present divided into three sections: an immense body who are ignorant, and speak out; a small proportion who know, and are silent; and a minute minority who know, and speak according to their knowledge.

And the last sentence has already become an aphorism.

Let us begin by making confessions. We have already learned something from such outspoken laymen as Huxley, and I suspect have a good deal more to learn. The results of the discussion upon the theory of evolution are but adding another testimony to the fact that theologians are generally incompetent to the treatment of such questions. As a rule we are unversed in exact science; we are not practiced in that minute observation upon which classification depends; we are not schooled in long and patient processes of thought. The ministerial profession is no longer sedentary. Its work grows more distracting from year to year. The demand of the pulpit is less for the studious than for the executive man. The people ask of him feasible plans of action, rather than scholarly interpretation. He must be well-spoken rather than well read. The clergyman is no longer a transcriber of manuscript, the chief maker of books, his study walls a great repository of the world's learning. Indeed, is it not observable that clergymen who write books nowadays put no indications of their business on the title-page? The sign of divinity has lost its sanction. The editions sell better without it.

What can be truer than that the questions of theology are no longer settled by theologians? The historian, the philologist, the naturalist, the expounder of social science, even the novelist,—these are really the men who are determining all those profound discussions concern-
Evolution and Theology.

ing cause, course, and consequence, origin, duty, and destiny, which agitate human thought. Nor need we ever hope to cope with these men, or parry the objections made to our time-worn and limping traditions, so long as we do not favor a more systematic, logical, and thorough training for the work of the ministry.

Surely there is no age of the past that we could wish to see reproduced. Last of all an age when all thought was subjected to scholastic forms, or its course marked out and limited by mere ecclesiastics. But, if we cannot control the thinking of our times, ought we not to fit ourselves better to comprehend it? How is the pulpit to maintain any intellectual rank among the people, if on every battle-field of science it joins the hordes of ignorance and superstition, to come out with the constant shame of demoralization and defeat? If the pulpit kept silent on matters it did not understand, daring to trust the truth to fight its own battle in that realm of mystery where so little can be known, sure that no harm could come from a temporary suspense of judgment, where the air is so thick with the smoke of contention, it were more to its honor. But it has no such modesty. It would be oracular though, as at Dodona, its utterances be but the lashing of a brazen caldron. It is in haste to draw inferences, and will leave no questions in abeyance. Inheriting the habit of dogmatism, it must give its opinion. And, once given, as we know, there was never a more pertinacious advocate.

Probably the proper work of the ministry is not exclusively intellectual or scholarly. Grant that goodness or piety, if you please, are higher requisitions. But we ask, with no little solicitude, is the religious teacher of to-day, with all his advantages of position, with all his means of culture, to have no perceptible influence upon, and make no permanent contributions to, the thought of the future? Is his office fulfilled by devoting himself to what is called philanthropic work? by seeking to supplement the State's neglect by founding charities, by leveling social inequalities, or narcotizing the hateful prejudices of caste? And then there is what is distinguished as "pastoral work," which brings the minister face to face with so much individual distress and need, mental and physical,—God knows how great is this burden and demand, and how poorly we meet it!—yet, do what we will or have strength to do in this direction, have we discharged all the reasonable obligations that even this generation lays upon us?

Grant that the apparent demand of the churches is for the bustling worker and showy talker, rather than for the steady thinker and well-read theologian. Grant that most of the theology taught in the
Evolution and Theology.

schools is poor preparation for any preacher; that the study of church Fathers and Hebrew conjugations has very remote application to the problems of to-day: yet shall we talk and act as though next to no preparation, after a good motive, is necessary for an entrance upon and prosecution of this work? Shall we make the large-minded, sound thinker an impossibility, or the rarest exception, in our profession? The substance of theological instruction may be poor, and the methods wrong,—I suspect many shortcomings of the church may be traced to that source,—but less education than the very utmost that any of us get, for any man who is to take part in the religious thinking of these times, must be looked upon as deplorable.

Let us talk about shortening the season of preparation when the pulpit ceases to fight science as the foe of religion, adopting that "incredible hypothesis that there are two orders of truth in absolute and everlasting opposition." Let us talk of less theological preparation when the pulpit betrays surer indications of being able to comprehend the issues involved in any given scientific theory; when it can answer its own questions, or, better still, leave them unanswered when unanswerable; or, at least, address itself with some deliberation and fairness to honest inquirers, rather than lead the crowd of uninformed bigots in branding them with all the epithets of infidelity.

If this age demands a pulpit of mediocre intelligence and scholarship, a pulpit which has to put out for solution the great problems of religion, being incapable of answering or even stating them itself, the less we talk about having a revelation to interpret the wiser we shall be. But I question the legitimacy of this demand. At any rate, let us refuse to allow as chief of our divinities the god Quack. There is a demand of the thinking, reasoning, reading class too poorly met. The pulpit is on trial before the intelligent public as never before. Let him doubt this who would rejoice to see it where dead Caesar lay, with "none so poor as to do him reverence." From the day of implicit and well-nigh universal faith in it as an absolute necessity, as an ultimate authority, we have come to a time when thoughtful and not irreligious men doubt if it has any utility whatever, or only smile at the empty fulminations of its weak intellect. If this continues long enough, there is no need of predicting what the result will be.

The sceptre of ruling thought is offered to whoever is brave enough and strong enough to grasp it. This age has a free press, free speech, and no respect for persons. And when Mr. Huxley and men like him charge the clergy with ignorance and incapacity, we had better be asking ourselves if the biting severity of the charge which so makes us
Evolution and Theology.

wince does not lie in its truth. These charges must tell against us. These “Lay Sermons” reach more thinking brains than the utterances of any pulpit. They are already in every township and every library in this land. They need no puffing and special terms, or giving away, to get them circulated and read. And their bold, clear, sharp assertions will be laid up and pondered. They will unconsciously become a part of already maturing thought. Does any one think that their antidote and refutation, if any such there be, is to be found in minute or profound Biblical researches, or in pious exhortations concerning personal salvation, or in the pretty tropes and touching anecdotes that grace the modern sermon? The proposition to waive the highest mental discipline, and to dispense with extensive reading, has been made at a time when they were more than ever indispensable. Until the clergy acquaint themselves with scientific methods they cannot wisely undertake the task of deciding upon scientific theories which may prove true, yet upon the falsity of which they are ready to found the whole fabric of religious faith and obligation.

It is plain that we might retort upon scientific men,—expose their disagreements, their petty jealousies, their prejudices; exaggerate the flaws that one man finds in another man’s system; paint a picture of their arrogance, their irreverence, their enmity toward the church, and humbly deprecate the pride of intellect, preaching triumphantly upon the insufficiency of human knowledge. But that method has been sufficiently tried. That converts no reasoning mind. Its chief result must only be to increase the distance and lessen the sympathy between us and them. It can do no possible good. It will only confirm members of our profession in their indolence and unwisdom. Not diminishing empiricism in science, it will multiply the charlatans of the pulpit. The conceit of learning is bad; but, as has been said, it is nothing, it is harmless, beside the conceit of ignorance.

Let us consider now, though necessarily in an imperfect manner, the doctrine of “evolution.” Without attempting to decide upon its truth or falsehood, we may at least report the attitude of thinkers towards it. Given the theory, we may inquire what its relations are (if any) to religion.

Hugh Miller, if we may judge him by the use made of his writings, was less a geologist than a theologian. His pulpit was the Old Red Sandstone of Cromarty and Stromness. Certainly his volumes seem to have been the complete arsenal, ready at hand and inexhaustible, to which the horde of small theologians have repaired for the last twenty or thirty years, when they wished to rebuke the innovations of science.
A daring innovator was Miller, yet the foe of innovators: that gave his own innovation success. The weapons he furnished were small arms, of course, easily handled, and so admirably adapted to popular use. Arms badly burned at the breach now, giving an unpleasant recoil when by any fortune they do not miss fire altogether. This author wrote intense, trenchant, vigorous, picturesque English. He was easily quoted: he was evangelical. He saw with terror the approach of the hydra-headed hypothesis of evolution. With no uncertain note he published his warnings. He poured out the full vials of his wrath upon “the new school of infidelity.” He even appeals to the unscientific pulpit to join in the rescue of scientific truth. The last time, I fear, unless some improvement takes place in us, that science will solicit our aid!

Well, men were persuaded that he uttered profoundest wisdom. It was a good deal easier for people who did not think at all to think and say what Miller thought and said than to think and say anything better. What exponent of science was ever so popular! St. George Mivart’s treatise, which has lately circulated so freely, may be considered fortunate, in comparison, if it finds ten years hence a single reader!

De Maillet, a contemporary of Newton, and consular agent of the French government in Egypt for many years, published, in 1748, some bold speculations under an anonymous name. They bore upon past geological events, and upon the modifiability of living forms. In 1809, Lamarck followed, enlarging upon the work of his predecessor. Then, bringing the discussion down to our own generation, came the “Vestiges of the Natural History of Creation,” whose author maintains that the whole train of animated beings, from the simplest and oldest up to the highest and most recent, is, under the providence of God, the result, first, of an impulse which has been imparted to the forms of life, advancing them in definite times, by generation and by external physical circumstances, from the nucleated germinal vesicle through many grades of organization terminating in the highest.

Lamarck and the author of the “Vestiges” were sufficiently distressing to Hugh Miller. They were in some sense tangible, and he fought them with a will. But he felt that he had also to fight a foe in the air in all the tendencies of thought about him. Ominous and haunting phrases every now and then dropped from scientific men. Owen, the osteologist, talked about “the axiom of the continuous action of creative power, or of the ordained becoming of living things.”
really preparing the way for phrases now much more familiar to us, and which would have been still more objectionable to Miller.

Miller declared that the God of the "Vestiges" was "a mere animal-manufacturing piece of clock-work, which bears the name of natural law." He thought the hypothesis offered this unendurable dilemma: that all vitalties (monads, fishes, birds, and beasts) are immortal, "or human souls are not so." Of a belief in God, unless we accept the doctrine of immortality and salvation by a mediator, he thought we might as well believe in the sea-serpent. He asserted that conscience would find no fulcrum and be wholly inoperative without evidence of a future state, and in that state a portion of the human race "doomed to unutterable misery." Finally, he calls the advocates of "this exceedingly plausible and consummately dangerous" theory "scolists and smatterers," "bad geologists," aiming to strike down "all the old landmarks, ethical and religious."

We have cited Hugh Miller thus at length because his method is typical of pretty much all the argument on that side of the subject since his day. He was very sure that the opposition which he led was not that of "the illiberal religionist," but of "the inductive philosopher."

Summing up the charges brought against the transmutation theory at the outset, and in the main — certainly in the minds of many — they apply equally well to its more recent modifications, it was believed virtually to deny the existence of God, the doctrine of immortality, the need of atonement by Christ, the authority of conscience, and the eternal perdition of unbelievers. This was the clear verdict of the clergy. If by any means it could prevail as had been predicted, the Bible would be done away, the church would be overthrown, human responsibility would cease, and a great number of desperate results would follow. But the height of opposition was not reached until Darwin and Spencer came into the field.

All things that we see were created as they exist or have been developed from pre-existing forms. "There is no alternative between creation and metamorphosis." And Darwin sought to show "that the origination of a species, no less than that of an individual, is natural." The means mainly instrumental (not exclusively, as is so often charged) he called the law of "natural selection" — or in Spencer's phrase "survival of the fittest." But could not man — lord of creation — be excepted from this hypothesis? If it apply to nature in its full and proper meaning it is impossible. No logic has yet been able to except him from the tangling alliance. But what then of our ancestors?
Evolution and Theology.

What shall we say of that wonderfully gifted, guileless, perfect pair of Genesis? Must “the Adam of the infidel” supersede “the Adam of the poet and the theologian”? Hugh Miller found evidence in plenty of the decline and degradation of the human race which he thought entirely admissible. Dr. South only expressed the orthodox sentiment when he said “an Aristotle was but the rubbish of an Adam, and Athens but the rudiments of Paradise.” And when a theory is set up that implies the abandonment of the grand conception of the sure and perfect parentage of a race now totally depraved, and possibly passing more and more beyond the limit of salvation, and instead thereof substitutes the dishonoring thought that out of the lowliest forms and most untoward circumstances man has come to be something, and even now presses forward to still unattained heights of excellence and glory, it must indeed be construed as showing great disrespect for the theological intellect.

Possibly to some may be suggested that good old lady who thanked heaven that Jesus Christ came of good family; that if he was born in a stable he was the son of David. Yet how we are less the children of God, though through long and tedious processes the body was formed into fit residence for the conscious soul, though through countless æons of delay the sparks of divinity which we are, waited, or sought not in vain for that physical instrumentality which makes us man, seems a question not so easily answered. Possibly it is quite as creditable to the race to have got up a very little, as to have fallen down a great deal.

But the tide of opposition to the hypothesis of evolution has already changed. Theology is making (as usual after a long period of self-stultification) astonishing concessions. The Duke of Argyle asserts that “such as man now is, man, so far as we yet know, has always been.” It is something to be assured that we are not worse than our ancestors. But we are borne beyond this. Certainly in the cosmogony of modern thought man’s position is entirely changed. The ancient anthropocentric theory of the universe has gone where the geo-centric theory went. Man is no longer at the centre of creation, chief puppet before all worlds in the spectacular drama of redemption, but he is at the end of a series, through whose natural gradations he has passed, each stage of which has been a transformation into the nearer likeness of God.

It is well known that for some time the majority of eminent scientific men throughout the world have sympathized with, if they have not adopted, the doctrine of evolution. On the very appearance of Dar-
win's "Origin of Species," Dr. Gray of Cambridge said in a very thoughtful review of the work: "After a full and serious consideration, we are constrained to say that, in our opinion, the adoption of a derivative process, and of Darwin's particular hypothesis, if we understand it, would leave the doctrines of final causes, utility, and special design just where they were before." He records it as bringing in "new scientific difficulty;" and while the book is commended as a most useful contribution to science, he concludes it "not harmful to religion unless injudicious assailants make it so."

And now, after ten years of rage, malediction, and ridicule, even the pulpit begins to see how harmless a thing this development theory was. Why, we were even told by the leading review of this country that "Orthodoxy has been won over to the doctrine of Evolution"! It is certainly true that in the corresponding number of that orthodox periodical, "The New-Englander," this terrible hypothesis is calmly exculpated from the charge of conflicting with Christianity; while "The Edinburgh Review" for the same month is bold enough to declare that "evolution, pure and simple" (if one can tell what the writer means by that), "does not touch in the least degree the province of religion."

Now, if all the grave, clerical accusations brought against a scientific theory are to break down in this way, we may as well withdraw from the arena and spare our breath for other purposes. We cannot help feeling that it touches our honor as well as our intelligence to be told (and the world acts as if it believed it) that "extinguished theologians lie about the cradle of every science, as the strangled snakes beside that of Hercules." No doubt St. George Mivart's book on the "Genesis of Species" has led some benighted and many tender-footed persons to look more favorably upon the doctrine in question. It is easy reading, and especially adapted to reach the exasperated opponents of the development theory, because it advocates evolution in the guise of an attack upon Darwin. A theory long fought frequently becomes less objectionable than the man who proposed it. Mr. Mivart sets up a weak image (even a minister can see that), which he calls "natural selection," makes Darwin responsible for all its shortcomings, then strikes it down again and again with great prowess, for the mere pleasure of knocking the breath out of it. His has been a very healing salve to the lacerated feelings of the clergy; so they unsparingly recommended this hopeful antidote of materialism. But that the writer will permanently succeed in superseding or even supplementing the law of natural selection by his facets-of-a-spheroid or kaleidoscopic
Evolution and Theology.

fancy of "specific genesis," looks very doubtful in the light of present tendencies.

Too often in this discussion, the fact has been lost sight of that whether we consider the "specific genesis" of Mivart, the "heterogeneous generation" of Kölliker, the "epigenesis" of Harvey, the "natural" or "sexual selection" of Darwin, or those more general ideas covered by the terms "transmutation," "derivation," "variation," "survival of the fittest," or "development," reference is made, not to any absolute or first cause: the language has no application to the origin of life, but to the origin of forms—of species; to the appearance of sensibly differentiated organisms. They refer not to the beginning of physical or vital action, but simply designate more or less wisely the laws or methods under which the process of birth and evolution goes on. Matter is here. Life is here. Man is here. God is here—over all and in all. Not even matter can elude His presence. It is the relations of these, and the laws by which he works, that we seek to discover.

Buffon said, "If there were no animals, the nature of man would be far more incomprehensible than it is." Latterly, however, we have seen systematic attempts to deny what before the proclamation of the development hypothesis was readily enough granted, namely, the reasoning power and intelligence of animals; as though man was degraded by as much as there could be found in the lower order of creation any feelings or faculties akin to his own. On this principle, that the earthworm has red blood must be overwhelmingly derogatory to the human family! How much nobler, how much truer and grander, a conception of nature and of man's relation thereto is contained in the words of Coleridge:—

"'Tis the sublime of man,
Our noon-tide majesty, to know ourselves
Part and proportions of a wondrous whole."

And the grander conception seems likely to prevail. For, notwithstanding the limits of belief set up here or there to save orthodoxy, we are now, even upon evangelical authority, permitted great latitude. We are told that without periling our spiritual interest we may hold either that the soul of man was created directly, or began in some animal lower than man, or, indeed, was generated from matter itself; that neither of these positions is necessarily inconsistent with Christianity.

If so much can be granted on this so vital point (I see not how the doctrine of evolution can ask more) perhaps it would be well to give up
Evolution and Theology.

any further anxiety about the conflict of science and religion. Prof. Oken was held to severe account because in his day he talked about certain "infusorial points" asserting that "no organization is, nor ever has one been created, which is not microscopic;" and hence all forms arose therefrom. But see what Sir William Thomson, the president of the British Association, proposed at Edinburgh in August last. A very ardent opponent of Darwin hitherto, yet quoting approvingly portions of the last paragraph of "Origin of Species" which contain the essence of the theory, then building an argument to show how those "few forms" or "one" into which life had been "breathed" — and from which all existing forms have been evolved — probably reached this earth of ours. His solution of the difficult problem is doubtless as original as it is ingenious. A meteoric stone, with a germ-attachment, so to speak, was the chief instrument for the impregnation of the barren planet. Sir William says of this theory of his that all objections to it are answerable upon scientific grounds, and that "we must regard it as probable in the highest degree that there are countless seed-bearing meteoric stones moving about through space." Thus life began on this globe. Here we get the monad (microscopic, doubtless) which became man.

When we observe the confidence with which this hypothesis is put forth by a scientific man of considerable eminence, and recur to his even more confident demonstration of the falsity of development theory some years ago — wherein he showed that the age of the world must fall within a hundred million years, which was a period wholly insufficient for the evolution of existing species by natural selection — we wonder if still his science (like Hugh Miller's) is not somewhat at the mercy of his theology. Now men are industriously experimenting to see if it be possible to derive organisms from inorganic elements. And although it seems a feat not yet accomplished, nevertheless one of the most eminent and practical scientific men of England says, "With organic chemistry, molecular physics, and physiology yet in their infancy, and every day making prodigious strides, I think it would be the height of presumption for any man to say that the conditions under which matter assumes the properties we call 'vital' may not, some day, be artificially brought together." But whether Charlton Bastian is right, with his "physical theory" of fermentation, or Pasteur, with his "vital theory," or Thomson, with his "meteoric theory," or any other man with any new theory, let inquiry go on and let all available facts be gathered and classified. There need be no apprehension but that nature in time will justify herself, and God not be dishonored.
Behind all questions solved there will rise questions unanswered; and behind the ultimate solution possible to the human mind we find the ever-asked and unanswerable.

The theory of evolution has thus far shown itself to all the facts of science very elastic and inclusive. In the phrase of Margaret Fuller, it pretty readily “accepts the universe,” even judged by the admissions of its jealous opponents and detractors. It is judged consistent with progress, with a certain persistence of type, even with retrogression in the courses of nature. With reference to its direct bearing upon questions of religion, surely Darwin, who best knows the scope of his own theory, has manifested no sympathy with atheism. Tyndall is not irreverent towards Christianity; and Spencer claims that its philosophy must satisfy and quicken the moral sense. It seems not to violate a faith in God, in duty, or in human brotherhood. And in general the names of those who prominently support the theory of evolution, and have contributed largely of the facts which seem to justify it, are of men of serious purpose, large minds, and pure lives. Not elsewhere I believe can there be found an equal number, equally eminent, with a fairer fame.

---

**EXPECTATION.**

THE wind has blown as it listeth:
I wait with cheerful mood—
I know the work is good.

Chilly morns of first Autumn
Proclaim a frost is near:
I rest: I do not fear.

Winter shall come soon, and dreary:
Behind her blithe trips Spring,
My full reward to bring!