The OPEN COURT

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

FOUNDED BY EDWARD C. HEGELER

AUGUST 1928

VOLUME XLII NUMBER 867

Price 20 Cents

The Open Court Publishing Company

Wieboldt Hall, 339 East Chicago Avenue Chicago, Illinois

THE UNIVERSITY OF CHICAGO PRESS

5750 ELLIS AVE., CHICAGO

Christianity in the Modern World. By ERNEST D. BURTON. \$2.00, postpaid \$2.10.

Popular edition, \$1.00, postpaid \$1.10.

New Testament scholar, leader in denominational and missionary enterprise, and exemplar of the practical Christian life—these aspects of Ernest D. Burton were all reflected in his public utterances. A group of them have here been gathered together.

Jesus and Our Generation. By CHARLES W. GILKEY. \$2.00, postpaid \$2.10.

Forty-thousand people in six great student centers in India heard Dr. Gilkey's interpretation of the personality of Jesus. The lectures which we are now publishing present a unique contribution to the understanding of the founder of the Christian faith.

The Nature of the World and of Man. \$4.00, postpaid \$4.15.

"The divine curiosity" about the ways of life and man's part in them has always driven men to seek beyond the houndaries of the obvious. Sixteen men, impelled by this desire and better trained than most of us in the ways of scientific thought, have sought and found and written down for all other inquiring minds the facts about the world and man as they have found them. Their book, The Nature of the World and of Man, is a complete picture of the world as it appears today in the light of man's increased understanding.

Principles of Christian Living. By GERALD BIRNEY SMITH. \$2.00, postpaid \$2.10.

Ethics is not just a principle about which to theorize; it is one to be applied. This is the theme of Dr. Smith's book on Christian ethics. His aim is to indicate the motives which enter into Christian living as the individual finds himself a member of various groups in actual life.

The Psalms. Newly translated from the Hebrew by J. M. Powis Smith. \$3.00, post-

Dr. Smith's purpose is to express as completely and accurately as limitations of language permit the thought and feeling of the original—to incorporate the scholarship of recent decades. In this clear, uncorrupted version are disclosed, unhampered, the beauties and true meaning of the world's greatest hymnbook.

The New Testament. By EDGAR J. GOODSPEED. \$1.00 to \$3.00, postage 10c extra.

Continued interest in this modern translation has been met by the publication of seven different editions in styles to suit every purse and every need. The popular edition is bound in cloth, pocket size. The pocket and regular size editions are bound in cloth, leather or morocco.

The Formation of the New Testament. By EDGAR J. GOODSPEED. \$1.50, postpaid.

The well-known translator of the New Testament has given us an account of still another phase of the compilation of the New Testament. Here is the complete story of the ebb and flow of the New Testament books through the middle ages, the Reformation, and on down to our own day.

The Story of the New Testament. By EDGAR J. GOODSPEED. \$1.50, postpaid \$1.60. Popular Edition \$1.00, postpaid \$1.10.

It tells who wrote the New Testament and when and where and how. This book presents in a vivid and popular manner the situations out of which the New Testament books arose, the actual conditions of early Christian life which caused the writing of each book, and the manner in which each writer met the problems before him.

The Religion of the Psalms. By J. M. Powis Smith. \$1.75, postpaid \$1.85.

The Religion of the Psalms gives an understanding of the purpose for which the Psalms were written and of their function in the Jewish community.

The University of Chicago Press

5750 Ellis Ave., Chicago

THE OPEN COURT

Volume XLII (No. 8)

AUGUST, 1928

Number 867

TABLE OF CONTENTS

A3	GE
Frontispiece—Charles Darwin	
The Religious Evolution of Darwin, J. v. NASH	49
In a Syrian Monastery. Joseph G. Haroutunian4	64
The Paradox of Diabolism, WILLIAM KILBORNE STEWART4	72
What Arabia Owes to Mohammed. JULIUS J. PRICE	80
Dialogues of Polemarchus. Lee Epstein	88
Meh Ti on Virtue. Quentin kuei yuan muang	92
God, The Invisible King. F. LINCOLN HUTCHINS4	97
Scientific Views of a Cultured Jew, First Century, B. C.	
WALLAUE N. STEARNS	03
Peruaia and Assisi. CAROL SCHNEIDER	08

Published monthly by THE OPEN COURT PUBLISHING COMPANY

337 East Chicago Avenue Chicago, Illinois

Subscription rates: \$2.00 a year; 20c a copy. Remittances may be made by personal checks, drafts, post-office or express money orders, payable to the Open Court Publishing Company, Chicago.

While the publishers do not hold themselves responsible for manuscripts sent to them, they endeavor to use the greatest care in returning those not found available, if postage is sent. As a precaution against loss, mistakes, or delay, they request that the name and address of the author be placed at the head of every manuscript (and not on a separate slip) and that all manuscripts and correspondence concerning them be addressed to the Open Court Publishing Company and not to individuals.

Address all correspondence to the Open Court Publishing Company, 337 East Chicago Ave., Chicago.

Entered as Second-Class matter March 26, 1897, at the Post Office at Chicago, Illinois, under Act of March 3, 1879.

Copyright by The Open Court Publishing Company, 1928. Printed in the United States of America.

PHILOSOPHY TODAY

A collection of Essays by Outstanding Philosophers of Europe and America Describing the Leading Tendencies in the Various Fields of Contemporary Philosophy.

Edited by Edward L. Schaub
Professor of Philosophy, Northwestern University.
Editor, The Monist.

An authoritative account of present trends in logic, ethics, aesthetics, legal and political thought, theory of knowledge, philosophy of religion and metaphysics, together with the philosophy aspects of psychology and sociology.

Cloth, \$3.75

THE OPEN COURT PUBLISHING COMPANY

Chicago London

THE METAPHYSICS OF PRAGMATISM

By SIDNEY HOOK
With an introductory word by John Dewey.
Cloth \$2.00; paper \$1.00

"The volume is noteworthy because . . . it expresses an equilibrium which is consciously and deliberately sustained between that newer movement which goes by the name of pragmatism and instrumentalism and essential portions of classic thought." . . . John Dewey.

Send for our complete catalog.

THE OPEN COURT PUBLISHING COMPANY

Chicago London

JOURNAL of PHILOSOPHY

This periodical is the organ of active philosophical discussion in the United States. There is no similar journal in the field of scientific philosophy. It is issued fortnightly and permits the quick publication of short contributions, prompt reviews and timely discussions.

Edited by Professors F. J. E. Woodbridge,

W. T. Bush, and H. W. Schneider,

of Columbia University

515 WEST 116TH STREET, NEW YORK

\$4 a Year, 26 Numbers

20 Cents a Copy

THE POINT OF VIEW

An Anthology of Religion and Philosophy Sclected from

the Writings of

PAUL CARUS

Just published in a most attractive volume bound in cloth with design in gilt and specially boxed for delivery.

Price \$2.50

The Open Court Publishing Company

CHICAGO 337 East Chicago Avenue NEW YORK
31-33 East Tenth Street

AMERICAN MATHEMATICAL SOCIETY

COLLOQUIUM SERIES

- G. C. Evans, The Logarithmic Potential. Discontinuous Dirichlet and Neumann Problems. 1927. 150 pp. \$2.00.
- E. T. Bell, Algebraic Arithmetic. 1927. 180 pp. \$2.50.
- L. P. Eisenhart, Non-Riemannian Geometry. 1927. 184 pp. \$2.50.
- G. D. Birkhoff, Dynamical Systems. 1928. 295 pp. \$3.00.

EARLIER ISSUES

(Circular giving full titles sent on request).

Evanston Lectures, \$1.25.
Chicago Congress Papers, \$4.00.
Boston Lectures, \$2.75.
Madison Lectures, \$2.50.
Princeton Lectures, \$2.50
Cambridge Lectures:
Part 1 (Evans), \$2.00.
Part II (Veblen), \$2.00.

Orders may be sent to the American Mathematical Society, 501 West 116th Street, New York City, or to

THE OPEN COURT PUBLISHING COMPANY

337 East Chicago Avenue

Chicago, Illinois

The Indian and Christian Miracles

of

Walking on the Water



BUDDIES WALKING ON THE WATER

bу

WILLIAM NORMAN BROWN

Professor of Sanskrit in the University of Pennsylvania

The earliest example of crossing water magically appears in the Rig Veda.

In the present study the author makes no effort to exhaust the endless number of later legends, Indian, Chinese, Japanese, Christian and African, exemplifying walking on the water, most of which are of pre-Christian antiquity.

Price \$2.00

THE OPEN COURT PUBLISHING COMPANY

339 East Chicago Avenue

Chicago, Illinois

PROBABILITY AND ITS ENGINEERING USES

Ву

Thornton C. Fry, Ph.D.

Within recent years the Theory of Probability and its attendant theories and applications has become widely important. Today industrialists, economists, and financial experts rely upon these principles for dependable data in all branches of science, industry, and business.

This text book is the outgrowth of a set of notes originally prepared for one of the "Out-of-Hour Courses" of Bell Telephone Laboratories, and subsequently revised for use in a course of lectures delivered at the Massachusetts Institute of Technology in its Department of Electrical Engineering.

Dr. Fry has spared no effort in making a book both broad and thorough enough to form a foundation for workers in all branches of industry and learning.

Cloth \$7.50

THE OPEN COURT PUBLISHING COMPANY
337 East Chicago Avenue Chicago, Illinois

PROJEKTIVE GEOMETRIE DER EBENE

UNTER BENUTZING DER PUNKTRECHNUNG DARGESTELLT

von

HERMANN GRASSMANN

Zweiter Band: Ternarcs
Zweiter Teil
Mit 259 Figuren im Text

Cloth \$5.50

G. E. STECHERT & COMPANY

31-33 E. Tenth Street

New York, N. Y.





CHARLES DARWIN

Frontispiece to The Open Court.

THE OPEN COURT

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religions Parliament Idea.

Copyright by The Open Court Publishing Company, 1928

Volume XLII (No. 8)

AUGUST, 1928

Number 867

THE RELIGIOUS EVOLUTION OF DARWIN

BY J. V. NASH

I N all the discussions concerning Darwinism and religion in recent years, little light has been thrown on the subject of Darwin's private religious convictions. What effect, if any, did the great Evolutionist's discoveries in biology exert upon his own inherited beliefs in the field of religion? And how shall we resolve the paradox that the man whose scientific writings have been criticized in many quarters as utterly destructive not only to Christian theology but to any system of supernaturalism should have been buried in Westminster Abbey with all the rites and honors of the Church of England?

Disliking theological controversy, Darwin was reticent in the matter of his personal religious views. He held that he was not justified in publishing his opinions on subjects in which he did not profess to be a specialist, and that his attitude toward religion was a purely private matter in which the public could have no legitimate interest. He shrank, too, from the thought of inflicting pain upon those who held different opinions and who found comfort and support therein.

A study of Darwin's religious evolution, as it kept pace with his scientific researches in the realm of biological evolution, is of peculiar interest and significance when it is remembered that, reared in an orthodox atmosphere, Darwin was once a candidate for the ministry of the Church of England. A phrenologist studying Darwin's head in later years assured him that he had a bump of reverence large enough for ten priests. Born in an earlier generation, he would quite likely have ended his career as The Most Reverend Charles Darwin, D. D., Archbishop of Canterbury.

Although Darwin published nothing on religious subjects, a wealth

of material bearing on this phase of his life is available to the investigator in Darwin's letters, of which a vast number have been published, in his posthumous autobiographical memoir, and in the writings of his son, Francis Darwin.

Entering life on the same day and in the same year as Abraham Lincoln,—February 12, 1809,—Darwin was baptized in the Church of England. He was nurtured in the odor of pious respectability and at the age of sixteen was posted off to Edinburgh by his father, Dr. R. W. Darwin, a successful physician, to study medicine. Thither his older brother, Erasmus, had already preceded him. But the sight of blood and the horrors of the operating room in the days before the use of anaesthetics were too much for his nerves. His father, hearing unfavorable reports from Edinburgh, decided to take him away. It occurred to the worthy parent that Holy Orders might offer better prospects for the discontented youth. As Darwin himself puts it:

"After spending two sessions in Edinburgh, my father perceived, or he heard from my sisters, that I did not like the thought of being a physician, so he proposed that I should become a clergyman. He was very properly vehement against my turning into an idle sporting man, which then seemed my probable destination. I asked for some time to consider, as from what little I had heard or thought on the subject I had scruples about declaring my belief in all the dogmas of the Church of England; though otherwise I liked the thought of being a country clergyman. Accordingly, I read with care *Pearson on the Creed*, and a few other books on divinity; and as I did not then in the least doubt the strict and literal truth of every word in the Bible, I soon persuaded myself that our Creed must be fully accepted."

In order to qualify for Orders, it was necessary that Darwin should attend an English university and take a degree. And so in 1828, at nineteen, he went into residence at Cambridge University.

The reference to Dr. Darwin's fear of his son's becoming "an idle sporting man" needs a word of explanation. From his early boyhood Darwin had been, as he tells us, "passionately fond of shooting." So strong was his ardor for the pastime that, in his own words, "I do not believe that anyone could have shown more zeal for the most holy cause than I did for shooting birds. How well I remember killing my first snipe, and my excitement was so great

that I had difficulty in reloading my gun from the trembling of my hands."

Another of his youthful hobbies was the more constructive pastime of collecting natural history specimens,—wild flowers, beetles, and insects of all kinds,—which he classified as best he could. This interest, indeed, had manifested itself from his earliest childhood, and by the time he was nine years old it was well developed. A good psychologist might have found in it a clue to Darwin's latent genius; but to his father it seems to have signified nothing; even his teachers apparently saw no significance in it. So Darwin was consigned to the sacred ministry.

At Cambridge, naturally enough, the holy vocation for which he was ostensibly preparing rested lightly on Darwin. He disliked the classics and mathematics: for the latter his dislike amounted to a positive loathing. From these odious studies he found relief in three directions. First, by plunging into the gay whirl of student life, not without some drinking. He admitted having been positively drunk on at least three occasions, and thought intoxication the greatest of pleasures. Second, in roaming about the country in search of natural history specimens. Third, but by no means least, in hunting and shooting. A strange theologue was Darwin; yet in all probability by no means unique in some of the particulars. But the profession of the ministry, he assures us, was never actually dropped by him; it simply faded imperceptibly out of the picture and at last was forgotten.

Another destiny was already beckoning to him. A common interest in science brought Darwin the acquaintance and ultimately the close friendship of two scientists on the faculty of Cambridge University at that time. They were Professors Sedgwick and Henslow. To Professor Henslow belongs the credit of having set Darwin out upon his epoch-making career. It happened that in 1831, after Darwin had spent three profitless years in his abortive preparation for the ministry, the British government was about to dispatch a vessel called the *Beagle* on a five-year voyage round the world for the purpose of surveying the little-known coasts of the continents and islands strewn over the southern hemisphere.

A naturalist was wanted who would be willing to serve without pay. Professor Henslow instinctively thought of Darwin. The latter was absent on a geological expedition in Wales with Professor Segdwick when a letter from Henslow, broaching the proposition, reached him. Catching fire at once, Darwin hurried to see his father in order to secure the latter's approval of the plan. Dr. Darwin frowned upon the project; so Darwin disconsolately sent off a reply declining the offer. But shortly afterwards when on a visit to his uncle, Josiah Wedgwood, he found a more sympathetic ear. Wedgwood volunteered to call on Dr. Darwin and endeavor to persuade him to reconsider his decision. So successful was he that the elder Darwin at once consented to his son's accepting the invitation.

This marked the turning point in Darwin's career. The fascinating story of that five-year voyage is told by Darwin in his memorable Voyage of the Beagle. It was his observations in many lands during this voyage, and the vast accumulation of data and specimens which he collected, that laid the foundation for his development of the theory of evolution by natural selection as the explanation of the origin of species, as against the then almost universally held theory of fixity of species, catastrophic destruction, and divine re-creation.

On Darwin's return to England he married his cousin, Miss Wedgwood, and settled at Down in Kent. Almost constant seasickness during the five years on the *Beagle* had left him a semi-invalid; hence he lived in much seclusion during the remaining forty years of his life, while one after another his memorable books issued from the press and his fame increased with the years. Here, too, a charming family circle grew up around him, for notwithstanding his invalidism Darwin became the father of no less than ten children, nearly all of whom reached maturity.

When Darwin started out on his memorable voyage to foreign parts, he was still perfectly orthodox in his religious views. His favorite theological work was Paley's Natural Theology. In later years he told Sir John Lubbock that he could almost have repeated the contents of this book by heart. Darwin's nature, however, was not religious in the devotional or mystical sense. William James, in his Varieties of Religious Experience, speaks of the once born and the twice born; i. e., those who never have felt any sense of spiritual maladjustment, and whose attitude toward life is one of healthy optimism; and those who are torn by an inner conflict and who can attain mental peace only through an emotional crisis or process of "conversion," whereby, at the cost of much Sturm und

Drang, a condition of harmony and equilibrium is attained through the establishment of satisfying relations with a Divine Power.

Darwin belonged to the "once born" class. He was essentially healthy minded. He found greater satisfaction, even when ostensibly preparing for the ministry, in going out hunting and fishing than in wrestling on his knees with the Lord in prayer and meditating on his and other people's "sins." So far as we can discover, Darwin never passed through any religious crisis. He accepted the creeds which came to him by inheritance, without much curiosity as to their validity. He fell in with his father's suggestion that he should take Holy Orders, merely because it seemed to offer a pleasant and respectable career, without too much hard work. When the way to a more attractive career opened before him, he quietly shelved the ministry. And when, in the course of his scientific studies, he came into conflict with Genesis and the New Testament miracles, he dropped the dogmas of Christianity one after another, without any particular regret, vet blandly retaining his membership in the Church of England. So at last he felt no qualms in announcing himself a complete Agnostic, while maintaining the friendliest relations with believers; and when death came, he was borne to his grave in England's holiest shrine, which the entire nation united in considering the most fitting resting place for his remains,

In terms of the most advanced contemporary psychology, Darwin was an *extrovert*. He was temperamentally optimistic, found life good, and liked to enjoy its pleasures. If his scientific researches had not fallen foul of his inherited religious beliefs, he would probably never have been prompted to examine the credentials of the latter. The Bible he took for granted as the great storehouse of spiritual truth for Christians. In a letter of condolence to W. D. Fox, April 23, 1829, on the occasion of the death of Fox's sister, Darwin, writing from Cambridge, said:

"I feel most sincerely and deeply for you and all your family, but at the same time, as far as anyone can, by his own good principles and religion, be supported under such a misfortune, you. I am assured, will know where to look for such support. And after so pure and holy a comfort as the Bible affords, I am equally assured how useless the sympathy of all friends must appear, although it is as heartfelt and sincere, as I hope you believe me capable of feeling."

"Whilst on board the Beagle," wrote Darwin in 1876, "I was

quite orthodox, and I remember being heartily laughed at by several of the officers (though themselves orthodox) for quoting the Bible as an unanswerable authority on some point of morality. I suppose it was the novelty of the argument that amused them." During his sojourn in South America, some pious Roman Catholics sought to convert Darwin to the religion which they considered the only real Christianity. "Why do you not become a Christian—for our religion is certain?" they pleaded. Darwin drily replied that he was already "a sort of Christian."

But when, on his return to England, he turned to the systematic study of the scientific material and data collected during those five years of wandering amid the watery wastes of the southern hemisphere, his inherited religious beliefs began to disintegrate. "During these two years," he informs us, "I was led to think much about religion." That the process must have been fairly rapid is revealed by his further statement that he "had gradually come by this time, i. e., 1836 to 1839, to see that the Old Testament was no more to be trusted than the sacred books of the Hindoos." He wondered, too, whether if God were now to make a revelation to the people of India, "he would permit it to be connected with the belief in Vishmu and Siva, etc., as Christianity is connected with the Old Testament. This appeared to me utterly incredible."

The miracles of the New Testament proved as great a stumbling block as the special creation stories of the Old. But he was reluctant to abandon belief. He tells us how he used to dream of ancient manuscripts being some day discovered, which would "confirm in the most striking manner all that was written in the Gospels." Yet the more he thought on the subject, the more his difficulties increased. He summarizes his reflections as follows:

"By further reflecting that the clearest evidence would be requisite to make any sane man believe in the miracles by which Christianity is supported,—and that the more we know of the fixed laws of nature the more incredible do miracles become,—that the men at that time were ignorant and credulous to a degree almost incomprehensible to us,—that the Gospels cannot be proved to have been written simultaneously with the events,—that they differ in many important details, far too important, as it seemed to me, to be admitted as the usual inaccuracies of eye-witnesses;—by such reflections as these, which I give not as having the least novelty or

value, but as they influenced me, I gradually came to disbelieve in Christianity as a divine revelation. The fact that many false religions have spread over large portions of the earth like wildfire had some weight with me."

At last he reached the position when not only did the existing evidence fail to convince him, but he could hardly imagine any evidence that would prove the validity of revealed religion:

"I found it more and more difficult, with free scope given to my imagination, to invent evidence which would suffice to convince me. Thus disbelief crept over me at a very slow rate, but was at last complete. The rate was so slow that I felt no distress."

Still, his belief in a personal God seems to have persisted for many years. "When I was collecting facts for the Origin," he remarks, "my belief in what is called a personal God was as firm as that of Dr. Pusev himself." For many years, too, he continued to use the term "creation" in speaking of the origin of life. But in later years he wrote: "I have long regretted that I truckled to public opinion, and used the Pentateuchal term of creation, by which I really meant 'appeared' by some unknown process. It is mere rubbish, thinking at present of the origin of life; one might as well think of the origin of matter." To be sure, Darwin sometimes personified Nature in a quasi-pantheistic way by the use of a capital N, a habit in which many of us unconsciously indulge. But he had no leanings toward pantheism; his outlook on nature was that of a scientific investigator, not that of a mystic or a poet. Wordsworth's rhapsodies no doubt left him cold; although, as we shall see, he could appreciate the beauty and sublimity of natural scenery.

The theistic argument from design, as expounded by the redoubtable Paley with his watch and watch-maker analogies, which once impressed Darwin with much force, was floored in its first bout with Natural Selection. He could no longer feel any conviction that "the beautiful hinge of a bivalve shell must have been made by an intelligent being, like the hinge of a door by man." Henceforth he could see no more indication of conscious design in the diversified structures of living organisms "than in the course which the wind blows." In *Plants and Animals under Domestication* he writes:

"If we assume that each particular variation was from the beginning of all time pre-ordained, then that plasticity of organization,

which leads to many injurious deviations of structure, as well as the redundant power of reproduction which inevitably leads to a struggle for existence, and, as a consequence, to the natural selection or survival of the fittest, must appear to us superfluous laws of nature. On the other hand, an omnipotent and omniscient Creator ordains and foresees everything. Thus we are brought face to face with a difficulty as insoluble as is that of free-will and predestination."

Speaking of design, he wrote to Asa Gray in July, 1860:

"One word more on 'designed laws' and 'undesigned results.' I see a bird which I want for food, take my gun and kill it; I do this designedly. An innocent and good man stands under a tree and is killed by a flash of lightning. Do you believe (and I really should like to hear) that God designedly killed this man? Many or most persons do believe this; I can't and don't. If you believe so, do you believe that when a swallow snaps up a gnat, God designed that that particular swallow should snap up that particular gnat at that particular instant? I believe that the man and the gnat are in the same predicament. If the death of neither man nor gnat is designed, I see no good reason to believe that their first birth or production should be necessarily designed."

Reverting to the same subject, in a letter to Miss Julia Wedgwood, July 11, 1861, he remarked:

"The mind refuses to look at this universe, being what it is, without having been designed; yet, where one would most expect design; viz., in the structure of a sentient being, the more I think on the subject, the less I can see proof of design. Asa Gray and some others look at each variation, or at least at each beneficial variation. . . .as having been providentially designed. Yet when I ask him whether he looks at each variation in the rock-pigeon, by which man has made by accumulation a pouter or fantail pigeon, as providentially designed for man's amusement, he does not know what to answer. . ."

Then there was the old, old problem of theodicy, or the existence of evil in a world created by an all-powerful and all-good God. Unquestionably evil exists, but Darwin believed that on the whole "happiness decidedly prevails, though this would be difficult to prove." This seemed to him a logical conclusion, because "if the individuals of any species were habitually to suffer to an extreme

degree, they would neglect to propagate their kind; but we have no reason to believe that this has ever, or at least often, occurred. Other considerations, moreover, lead to the belief that all sentient beings have been formed so as to enjoy, as a general rule, happiness." Then, too, pain and suffering it long continued lower the vitality of an organism, whereas pleasurable sensations "stimulate the whole system to increased action." Happiness, therefore, has survival value, and must predominate over whatever suffering is involved in the struggle for existence.

On the ethical side, Darwin cannot believe that human suffering assists man's moral improvement, and animals certainly are not morally improved by it. "This very old argument from the existence of suffering against the existence of an intelligent First Cause seems to me a strong one," he admits, whereas the presence of suffering is perfectly explainable on the basis of variation, natural, selection, and the survival of the fittest. "The moral nature of man," he thinks, "has reached its present standard, partly through the advancement of his reasoning powers and consequently of a just public opinion, but especially from his sympathies having been rendered more tender and widely diffused through the effects of habit, instruction, and reflection."

In the Descent of Man, Darwin suggests the social instinct as a sufficient moral guide and inspiration to righteous living. To quote: "We have seen that even at an early period in the history of man, the expressed wishes of the community will have naturally influenced to a large extent the conduct of each member. . . . Thus the reproach is removed of laying the foundation of the noblest part of our nature in the base principle of selfishness." He even throws in the hope, "it is not improbable that after long practice virtuous tendencies may be inherited."

In any event, the abandonment of the old Pentateuchal idea of "the fall of man" seems to him a distinct gain. "To believe," he says in the *Descent of Man*, "that man was aboriginally civilized and then suffered utter degradation in so many regions, is to take a pitiably low view of human nature. It is apparently a truer and more cheerful view that progress has been much more general than retrogression: that man has risen, though by slow and interrupted steps, from a lowly condition to the highest standard as yet attained by him in knowledge, morals, and religion."

As to the God idea itself, he never definitely disposed of it, though he admitted the bankruptcy of the ontological and other intellectual arguments for the existence of God. "At the present day," it seemed to him, "the most usual argument for the existence of an intelligent God is drawn from the deep inward conviction and feelings which are experienced by most persons." (Here he might have shaken hands with Cardinal Newman.) Like Kant, he thought it futile to attempt to find God through the exercise of the "pure reason." "Formerly," he continues, "I was led by feelings such as those just referred to (although I do not think that the religions sentiment was ever strongly developed in me), to the firm conviction of the existence of God, and of the immortality of the soul." But as time went on, this feeling grew progressively weaker.

In South America, during those far-off days of the Beagle voyage, he had felt a religious awe in the presence of the grandeur of the Brazilian forest. "But now the grandest scene would not cause any such convictions and feelings to arise in my mind." Some critics, he allows, might object that he has simply become spiritually color blind. "This argument would be a valid one if all men of all races had the same inward conviction of the existence of one God: but we know that this is very far from being the case. Therefore, I cannot see that such inward convictions and feelings are of any weight as evidence of what really exists. The state of mind which grand scenes formerly excited in me, and which was intimately connected with a belief in God, did not essentially differ from that which is often called the sense of sublimity; and however difficult it may be to explain the genesis of this sense, it can hardly be advanced as an argument for the existence of God, any more than the powerful though vague and similar feelings excited by music."

Immortality was another problem. He recognized how men instinctively cling to this belief as an offset to the dismal prospect of the ultimate fate in store for the solar system. On this point he commented: "Believing as I do that man in the distant future will be a far more perfect creature than he now is, it is an intolerable thought that he and all other sentient beings are doomed to complete annihilation after such long continued slow progress. To those who fully admit the immortality of the human soul, the destruction of our world will not appear so dreadful." But, alas! such consolations are not for him. In a letter to Lvell, September 3, 1874, he wrote:

"Many persons seem to make themselves quite easy about immortality. . . .by intuition; and I suppose I must differ from such persons because I do not feel any innate conviction upon such points."

Must we, then, conclude that the universe is merely the product of a "fortuitous concourse of atoms"? Is a "First Cause" conceivable? He had long felt "the extreme difficulty or rather impossibility of conceiving this immense and wonderful universe, including man with his capacity of looking far backwards and far into futurity, as the result of blind chance or necessity." Such reflections at one time did indeed incline him strongly "to look to a First Cause having an intelligent mind in some degree analogous to that of man." When holding this view he thought that he might rightly be called a theist. Yet this conviction also wavered and grew blurred. When writing the Origin of Species it occupied his mind, but "since that time it has gradually and with many fluctuations, become weaker; for there always arises the doubt, can the mind of man, which has, as I fully believe, been developed from a mind as low as that possessed by the lower animals, be trusted when it draws such grand conclusions?"

These words were written in 1876. In 1881, a few months before his death, his position was much the same. Writing to W. Graham, July 3, he returns to the same theme, and uses almost the identical language:

"..... you have expressed my inward conviction, though far more vividly and clearly than I could have done, that the Universe is not the result of chance. But then the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value or trustworthy. Would any one trust in the convictions of a monkey's mind, if there are any convictions in such a mind?"

Darwin had no illusions about the ultimate fate of the earth and the solar system. Writing to Hooker, February 9, 1865, he observed: "I quite agree how humiliating the slow progress of of man is, but everyone has his own pet horror, and this slow progress. . . .sinks in my mind into insignificance compared with the idea or rather I presume certainty of the sun some day cooling and we all freezing. To think of the progress of millions of years with every continent swarming with good and enlightened

men, all ending in this, and with probably no fresh start until this our planetary system has been again converted into a red-hot gas."

But there was a more optimistic view, on which he liked to dwell. He believed that the rise and development of the Caucasian race through natural selection gives promise of a still brighter future for the world; it seemed to him proof of the "higher"—i. e., more civilized—races being the fittest for survival in the struggle for existence. The defeat of the Turks as contenders for world dominion only a few centuries ago he thought especially significant and symbolic. "Looking to the world at no very distant date," he exclaims with unwonted exuberance, "what an endless number of the lower races will have been eliminated by the higher civilized races throughout the world."

Here Darwin for once proved himself a poor prophet. If he had lived until the days of the World War the future of the Caucasian race might have appeared more dubious to him. The so-called "lower races" show no signs of eliminating themselves in the near future. As for the Caucasian race, all over Asia its authority is slipping and its hold on Africa is, to say the least, precarious. Publicists like Stoddard view with alarm "the rising tide of color."

As we have already noticed, Darwin avoided as far as possible the discussion of his religious beliefs or unbeliefs. However, when pressed for a categorical statement of his position on the great questions of religion, he responded with perfect candor. For instance, replying to one J. Fordyce, in 1879, he wrote:

"What my own views may be is a question of no consequence to anyone but myself. But, as you ask, I may state that my judgment often fluctuates. . . . In my most extreme fluctuations I have never been an Atheist in the sense of denying the existence of God. I think that generally (and more and more as I grow older), but not always, that an Agnostic would be the more correct description of my state of mind."

His son remarks: "He felt that he ought not to publish on a subject to which he had not devoted special and continuous thought. Ill health, for one thing, prevented him from feeling equal to deep reflection, on the deepest subject which can fill a man's mind." This is a curious apology, inasmuch as religion is

so generally considered a special source of comfort and strength in illness.

Darwin's reply to a Dutch student, April 2, 1873, makes the point that whether God exists or not, the obligations of duty are still binding on man:

"It is impossible to answer your question briefly; and I am not sure that I could do so, even if I wrote at some length. But I may say that the impossibility of conceiving that this grand and wonderous universe, with our conscious selves, arose through chance, seems to me the chief argument for the existence of God; but whether this is an argument of real value, I have never been able to decide. I am aware that if we admit a First Cause, the mind still craves to know whence it came, and how it arose. Nor can I overlook the difficulty from the immense amount of suffering through the world. I am, also, induced to defer to a certain extent to the judgment of many able men who have fully believed in God; but here again I see how poor an argument this is. The safest conclusion seems to me that the whole subject is beyond the scope of man's intellect; but man can do his duty."

Darwin's position on the question which is agitating so many church people to-day concerning a conflict between Evolution and religion, is stated in his reply to a German student, in 1879, through a member of his family:

"He [Mr. Darwin] considers that the theory of Evolution is quite compatible with the belief in a God; but that you must remember that different persons have different definitions of what they mean by God."

The German youth, not satisfied apparently with this reply, wrote again, and Darwin—now seventy years old—replied personally as follows:

"I am much engaged, an old man, and out of health, and I cannot spare time to answer your questions fully,—nor indeed can they be answered. Science has nothing to do with Christ; except in so far as the habit of scientific research makes a man cautious in admitting evidence. For myself, I do not believe that there ever has been any revelation. As for a future life, every man must judge for himself between conflicting vague probabilities."

Still, Darwin fully recognized the theologically destructive tendencies of his scientific teachings. Professor Judd reported that "Lyell once told me that he had been frequently asked if Darwin was not one of the most unhappy of men, it being suggested that his outrage upon public opinion should have filled him with remorse." And Darwin himself reflected: "What a book a devil's chaplain might write on the clumsy, wasteful, blundering, low, and horribly cruel works of nature!" On the other hand, commenting upon an orthodox gentleman's alleged harmonizing of orthodoxy with Evolution, Darwin wrote with some hilarity: "How funny men's minds are! He says he is chiefly converted because my books make the Birth of Christ, Redemption by Grace, etc., plain to him! How funny men's minds are!" And when the Descent of Man was published poor orthodox Mrs. Darwin wrote to her daughter: "I think it will be very interesting, but that I shall dislike it very much as again putting God further off."

But Darwin ignored as far as possible the attacks of orthodox champions; Huxley, "Darwin's bull-dog," rushed out at the critics and silenced them when they barked too loudly. When a pious spinster, Miss Cobb, published an article declaring that if Darwin's theories won general acceptance there "would be sounded the knell of the virtue of mankind," Darwin's amused comment was: "It is to be hoped that the belief in the permanence of virtue on this earth is not held by many persons on so weak a tenure." On the whole, however, Darwin strove to spare believers unnecessary pain; a contemporary eulogizes "the magnanimous simplicity of character which in rising above all petty and personal feeling delivered a thought-reversing doctrine to mankind with as little disturbance as possible of the deeply rooted sentiments of the age."

Darwin, too, remained on cordial terms with the rector of the parish in which he lived. He even took an active part in church affairs, and the parson was one of his most enthusiastic admirers. This reverend gentleman became an eloquent panegyrist of the great scientist. In his memoirs he writes as an illustration of the nobility of Darwin's character:

"On one occasion, when a parish meeting had been held on some disputed point of no great importance. I was surprised by a visit from Mr. Darwin at night. He came to say that, thinking over the debate, though what he had said was quite accurate, he thought I might have drawn an erroneous conclusion, and he would not sleep until he had explained it."

Darwin's ultimate attitude toward religion was pragmatic. If the belief in God is useful to fellow human beings, he would not disturb it. In the *Descent of Man* he remarked: "With the more civilized races, the conviction of the existence of an all-seeing Deity has had a potent influence on the advance of morality." He himself, frankly, was in "a muddle" on these great questions. He summed up the whole matter in a few words when in 1876 he wrote:

"I cannot pretend to throw the least light on such abstruse problems. The mystery of the beginning of all things is insoluble by us; and I for one must be content to remain an Agnostic."

Fifteen years earlier he had written to Lyell: "The conclusion that I always come to after thinking of such questions is that they are beyond the human intellect; and the less one thinks of them, the better." And to Asa Gray he wrote at about the same time: "Let each man hope and believe what he can. Certainly I agree with you that my views are not at all necessarily atheistical."

But through all the shifting mists of theology there was a star that ever shone with a screne radiance—the star of human love. "Talk of fame, honor, pleasure, wealth," he confided in a letter to Sir Joseph Hooker, July 2, 1860, the year after the publication of the *Origin*, "all are dirt compared with affection; and this is a doctrine which, I know, from your letter, that you will agree with from the bottom of your heart."

May it not be that he found in Love all the sustaining strength that others assumed to be the monopoly of Faith? For, in his last illness, when hope of recovery was gone, though his mind remained clear, he could say with perfect tranquillity: "I am not the least afraid of death."