THE PLAGUE OF PSEUDO-SCIENCE

T is sad to think that, whereas truth is difficult enough to grasp with our imperfect human faculties, even when the effort is sincere and the circumstances favourable, there prevail in our midst almost innumerable agencies for disseminating falsehood. I am not referring now to the daily or weekly press, for if a person believes anything on the sole authority of a party journal his zeal for truth cannot be called very strong. I refer to the perversion of history, on which non-Catholic youth in this country is trained and of which this review has said much in the past. and especially to the perversion of science, spread abroad by a multitude of atheistic text-books, still following the Darwinian tradition. Mr. Wells's Outline of History is an excellent type of the former, and Professor Thomson' Outline of Science, though a fairer book, must yet be classed amongst the latter. Accordingly part of our duty as Catholics is to bear witness to the truth, in one or other of these departments, to the best of our ability, or at least to bear witness against what is false.

"Slowly but surely the idea of evolution is undermining the foundations of orthodox Christian theology." These are the words with which an eminent freethinker, Mr. E. G. A. Holmes, to whose free (and incorrect) thought about Christianity we had occasion to call attention in this Review a dozen years ago,* opens an article in a recent *Hibbert Journal*. I do not propose to discuss that article, which shows indeed that Mr. Holmes has no more understanding of Christianity now than he had then, nor to point out in detail the puerility of his arguments against the fundamental laws of thought, no step of which discussion could he rationally take without implicitly calling on their aid. We merely wish to emphasize again that the supposed quarrel between religion and science, herein insisted on, can only be maintained by gross and persistent misrepresentation of

I

^{*} See, lor instance, "The Lie in English History," Tub Month, Jan. 1919: "To Reconstruct the Past," by Dont J. B. Ryan, O.S.B., Jan. 1910. * See "The Ideas of a Chief Inspector of Schools," by the Rev. S. F.

^{*} See "The Ideas of a Chief Inspector of Schools," by the Rev. S. F. Smith, S.J., The Month, Nov. 1911.

what religion stands for and what are the achievements of science. The notion that Christian theology is afraid of the "idea of evolution" shows the obscurantism in which your modernist dwells. This particular assailant is of course unaware that St. Gregory of Nyssa in the East and St. Augustine of Hippo in the West, relying solely on the Biblical record, held an evolutionary theory in regard to the origin of species far more thorough than that of Darwin, whilst St. Thomas and the Scholastics found no difficulty even in the evolution of life from non-living matter. It was, in fact, the growth of the scientific spirit in the Church, the fuller investigation and clearer understanding of the laws of Nature, brought about in many cases by ecclesiastics, that gradually made her later theologians chary of such sweeping hypotheses. It is the free-thinker now who has become credulous, who allows his desires to damage his capacity for truth, who goes beyond what evidence warrants, who cultivates apriorism and préjudice. It is a strange nemesis on the rationalist abuse of human reason that its votaries should thus fall into superstition and sink to forgery' and falsehood, whilst the Church, miscalled the foe of learning, remains almost the sole refuge of correct, self-consistent thought. And if there is one idea more than another familiar to that Church, it is the idea of evolution, for she alone teaches the existence of the Absolute, without which the contingent could not evolve. If we read his misty metaphysics aright, Mr. Holmes conceives the Absolute as itself a result or process of evolution, God, he suggests, instead of being" may be "becoming," as if "becoming" were notitself in the category of "being," and as if there could be an intermediate stage between existence as such and non-existence. Having so disposed of the Law of Contradiction, he proceeds to reject revelation as well as reason, and imagines that the idea of God is a work of human minds, which are still engaged in elaborating and modifying their own creation. He does not know that, so far from Christian theology being embedded in "à static conception of the universe"—to use his curious phrase—it teaches that God is not only Absolute Being but pure Activity, that the Divine energy is so immense as to find necessary expression in the ineffable wonder of the Trinity, that the essence of creaturehood is mutability and change, that, though God is necessarily changeless, being infinitely perfect, man's thought about God is always growing in richness and variety. There is a good deal, in

Γ

I. ?

Si. 'J.-

0

&

æf

-M

jg
i
k

r? ****** fact, that Mr. Holmes does not know about Christian theology, and Catholic doctrine, and his ignorance will not be dissipated by a casual search amongst theological textbooks.

But the notion which he expresses is, after all, prevalent enough, owing to the determinedly atheistic attitude adopted by modern scientific teaching. Apart from the writings of avowed materialists of the school of Haeckel, there is a lamentable fear and disuse, in the scientific writings of our day, of knowledge derived from relevation. The giants of science a generation or two ago were bolder or more honest; Lord Kelvin, Professor Stewart, Professor Tait, Sir W. Siemens, Sir J. Herschel, Faraday, Clerk-Maxwell, A. R. Wallace, etc.—these men had no hesitation in proclaiming in their scientific books the necessary existence of a First Cause. "No system of the Universe," said Sir J. W. Dawson, "can dispense with a First Cause, eternal and selfexistent; and the First Cause must necessarily be the living God, whose will is the ultimate force and the origin of natural law." | By far the greater proportion of eminent scientific men in the past have believed in revelation and not a few have proclaimed their belief, but it is becoming increasingly rare to find modem scientific writers acknowledging that source of information. It is true that the sciences of observation are not concerned with ultimate causes, still less with religious philosophy, yet surely the knowledge wherewith God has supplemented the researches of reason should be employed or kept in mind, when hypotheses are framed to account for observed facts. The materialists have set an unfortunate fashion in this matter, and although their doctrine is all but abandoned, few have had the courage to shake off their literary methods.

The recently published Outline of Science, as we have suggested, which is an endeavour to make the "general reader" aware of the present state of knowledge in every department of scientific research, is a great offender in this way. It assumes that before Darwin and Spencer the idea of evolution was comparatively unknown, whereas the human mind necessarily investigates causes and in no branch of study has its historical development ever been neglected. The old lawyers went back to Roman law; the physicians, alchemists, astronomers, were all acquainted with what their predecessors had achieved; even theology had its positive

^{*} Modern Idea of Evolution (1890), p. 241;

side, and the gradual unfolding of the deposit of revelation was recognized from the first. Evolution in its wider aspect simply means a process of growth, an idea always familiar to mankind. What the great physical scientists did was to apply that familiar notion to the organic world, and to endeavour to account for existing species by tracing their ancestry. "The Doctrine of Evolution," says the Outline of Science, with the air of announcing a disoovery, "states the fact that the present is the child of the past and the parent of the future." Who in the world ever denied that truism? But it is another thing to assume as an established fact that the Author of Nature never intervened directly or indirectly in the history of His creation to introduce new forces, and to assist or modify development. The whole of the materialistic treatment of the sub----ject is vitiated by the assumption that there is no Creator and no Designer, that the alleged development of the vast organic world from a few simple elements is the outcome of blind impulses and self-established laws. Hence the Outline of Science and other popular works are full of dishonesty, the dice are loaded against any hypothesis save the materialistic one, difficulties enormous and insurmountable are ignored or discounted, and the evidence, especially in support of the animal origin of man, is flagrantly and impudently "cooked." The hopeless inadequacy of Darwin's theory of Natural Selection to account for development of species has been demonstrated times out of mind, historically, mathematically, philosophically. It has ceased to be, with the learned, even an hypothesis. Yet the Outline of Science solemnly restates the old discredited process—Variation, Hereditary Transmission, the Struggle for Existenceas if its adequacy had never been challenged, as if blind chance, given time, could effect what human intelligence, working with all the inherited skill of the ages, has never been able to accomplish—the creation of a real and permanent new species. All the "genealogies," animal or vegetable, so plentifully supplied by writers of this class, are literally figments of the brain, or rather of the imagina-There is no support for the Evolution of Species in fossil Botany: the record of the rocks tells us nothing certain about the development of the horse or any other animaL There can be no objection to these fancies being put forward as what they are - conjectures based upon a few slight

1

j

J

j

1

j

indications which may just as well be interpreted otherwise. But again and again these ideas are stated as facts. Some consciousness of the dishonesty of this proceeding seems to have been awakened in a writer in the Outline. After stating (p. 274) that "it is quite illegitimate to infer from our dubiety in regard to the factors of evolution any hesitation as to the fact"—here, we notice, Darwinism is actually advanced from the sphere of hypothesis into that of reality—he goes on to say:

Our frankness in admitting difficulties [he nowhere fairly states, or resolutely faces them] and relative ignorance in regard to the variations and selections that led from certain Dinosaurs to Birds cannot be used by any fair-minded enquirer as an argument against the idea of evolution. For how else could birds have arisenl (Italics ours.)

'j

1

The idea of special creation is apparently ruled absolutely out of court by this fair-minded Darwinian. wonder that Mr. Holmes, wishing to recommend the idea of Evolution, is first of all at pains to destroy the trustworthiness of reason. Even Mr. A. R. Wallace, devoted Darwinian though he was, declared that at least thrice in the process of development a new force must have intervened to accomplish what no natural forces could effect, viz., the production of life, the production of sensation or consciousness, the production of reason. Why do Darwinians ignore Wallace, one inventor of the theory of natural selection, and pin their faith upon the other? Of course, palaeontology in any case can only exhibit the material structural varieties of things, but even here there is a complete absence of gradation. There is progress in complexity of organization from epoch to epoch, but, on the other hand, each displays its particular forms quite abruptly and in relative perfection. One feels in reading evolutionary treatises that the facts are being explained (and sometimes explained away) to fit the theory, not that the theory has been drawn from the facts. The truth is, the rationalists, in their hurry to get rid of Creation and Design, have eagerly seized upon an hypothesis which, however superficially plausible, is essentially inadequate as an explanation of the genesis of species, and they do not see how they can retreat without discredit.

Such methods, practised now through several generalions and perpetuated in text-books and museum-exhibits,

naturally provoke irritation amongst those who reverence Truth and respect Reason. Hence we are not surprised that, on the other side, there is a certain tone of acrimony and a certain violence of argument employed in dealing with the materialists. It would seem that the United States, always prolific in strange types, produces a larger crop of atheistic evolutionists than grows in the effete soil of Europe. Consequent!}' we find there a corresponding output of vigorous hard-hitting literature devoted to the cause of sanity andl truth. The opposition is excited, not so much by the theory of Evolution properly understood and supported, which, as we know, has many Catholic advocates, but by the unwarrantable extension of the theory to explain the origin of the human race. The dogmatic, violence of the supporters of the simian relationship of man has provoked such a reaction that Mr. W. J. Bryan and others have projected a law to prevent the teaching of Darwinism in the schools of America. Certainly a Darwinism which destroys the notion of free-will and moral responsibility, and which thus strikes at the roots of civilization, might well be forbidden by law. And the practical atheism under the guise of Science, which flourishes in our Universities and in those of the States, is as real a menace to social well-being as the crude Marxianism and class-war taught in the Communistic "Red-Schools."

However, the follies and pretences of pseudo-science are best met by vigorous and persistent exposure. A volume, to which we have had occasion to allude more than once—Mr. A, McCann's God—or Gorilla*—admirably fulfils this necessary rôle. Its immediate occasion was the display, in the New York Museum of Natural History, of several cases containing supposed illustrations of the evolution of man. In these cases, models of all the much-debated skeletal fragments of palaeolithic man are "reconstructed" and arranged chronologically to suggest his descent from some ancestor from whom have also descended the race of apes. This exhibit/ as it stands, and the accompanying guide-

j

¹ The Devin-Adair Co., New York, 1922.

^{*} Our own museum at South Kensington is not altogether guiltless in the same regard: it contains the same fragments or models of them, as it undoubtedly should, but in the "reconstructions" and in the hand-book that describes the fossil remains there is the continuous suggestion 1) that the particular fragment represents a "type," and 2) that it shows more ape like features the older it is. Some of these fanciful yet purposive "reconstructions" are represented in the Outline of Science. See The Month, Oct. 1922, "Science

1.1

book, as much by what they assert as by what they ignore or conceal, form a constructive falsehood, devoted to bolstering up an unproven if not an exploded theory; accordingly, starting with this palmary instance of its deceptive methods, Mr. McCann proceeds to examine the whole field of atheistic evolution and to show how it prostitutes the fair name of Science, and grievously misleads those that trust in it. Aided by a large series of admirable illustrations, Mr. McCann proceeds on his savagely-facetious way, using a bludgeon where the late Editor of this periodical wielded a rapier, and probably finding the weapon more effective on the heads with which he deals. He is not fighting science, but that masquerade of science which manipulates, exaggerates and suppresses facts in order to establish some favourite theory. At the same time, though his attack is on the whole sound and well-sustained, he sometimes overlooks points in favour of his adversaries. For instance, in dating these various prehistoric human remains scientific men rely a great deal upon the "cultural" evidence of the strata which contains them and upon the fossil remains of other animals whose range of existence is otherwise known. Although the union of the chimpanzee mandible with the human brain-pan in the case of the Piltdown skull is quite unwarranted, the remains can be proved early Pleistocene from the flints and other implements found with them. However, his book remains a convincing demonstration, not of the falseness of the evolutionary theory, which as a whole has been neither proved nor disproved, although the process suggested by Darwin has been found inadequate, but of the subterfuges and dishonesty of the materialists, and it should be found alongside Professor Windle's Church and Science in every Catholic library. For the endeavour to persuade men that they are evolved from brutes is radically inspired by the desire to get them free from the moral law and responsibility to a Creator. It is an endeavour which has long ago failed, as all would recognize if it were not for the conspiracy against the truth engineered by the pseudo-scientists. The result of their efforts has been declared once for all by Professor Virchow, a non-Catholic scientist of repute, who says: "Every positive advance which we have made in that study [prehistoric anthropology] has removed us

 $^{^{*}}$ See Essays In Un-Natural History, by Father John Gerard, noir unhappily out of print in collected form. (C.T.S.)

further than before from any proof of evolution to be found there. Man has not descended from the ape nor has any ape-man ever existed."!

Τ

i

Amongst the facts that have discredited Darwinism and which on that account Darwinians rather ignore, the expertinents of Abbot Mendel take first rank. They were published a few years after the publication of the Origin of Species, but the Abbot lacked advertisement, and his revolutionary discoveries were not really made public till 1900. They did not profess, as Darwin's theory did, to account for the emergence of new species, but they established facts which show the uselessness of Natural Selection demonstrated that the cause of variations is something intrinsic, some property of the germ-cell which alternately acts It leaves and ceases to act according to a definite law. us with the old mystery—what determines the fixity of species, how did these very definite laws become inherent True science is humble and confesses! in living matter? ignorance. False science pridefully tries to hide ignorance under a cloud of words. But the mystery remains as a constant spur to human curiosity.

Apart from the need of refuting the attempt to connect man with the brute, on the sole grounds of resemblance in bodily structure, the study of prehistoric times is one of great importance for our apologists. That the physical nature of the crown of creation should be, as it were, the' basic idea on which the Creator has elaborated such a vast number of variations, is not surprising. But whilst resemblance can never be a proof of relationship, still, the doctrine of the Fall, taught by revelation, prepares us to find primitive man in a degraded condition. And so we always need, actively, and consciously, to bring the impressions which we receive from the Genesis narrative into accord with the established facts of palaeontology, or else we shall run the risk of adopting views not warranted by revelation. The first notion to get rid of is that foisted upon the Christian mind by the Biblical chronology of the Protestant Archbishop Ussher. Mr. Edmond Holmes; in his ignorance of the Catholic faith, imagines that we are bound to hold that the parents of the human race existed at the utmost some six thousand years ago.2 That is demonstrably incorrect. Catholic chronolo-

^{*} Address at Weisbaden Congress of Naturalists.

[·] January Hibbert Journal, p. 243.

gists know that Genesis gives no certain data. Even the cautious and conservative Abbé Vigouroux, in his *Dictionnaire de la Bible*, sets down its chronology thus:

Deluge .					?
Abraham lea	т	т.		128	В.с.

So there may be gaps in the patriarchal record long enough to allow for physical degeneration, as well as for the moral corruption of which we read. Moreover, Archbishop Sheehanl significantly reminds us that, whilst we are bound to believe that the present human race are all descended from Adam and Eve, the Church has never condemned the opinion that a race of men lived on the earth, but became extinct before the creation of Adam. Catholic apologist, as we have often pointed out, should be at great pains to ascertain the exact limits of revelation in regard to human origins and primitive history, for it is in that direction that the rationalist finds it easiest to advance to the attack. There is room for a detailed and popular *' harmony " between the Book of Nature and the Bible which only those well acquainted with both should attempt. Such a reconciliation would at once satisfy the intellectual demands of the Catholic and provide him with a needed defence of the Faith. For the rationalist is most effectually discomfited when he finds that there are no real grounds of conflict between Church teaching and the assured results of scientific research.

THÉ EDITOR.

Note. It must not be implied from the foregoing that there is any real dearth of Catholic literature on subjects involving the reconciliation of revelation and science, but only that it is not available enough either for the young in their formative years or for the Catholic. "man (or woman) in the street." The information that is contained in such books as that under review, Father Husslein's "Evolution and Social Progress," Professor Windle's "The Church and Science," "Moses and the Law," edited by Father Lattey, Father Gerard's "Old Riddle" and "Essays in Un-Natural History," Canon de Dorlodot's "Darwinism," Dr. P. L. Mills's "Creation versus Evolution," and a host of articles in the great Catholic Encyclopedia, needs digesting and simplifying for youthful consumption, and, for popular use, should be presented in a carefully thought-out series of C.T.S. pamphlets. False and misleading doctrines are already propagated in attractive form: truth should be elaborated with at least equal care.

¹ Apologetici and Christian Doctrine, Part II., p. 56.

SOME PHYSICAL PHENOMENA OF MYSTICISM

INCENDIUM AMORIS.

HAT emotional ardours of a more intense type art often attended by an actual rise of bodily temperature may be regarded as a fact of everyday experi-There is nothing therefore particularly astonishing ence. in the statements' which we so often encounter in the lives of the great mystics, to the effect that when some transport of love took possession of their souls their countenances became inflamed, that they could hardly endure the clothing which seemed to stifle them, and that in the coldest of winter weather they threw open doors and windows, panting for air and half unconsciously seeking the same kind of relief as our Lord has indicated in His parable of Dives and Lazarus. Let us begin by taking a few well-known exam-In Father Goldie's Story of St. Stanislaus Kostka we read:

St. Francis de Sales'in his book on the Love of God, says, "Stanislaus was so violently assailed by the love of Our Saviour as often to faint and to suffer spasms in consequence, and he was obliged to apply cloths dipped in cold water to his breast in order to temper the violence of the love he felt." One day he was found by his Superior walking alone at night time in the little garden which the Novitiate then possessed, when a very bitter cold wind was blowing, and on being asked by the Father Rector what he was doing there, he replied with all simplicity and straightforwardness, "I am burning, I am burning," as he felt his heart still on fire with the love of God, although his prayer was over. Stephen Augusti bore witness to the fact that the Socius to the Master of Novices, Father Lelius Sanguigni, had often to bathe his chest to temper the scorching heat.

Similarly in the case of St. Mary Magdalen de' Pazzi, who was born in 1566, two years before St. Stanislaus died, we are told how her transports of love transformed her outward appearance, "for her face," says her biographer and confessor, Father Cepari, "losing in a moment the paleness which had been produced by her penances and austere re-

« The Story of St. Stanislaus Kostka, pp. 136—137 (ed. 1893). This is based upon the details furnished in the Analecta Bollandiana, c. xiii., pp. 143-5."