The Open Court

A MONTHLY MAGAZINE

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

Editor: Dr. Paul Carus,
Assistant Editor: T. J. McCormack.

Associates: { E. C. HEGELER MARY CARUS.

VOL. XIII. (No. 4)

APRIL, 1899.

NO. 515

CONTENTS:

Frontispiece. JEAN JACQUES ROUSSEAU. (1712-1778.)	
Jean Jacques Rousseau. Social Philosopher and Founder of Modern Pedagogy. Prof. L. Lévy-Bruhl, Maître de Conférences at the Sorbonne, Paris	193
The Origin of Speech. A Study in the Evolution of General Ideas. TH. RIBOT, Editor of the Revue Philosophique and Professor in the Collège	
de France, Paris	202
Parenthood; or, the Duties of Parents Toward Their Children. Editor	211
Americanism and Expansion. Editor	215
The Cross in Central America. With Numerous Illustrations of Ancient Mexican, Yucatecan, Guatemalan, and Other Monuments and Anti-	
quities. Editor	224
Saint Paul and the Theatre Hat. The REV. WILLIAM WEBER	247
On the Relations Between Japan and the United States. Count Terachima.	251
Americanism in the Roman Church	253
Periodicals, Book Notices, Etc	255

CHICAGO

The Open Court Publishing Company

LONDON: Kegan Paul, Trench, Trübner & Co.

Single copies, 10 cents (6d.). Annually, \$1.00. In the U. P. U., 5s. 6d.



The Open Court

A MONTHLY MAGAZINE

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

Editor: Dr. Paul Carus, Assistant Editor: T. J. McCormack.

Associates: { E. C. HEGELER MARY CARUS.

VOL. XIII. (NO. 4)

APRIL, 1899.

NO. 515

CONTENTS:

Frontispiece. JEAN JACQUES ROUSSEAU. (1712-1778.)	
Jean Jacques Rousseau. Social Philosopher and Founder of Modern Pedagogy. Prof. L. Lévy-Bruhl, Maître de Conférences at the Sorbonne, Paris	193
The Origin of Speech. A Study in the Evolution of General Ideas. TH. RIBOT, Editor of the Revue Philosophique and Professor in the Collège de France, Paris	202
Parenthood; or, the Duties of Parents Toward Their Children. Editor	211
Americanism and Expansion. Editor	215
The Cross in Central America. With Numerous Illustrations of Ancient Mexican, Yucatecan, Guatemalan, and Other Monuments and Anti-	
quities. Editor	224
Saint Paul and the Theatre Hat. The Rev. WILLIAM WEBER	247
On the Relations Between Japan and the United States. Count Terachima.	251
Americanism in the Roman Church	253
Periodicals, Book Notices, Etc	255

CHICAGO

The Open Court Publishing Company

LONDON: Kegan Paul, Trench, Trübner & Co.

Single copies, 10 cents (6d.). Annually, \$1.00. In the U. P. U., 5s. 6d.

The Open Court Publishing Company

324 DEARBORN ST., CHICAGO, ILL.

General Agencies:

Agencies for Open Court Publications in the United States and foreign countries are given below. Pubications may be examined and orders filled at any of these places.

CHICAGO:

AT THE OFFICE OF THE PUBLISHERS, 324 Dearborn St.

A. C. McClurg & Co., Corner Wabash Ave, and Madison St.

BRENTANO'S, 218 Wabash Ave.

CHARLES McDonald, 5 Monroe St.

KEGAN PAUL, TRENCH, TRÜBNER & Co., Paternoster House, Charing Cross Road.

WATTS & Co., 17 Johnson's Court, Fleet St.

LEIPZIG:

OTTO HARRASSOWITZ, 14 Querstrasse.

ROTTERDAM:

H. A. KRAMERS & SON.

NEW YORK:

LEMCRE & BUECHNER, 812 Broadway. BRENTANO'S, 31 Union Square.

BOSTON:

DAMRELL & UPHAM, 283 Washington St.

CAMBRIDGE, MASS.
HARVARD CO-OFERATIVE SOCIETY.

Foreign Countries:

AMSTERDAM:

KIRBERGER & KESPER, Rokin, 134.

PALERMO: LIBRERIA CARLO CLAUSSEN. TURIN:

MILANO:

ULRICO HOEPLI, Librario della Real Casa.

CALCUTTA:

THE MAHA-BODHI SOCIETY, 2 Creek Row.

The Monthly Open Court.

A FEW RECENT AND FORTHCOMING FEATURES:

Biographical Sketches of Great Thinkers, Philosophers, and Scientists.

WITH HANDSOME HALF-TONE PORTRAITS.

The following have appeared in the series:

PYTHAGORAS ZOROASTER

DESCARTES MALEBRANCHE

EULER GALILEO LAPLACE LESSING SCHOPENHAUER

for 1898.

SCHILLER

GOETHE

LOBACHEVSKI

KEPLER LAGRANGE MONGE

Dr. Bruce on Buddhism. Glasgow Gifford Lectures

Studies in Comparative Religion. (Mostly with rich illustrations.)

THE RELIGION OF THE ANCIENT PERSIANS. Editor.

ESCHATOLOGY IN CHRISTIAN ART. Editor. THE RELIGION OF ISLAM. Père Hvacinthe Lovson.

CATHOLICISM IN ITALY. Prof. G. Fiamingo, DEATH IN RELIGIOUS ART. (A Series.)

THE TRINITY IDEA. Editor

ANIMAL WORSHIF. Dr. Th. Achelis, Bremen.

NORSE MYTHOLOGY. Editor.

The History of Religion.

HISTORY OF THE PEOFLE OF ISRAEL. From the Beginning to the Destruction of Jerusalem. By Dr. C. H. Cornill, of the University of Königsberg. Written especially for The Open Court.

HISTORICAL SKETCH OF THE JEWS SINCE THEIR RETURN FROM BABYLON. With illustrations of Jewish customs and life. By the Rev. B. Pick, Ph. D.

THE INQUISITION. Editor. Illustrated.

THE CANONISATION OF SAINTS. By Professor Fiamingo. Illustrated.

THE UNRECORDED SAYINGS OF JESUS CHRIST. Thoroughly compiled.

Philosophical and Scientific.

LAMARCK AND NEO-LAMARCKIANISM. By Prof. A. S. Packard.
ETHNOLOGICAL JURISPRUDENCE. By the late Judge Post of Bremen.
On the Photography of Flying Bullets. By Prof. E. Mach, Vienna.
Popular articles by the First Authorities appear on all scientific and philosophical questions.

Announcements.

SOLOMONIC LITERATURE. By M. D. Conway. On Money. By Count Leo Tolstoi.

Mathematical Recreations, etc.
History of Modern Philosophy in France. By
Professor Lévy-Bruhl, Paris.

ON THE PHILOSOPHY OF SCIENCE. Prof. Ernst Mach,

On the Evolution of General Ideas. Prof. Th. Ribot, of the Collège de France, Paris. Assyria. Prof. J. A. Craig.

Single copies, 10 cents. Annually, \$1.00. In the U.P.U., 5s. 6d.

THE OPEN COURT PUBLISHING CO., CHICAGO, St. 324 Dearborn St.





JEAN JACQUES ROUSSEAU.

(1712-1778.)

Frontispiece to the April, 1899, Open Court.

THE OPEN COURT

A MONTHLY MAGAZINE

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

VOL. XIII. (NO. 4.)

APRIL, 1899.

NO. 515

Copyright by The Open Court Publishing Co., 1899.

JEAN JACQUES ROUSSEAU.

(1712-1778.)

BY PROFESSOR L. LÉVY-BRUHL.

ROUSSEAU'S personality exhibits so much complexity and yet at the same time so much unity that it is no easy thing to study in him the philosopher apart from the man of letters. His philosophical tenets are the very soul of his talent as a writer. They are not merely the result of his mind's reflexions upon the great problems, but rather of his heart's inmost tendencies. Rousseau the philosopher is Rousseau's entire self. Yet this very fact gives to his philosophical doctrine, if we try to examine it separately, a certain character of unity. His solutions of the essential questions are in harmony with one another, and it is not impossible to discover the general principles from which all the rest springs.

The chief philosophical problem, according to Rousseau, is the moral problem from the two-fold point of view of the individual and of society. He feels but little curiosity for theoretical questions, properly so called. Though a subtle and sometimes rigorous dialectician, it never occurs to him to reflect upon logic. Exact sciences have but little interest for him. The strong liking for botany which he manifested in his later years came from an æsthetic, and, in a certain sense, religious feeling.

On the other hand, everything relating to man's conduct and destiny moved him deeply. He was led to philosophical reflexion by the discomfort, suffering, and often indignation bred in him either by his intercourse with other men, or by the sight of men's intercourse with one another. Morals, institutions, and beliefs all hurt him, and appeared to him false, and different from what

they should be. Whence comes it that the immense majority of men are sunk in poverty, in order to maintain in luxury the few who in their turn suffer from having no rule of life and nothing more to desire? Whence comes it that the weak and the powerful are equally dependent upon one another, and equally unhappy? Why do we find, lurking beneath the apparent refinement and mildness of manners, the cold rage of envy, base covetousness, desperate pursuit of personal interest, indifference to public good, hardness of heart, and cruelty? Why does the development of arts and sciences, notwithstanding the excellence of a few individuals, seem to have made mankind worse and more miserable still? And, lastly, why is hypocrisy universal, making it possible for Rousseau to appear original merely because he said what was as clear as daylight to everybody? In short, to reduce all these questions to two essential ones: is it necessary that man and society should be what they are? If we can conceive the possibility of their being otherwise, by what means can man be brought back to truth, virtue, and happiness?

To the first of these two questions there is a very simple answer, supplied by Christian theology. Man fell through sin. His nature is corrupt, and it is not a surprising thing that what springs from such a nature should be corrupt also. Rousseau did not content himself with this appeal to mystery. Had he done so, he might have been a more orthodox Christian, but his effect upon his contemporaries would have been far less great, and he might have had none whatever. How could the theological solution be proposed again to minds feverishly longing for enfranchisement, and impatient to apply reason to the treatment of those subjects which theology had kept to itself for so many centuries? And then, had he borrowed his argument from the doctrine of the fall of man, what could he have said on morals that had not been well said already by Nicole and Malebranche? Instead of simply taking human perversity as a fact, Rousseau, by a stroke of genius, set himself to the study of its genesis. Instead of supposing it to be innate, he sought to discover how it was acquired. "All you can see is man in the hands of the Devil," he writes to the Archbishop of Paris; "but I see how he came there. The cause of evil, according to you, is man's corrupt nature; but this corruption is itself an evil, and what ought to have been done was to seek its cause. We both agree that man was created good, but you say he is wicked because he has been wicked, while I demonstrate how he came to be wicked. In short, according to Rousseau, the

dogma of original sin is not so much a solution as a statement of the problem. He attempted to supply a real solution and to offer an explanation instead of a dogma.

The undertaking was a bold one, and characteristic of the age which asserted that in man "everything is acquired," and which, in its desire to set the individual man wholly free from all sense of solidarity with his fellows, except in so far as he himself freely accepted it, endeavored with Condillac and Helvetius to belittle and even to deny the influence of heredity. In the same way, Rousseau attacked the formidable problem of the origin of evil in the human soul, still unsolved save in religious metaphysics, without stopping to ask himself whether it was not beyond the reach of his reason. That reason set the problem, was for him sufficient ground for believing that reason was capable of solving it. Though Rousseau was an adversary of the philosophers and out of patience with their misuse of reason, it did not occur to him, any more than to them, to submit reason itself to criticism and to measure its power.

* *

The search for the genesis of moral and social evil implies that man was once innocent and good. If we thus admit a "contradiction" (a word Rousseau was wont to use with the meaning of "opposition") between man's primitive nature and our social order, we shall see that it is sufficient to explain all the vices of men and the evils of society.

But it is no light task to discern what is original and what is artificial in the present nature of man. How can we know his "primitive state, which exists no longer, may never have existed, will probably never exist again, but of which, however, we must have some precise notions in order to judge rightly of our present state?" We see that Rousseau does not for a moment claim for his researches the character of historical investigations. He makes no pretension to anthropological science. He does not even seek to discover what primitive man may actually have been. The genesis he undertakes to seek is an analytical one, like those attempted in psychology by Diderot, Condillac, and Buffon, to which the public had given a very favorable reception. Just as Condillac, in tracing our knowledge back to its first elements, did not have recourse to direct observation, but, by a sort of ideal analysis, eliminated imaginatively all the senses save one, in order to establish the special data of that one, after which he brought back the other senses one by one, so Rousseau proceeds, as he himself says, by means of 'hypothetical and conditional" reasoning. He first considers the nature of man as he now is, and determines all that may be explained by the influence of social intercourse, of surroundings, education, etc. Then, suppressing all that is thus explained, he infers that what remains must have been the original nature of man.

Those who objected that Rousseau's "man in a state of nature" had never existed, failed therefore very egregiously to understand him. It is as if one should object that Condillac's animated statue never existed. Rousseau's method is quite a psychological one. It was "by meditating upon the first and simplest operations of the soul" that he endeavored to deduce the feelings and ideas of the natural man. Nature, whose voice cannot be completely hushed, was to tell him, by means of an inward feeling, whether his hypotheses were acceptable. He had in her a means, if not of verification, at least of control.

* *

In order to separate at once from man's present nature all that the successive generations have acquired in the course of the centuries, Rousseau supposes the original man to have lived alone. Even the family did not yet exist: it was a first revolution that brought about the establishment of families, and the distinctions between them. Originally man did not live in society any more than wolves and monkeys do; he occasionally joined his fellowcreatures, but usually kept aloof from them. He was an animal, inferior in certain respects to some but upon the whole superior to all others. His body was robust, and mainly unacquainted with other ills than wounds and old age. The innumerable diseases to which civilised man is a prey were unknown to men in a state of nature; moreover, as the sway of natural selection was undisputed among them, every weak and deficient individual, not being able to get beyond childhood, was eliminated at the outset. As regards his mind, his first state, in common with all animals, must have been that of simple perception and feeling to will and to be unwilling, to desire and to fear,—these must have been the first and almost the only operations of his soul. He felt no curiosity, and his mind stagnated indefinitely. As he wandered through the forests, without industry and without speech, neither at war with his kind nor bound by any ties to them, having no need of his fellow-creatures and at the same time no desire to harm them, he had only so much feeling and enlightenment as belongs to such a state; there could be no education and no progress. The species

was already old, and man remained still a child. His only passion was the love of his own person (not self-love which supposes a distinction between personal interest and the interest of others, that is, of society). He had a natural inclination to pity, when he beheld one of his fellow-beings in distress.

But this harmless animal, apparently so nearly like the others, had that within him which could create between him and them an almost boundless difference. He was "perfectible." He possessed the potentiality of reason, and of everything that comes in its train: language, civil society, morality, and progress. difficulty is to understand how the solitary man became sociable, and what started that extraordinary evolution, of which modern societies are the outgrowth. Rousseau confesses that the transition puzzles him; he has recourse to "the spur of necessity," to the presence of want, occasioned apparently by the increase of population. How did man begin to think? "The more we meditate upon this subject, the greater the distance between pure sensations and the most simple form of knowledge" appears. And how are we to explain the origin of language? Rousseau thinks the problem insoluble; he does not know which was the more indispensable prerequisite for the creation of the other, a society already in operation or a language already invented.

Having reached this point, the author sketches a sort of hypothetical pre-history, in which man, having once left the state of nature behind him, is constantly led on to new inventions by new wants. His intelligence and sensibility developed, the family is constituted, and groups of families are formed; common tradition, knowledge, and beliefs are established. Finally, when the last traces of the state of nature are obliterated, the idea of property appears. This idea, dependent as it is upon many other previous ideas, which could have arisen only one after another, was not formed all at once in the human mind: many improvements had to be made and much industry and enlightment to be acquired before it could occur to men.

Property implies the organisation of civil society, of penal justice, and the legal recognition of inequality. Henceforth there must be rich men and poor men; and, by a prodigious piece of dexterity, those who have possessions have managed to get their wealth insured and protected by those who have none. Soon there will be powerful men and weak men, and in the end masters and slaves. Inequality thus reaches its last stage. In the state of nature men were all equal, save for a few physical differences, since

they all led the same peaceful and solitary life. In the present state some are starving while others are wallowing in superfluous wealth, and all become crafty, jealous, and wicked.

But, one might object, was it not by virtue of his very nature that man developed his reason, and gradually formed the family, property, and civil society? If the social man existed as a germ or potentiality within the original man, is it fair to oppose them to each other? Rousseau forestalled the objection. Such an evolution, he says, was not inevitable. It might possibly not have taken place. Nature had but meagerly endowed men for sociability. She had very little share in all that they did to make fast its bonds. She had made him rather for solitude. Perfectibility, social virtues, and all other potentialities which the natural man had received could never have developed of themselves; they needed the chance conjunction of several causes which might never have occurred; man would then have remained forever in his primitive condition. But when once this evolution had begun, and, above all, when once society had been established, every step taken brought man farther from his original type.

Thus the long toil of civilisation, which gave us arts, sciences, and industry, also brought upon us diseases, misery, sufferings of all kinds, and especially vices. Society is an assemblage of artificial men, preyed upon by factitious, though only too real, passions, for which in the primitive state there was no occasion. Therefore, if man's nature is now corrupted, we must not infer therefrom that it has always been so. This corruption is his own work, and the ransom to be paid for his release from savagery.

Thus did Rousseau solve the first problem he had set himself, and trace the genesis of social evil. Where are we to seek a remedy for it? This remedy, if it exists, can be found only in a system of education that would rehabilitate man depraved by the morals and institutions of to-day. But such a system of education implies a whole system of philosophy, for it presupposes a thorough knowledge of man's nature, of the laws of his mental development, of his private and public intercourse with his fellow-creatures, of his place in nature, of his future destiny, and lastly, of the first cause of all things. This philosophy Rousseau was to undertake, and the idea of "nature" as opposed to everything fictitious or conventional, was to be the clue that he followed in his researches.

Knowing what was the state of nature, which man has left forever, knowing what his present social state is, and what it ought to

*

be, what education ought man to receive? What is he to be taught, and how?

As a principle, education should be national and public. There lies the essential cause of the "superhuman grandeur" of Sparta. There are opened the ways unknown to the moderns, by which the ancients brought men to such fortitude and patriotic zeal as are unexampled among ourselves, but the germs of which are in the hearts of all men. To train citizens is not the work of a day, and in order to have men good citizens, they must be taught when children, and accustomed from their earliest years to regard themselves only as members of the State, and to consider their own existence, so to speak, as part of that of the State. Evidently this can be obtained only by public education entirely directed to this object. Public education is, therefore, one of the fundamental maxims of popular and right government.

But as nothing is more unlike Sparta than the States of the eighteenth century, our ambition shall not be to train citizens, and we shall turn from the question of public control. We must limit our task, which even then will be difficult enough, to preventing the social man from being entirely artificial. "Conformity with nature" is the motto of Rousseau's pedagogy. In accordance with this principle, he advises mothers to suckle their children themselves; in devotion to the same principle he waits, before speaking of religion to his pupil, till the latter is able to understand the twofold revelation of conscience and of the universe. The good teacher is he who assumes no other function than to present matters in such a way that the lessons of experience may be clear, striking, and calculated to produce a durable impression upon the child's mind. He leaves it to nature to educate by degrees the child's senses, understanding, and conscience; he sometimes encourages nature, but never forestalls her. Thus the child escapes the many prejudices insidiously instilled into his mind by the customary methods of education, which are afterwards so difficult to eradicate.

Thus, Émile shall not be a man made by man; he shall be one made by Nature. This does not involve making him a savage, or confining him in the depths of the forests; but, though absorbed in the vortex of society, we ask only that he be not led away by man's passions or opinions; that he see with his own eyes, feel with his own heart, be governed by no authority save his own reason. To be one's self: nothing is more rare, difficult, and even impossible, unless one has been prepared for it from child-

hood. As soon as he is born, man is wrapped in swaddling clothes; when dead, he is sewed up in a shroud; all his life long, he is pinioned by laws, manners, and customs, decorum, and professional obligations. Nobody ever suffered more than did Rousseau from social tyranny and hypocrisy; nor did any cry of revolt ever echo so far and so long as the cry he uttered against them.

Does this mean that he dreams of bringing man back to his primitive state? Certainly not, for there is a wide difference "between the natural man living in a state of nature, and the natural man living in a state of society." The latter must adapt himself to his situation. He is a "savage intended for life in towns." He must therefore receive a systematic education, and be instructed in all accomplishments. Mingling with other men, he must learn to live not like them, but with them. Our race does not like to be half finished. In the present state of things, a man left to himself among other men would be the most distorted of all. Whence it follows that in a well regulated republic, the State owes to every man not only the possibility of living by his own work, but also such education as will make of him a free man and a good citizen.

No philosopher, and, more broadly speaking, no writer for a century past, has had an influence comparable to that of Rousseau. But the very strength and durability of this influence, which is still deeply felt in our times, has often prevented him from being studied and judged with impartiality. He has enthusiastic admirers and intense opponents, and both sides have maintained legends often very far from true. Thus many people still believe that to Rousseau must in an especial manner be ascribed the responsibility for the excesses committed during the Revolution, and that the worst terrorists were inspired chiefly by his doctrines. But the responsibility of Rousseau in this connexion is neither greater nor less than that of other philosophers of the eighteenth century, and he even contributed, as Auguste Comte clearly perceived, to bring on the religious reaction which combated these very philosophers. The error may have arisen from the fact that other French philosophers, from motives of policy, met the temporal power with deference and with flattery, whereas Rousseau, being a Genevese citizen, boasted of his republican feelings. But for all that he is not a revolutionary spirit. On the contrary, he counselled political moderation and prudence. Even the unhappy Poles who were on the point of perishing he exhorted not to lay their hands rashly upon their national constitution, and he predicts most profound misfortunes for the French if they try to change the institutions

under which they have lived for so many centuries. Though the inequalities of fortune are monstrous, though "the demon of property pollutes whatever it touches," yet Rousseau does not mean to lay hands on vested rights, and it is in the future only that he perceives means of opposing the ever-increasing social inequality.

But, having said this much, we must acknowledge that Rousseau's philosophy was big with consequences. The opposition between what is natural and what is artificial, which is its leading idea, was apt to lead minds in love with logic and justice a very great way if applied to every aspect of human life. This opposition was, of course, not discovered by Rousseau; it had been known ever since there had been moralists; and especially since the beginning of the eighteenth century, the "good savage" and "nature" had been quite in fashion. Rousseau's achievement lies in making of this opposition the principle of a whole moral and social doctrine, and of finding therein a means of distinguishing between what is and what ought to be, by declaring nature to be good, and evil to have sprung from human conventions. fore, if the evils under which we labor are of social origin, the finding of remedies depends upon us. For this it is sufficient to "see with our eyes, to feel with our hearts, and to judge with our reason"; to free ourselves from traditional preconceptions and prejudices. We shall then plan for man, not a chimerical return to an impracticable state of nature, but a social organisation more in conformity with order and justice.

The very foundation principles of the present state of society are thus called into question. The lawfulness of individual property, the excessive inequality of fortunes, the sovereignty of the people, the reciprocal rights and duties of the individual and the State, the relation between the Church and political powers, are so many problems proposed by Rousseau in such a way that it became thenceforth impossible not to take an interest in them. He thought the solutions more simple and easy than they really are: witness the "civil religion" he wished to establish in the name of the State, which was often so entirely misunderstood. But the thought that led him to ask these questions was after all just, and many of his ideas were original and suggestive. In spite of his connexion with the "philosophers," he really follows none of them; how many others, friends and adversaries, have followed him!

THE ORIGIN OF SPEECH.

BY TH. RIBOT.

ALTHOUGH many linguists resolutely abstain from considering the origin of speech (which is certainly, like all other genetic problems, beyond the grasp of psychology), the question is so intimately allied with that of the evolution of articulate language, allied again in itself with the progressive development of abstraction and of generalisation, that we shall give a brief summary of the principal hypotheses relating to this subject, while limiting ourselves to the most recent.

Ι.

Launching forth then into this region of conjecture—do we, in the first place, find among some animals signs and means of communication which for them are the equivalents of language? In considering this point it matters little whether or no we accept the evolutionary thesis. It must not be forgotten, in fact, that the problem of the origin of speech is only a particular case of the origin of language in general: speech being but one species among several others of the *facultas signatrix*, which can only be manifested in the lower animals in its humblest form.

There can be no doubt that pain, joy, love, impatience, and other emotional states, are translated by proper signs, easy to determine. Our problem, however, is different; we are concerned with signs of the *intellectual*, not of the affective, life. In other words, can certain animals transmit a warning, or an order, to their fellows? Can they muster them for a co-operative act, and make themselves intelligible? Although the interpretation is necessarily open to the suspicion of anthropomorphism, it is difficult not to recognise a sort of language in certain acts of animal life. Is it, a priori, probable that animals, which form stable and well-organised

¹ Translated by Frances A. Welby.

societies, should be bereft of all means of intercommunication and comprehension?

With regard to ants, we learn from such observers as Kirby and Spence, Huber, Franklin, that they employ a system of signs. To elucidate this point, Lubbock undertook a series of patient experiments, certain of which may be quoted. He pinned down a dead fly so that no ant could carry it off. The first that came made vain attempts to remove it. It then went to an ant-hill and brought seven others to the rescue, but hurried imprudently in front of them. "Seemingly only half awake," they lost the track and wandered alone for twenty minutes. The first returned to the nest and brought back eight, who, so soon as they were left behind by the guide, turned back again. During this time the band of seven (or at least some of them) had discovered the fly, which they tore in pieces and carried off to the nest. The experiment was several times repeated, with different species, and always with the same result. Lubbock concluded that ants were able to communicate their discoveries, but without indicating locality. In another experiment he placed three glasses at a distance of thirty inches from a nest of ants. One of the glasses contained two or three larvæ, the second three hundred to six hundred, the third none at all. He connected the nest with the glasses by means of three parallel tapes, and placed one ant in the glass with many larvæ and another ant in that with two or three. Each of them took a larva and carried it to the nest, returning for another, and so on. After each journey he put another larva into the glass with only two or three larvæ, to replace that which had been removed, and every stranger brought was imprisoned until the end of the experiment. Were the number of visits to all three glasses the same? And if not, which of the two glasses containing larvæ received the greater number of visitors? A difference in number would seem to be conclusive as proving a power of communication. The result was that during forty-seven and a half hours two hundred and fifty-seven friends were brought by the ants having access to the glass containing numerous larvæ, while during an interval of fiftythree hours there were only eighty strange visitors to the glass containing two or three larvæ; there were no visits to the glass containing none. Communication for bees as for ants, appears to be made by rubbing the antennæ. If the queen is carried off in a hive, some of the bees are sure to discover it before long. They become greatly agitated, and run about the hive frantically, touch-

¹ Ants, Bees, and Wasps, VII.—Romanes, Animal Intelligence, IV.

ing any companions they meet with their crossed antennæ, and thus spreading the news through the whole community. The beehunters in America discover them by choosing a clearing where they catch a few wandering bees, which are then gorged with honey and suffered to fly when replete. These bees return with a numerous escort. The same process is repeated with the new comers, and by observing the direction which they follow at their departure, the nest is discovered.

As regards the higher animals (notwithstanding the exaggerations of G. Leroy—who asserts that when they hunt together, wait for one another, find each other again, and give mutual aid, "these operations would be impossible without conventions that could only be communicated in detail by means of an articulate language [sic]") the truth is that we know singularly little about them. It is certain that, in addition to sounds that translate their emotions, many species have other means of communication. According to Romanes 1 the most intelligent dogs have the faculty of communicating with one another by tones of barking, or by a gesture, such simple ideas as "follow me." This gesture is invariably the same; being a contact of heads with a motion between a rub and a butt, and always resulting in a definite but never complex course of action. In a troop of reindeer the leader makes one sign for the halt, another for the march forward, hitting the laggards one after another with his horns. Monkeys are known to produce various sounds (the gibbon compasses a complete octave), and several species will meet and hold a kind of conversation. Unfortunately, notwithstanding recent researches, we have only vague and doubtful data in regard to monkey language.

We know finally, that certain birds are able to articulate, and possess all the material conditions of speech, the faculty being indeed by no means uncommon. Parrots do even more; there is no doubt that they can apply words, parts of sentences, and airs, to persons, things, or definite events, without varying the application, which is always the same.² Association by contiguity sufficiently explains this fact; but, granting that they do not as a rule make a right intellectual use of articulate sounds, they seem in certain instances to attach to them the value of a sign. Romanes actually observed a more extraordinary case, implying generalisation, with apposition of a sound. In the first instance, one of his par-

¹ Animal Intelligence, XVI., p. 445.

² The most interesting of the many observations on this subject are those of Dr. Wilkes, F R. S., published in the *Journal of Mental Science*, July, 1879.

rots imitated the barking of a terrier which lived in the house. Later on, this barking became a denotative sound, the proper name of the dog; for the bird barked as soon as it saw the terrier. Finally, at a still later stage, it got into the habit of barking when any dog, known or unknown, came into the house; but ceased to bark at the terrier. While distinguishing individuals it therefore perceived their resemblance. "The parrot's name for an individual dog became extended into a generic name for all dogs." 1

In short, the language of animals—so far as we know it—exhibits a very rudimentary development, by no means proportionate to that of the logic of images, and highly inferior to that of analytical gesture. It throws no light, notwithstanding all that has been said, upon the problem of the origin of speech.

In respect to this subject, which has excited human curiosity for centuries without satiation, there appear to me (when we have eliminated old or abandoned hypotheses) to be only two theories which have any solidity: the one presupposes instinct; the other a slow evolution.

I. It must be remarked that if the partisans of the first theory seem at the outset to have frankly admitted innate disposition (the fundamental characteristic of instinct), it is more difficult to distinguish between some of the later writers and the evolutionists.

Thus it has been said: speech is a necessary product in which neither reflexion nor will participate, and which is derived from a secret instinct in man (Heyse). Renan sustained a similar thesis. For Max Müller, "man is born speaking, as he is born thinking"; speech marks the transition from (concrete) intuitions to ideas; it is a fact in the development of the mind; it is created with no distinct consciousness of means and end. For Steinthal, on the contrary, "language is neither an invention nor an innate product; man creates it himself, but it is not begotten of the reflecting mind." Through all these formulæ, and others somewhat tinged with mysticism, we can discover but one point of fact, analogous to that which states that it is in the nature of the bee to form its comb, of the spider to weave its web. The last word of the enigma is unconscious activity, and whether directly, or by evasions, this school must return to innate faculties.

A somewhat recent theory—that of L. Noiré,²—is distinct from the foregoing. In these, speech is the direct (although, it is true, unconscious) expression of intelligence; for Noiré, on the other

¹ Mental Evolution in Man, p. 173.

² Der Ursprung der Sprache (1877). Fr. Müller maintained a similar view.

hand, it is the outcome of will. "Language is the result of association, of community of feeling, of a sympathetic activity which, at the outset, was accompanied by sounds; it is the child of will and not of sensation." Speech is derived from community of action, from the collaboration of primitive men, from the common use of their activities. When our muscles are in action, we feel it a relief to utter sounds. The men who work together, the peasants who dig or thresh the grain, sailors rowing, soldiers marching, emit more or less vibrant articulations, sounds, exclamations, humming, songs, etc. These sounds present the requisite characters of the constitution of articulate language; they are common to all; they are intelligible, being associated by all with the same acts. Action, according to Noiré, is the primitive element in all language. Human labor is the content of primitive roots; to cut, knock, dig, hollow, weave, row, etc. Although Max Müller adhered almost unreservedly to this hypothesis, it has, like all others, encountered much criticism which we need not dwell on. probable, it has been asked, that the first names should have been for acts only, not for objects? How explain the synonyms and homonyms so frequent in primitive language? etc.

II. The hypothesis of a progressive evolution of speech, while dating from antiquity, has only taken a consistent form in our own days, under the influence of transformist doctrines. The work of anthropologists and of linguists, above all of the former, it finds support in the study of inferior idioms and of the comparative method. Its fundamental thesis is that articulate language is the result of a long elaboration, lasting for centuries, in which we may with some probability reconstitute the stages. While its authors are not in complete agreement it may be said that, generally speaking, they admit three periods: the cry, vocalisation, articulation.

The cry is the primordial fact, the pure animal language, a simple vocal aspiration, without articulation. It is either reflex, expressing needs and emotions, or, at a stage higher, intentional (to call, warn, menace, etc.). It has been said that the speech-lessness of animals is due to the imperfection of their auditory (?) organs and want of organic correspondence between their acoustic images and the muscular movements that produce sound: but the cause of this aphasia must also, and above all, be referred to their weak cerebral development; this applies also to primitive man. "What function could words have fulfilled when the anthropoid of the Neanderthal or the Naulette roamed, naked and solitary,

from ditch to ditch, through the thick atmosphere, over marshy soil, stone in hand, seeking edible plants or berries, or the trail of females as savage as himself?" It is intelligence that creates its instruments, as well speech as all the rest.

Vocalisation (emission of vowels only) does not in itself contain the essential elements of speech. Many animals practise it; our vowels, long or short, even our diphthongs, can readily be recognised in the voice of different species (dog, cat, horse, birds in large numbers, etc.). In the child, it succeeds the period of the simple cry; and since it is admitted that the development of the individual hints at that of the race; that, moreover, many primitive languages or rudimentary idioms (as such, near the time of their origin) are very rich in vowels,—it has been concluded that there existed a longer or shorter period intermediate between those of the cry and of articulation (this thesis has close affinities with the theory of Darwin, Spencer, etc., which has been rejected by other evolutionists); that speech is derived from song, intellectual language from emotional language; in other words, that man could sing before he could speak. Various facts are alleged in support of this theory: (1) In monosyllabic languages, which are generally held to be the most ancient, the accent plays a cardinal rôle; the same syllable, according to the tone which accompanies it, takes on the most widely different meanings. Such is the case of the Chinese. In Siamese, $h\ddot{a} = \text{to seek}$; $h\acute{a} = \text{plague}$; $h\grave{a} =$ five. (2) Other languages in which intonation is of less importance, are nevertheless in close relation with song, and by reason of their vocabulary and of the grammatical construction, modulation is necessary for giving a complete sense to the words and phrases. (3) Even in our own languages, which are completely dissociated from song, the voice is not even in tone; it can be greatly modified according to circumstances. Helmholtz showed that for such banal phrases as "I have been for a walk," "Have you been for a walk?" the voice drops a quarter-tone for the affirmation, and rises a fifth for the interrogation. H. Spencer called attention to several facts of the same order, all commonplace. (4) The impassioned language of emotion resembles song: the voice returns to its original form; "it tends," according to Darwin, "to assume a musical character, in virtue of the principle of association."

Whatever may be the force of this reasoning, conclusive for some, doubtful for others, the conditions necessary to the existence of speech arose with articulation only, consonants being its firmest

¹ A. Lefèvre, Les races et les langues (Bibliothèque scientifique internationale), pp. 5-6.

element. The origin of speech has been much disputed. Romanes invokes natural selection: "The first articulation probably consisted in nothing further than a semiotic breaking of vocal tones, in a manner resembling that which still occurs in the socalled 'chattering' of monkeys,—the natural language for the expression of their mental states." It should, however, be noted that the question, under this form, has merely a physiological interest. The voice is as natural to man as are the movements of his limbs; between simple voice and articulate voice there is but the same distance as between the irregular movements of the limbs of the newly born, and such well-co-ordinated movements as walking. Articulation is merely one of the forms of expression: it is so little human that it is met with, as we have seen, among many of the lower animals. The true psychological problem lies elsewhere: in the employment of articulate sounds as objective signs, and the attaching of these to objects with which they are related by no natural tie.

Geiger in his Ursprung der Sprache (1878) brought forward a hypothesis which has been sustained by other authors. It may be summed up as follows: words are an intimation of the movements of the mouth. The predominant sense in man is that of sight; man is pre-eminently visual. Prior to the acquisition of speech, he communicated with his fellows by the aid of gestures, and movements of the mouth and face; he appealed to their eyes. Their facial "grimaces," fulfilled and elucidated by gestures, became signs for others; they fixed their attention on them. When articulate sounds came into being, these lent themselves to a more or less conventional language by reason of their acquired importance. For support of this hypothesis, we are referred to the case of noneducated deaf-mutes. These invent articulate sounds (which of course they cannot hear), and use them to designate certain things. While many of these words appear to be an arbitrary creation (e. g., ga=one, ricke=I will not, etc.), others result from the imitation by their mouth of the movements perceived on the mouth of others. Such are mumm=to eat; chipp=to drink; be-yr=barking of a dog, etc.2 Why should primitive man have done less than the deaf-mute, when he not only saw the movements but heard the sounds to boot?

To conclude with a subject in which individual hypotheses abound, and which for us is only of indirect interest, we may sum-

¹ Loc. cit., 372.

² Heinicke, Beobachtungen über Stumme, 75, 137.

marise the sketch given recently enough (1888) by one of the principal partisans of the evolutionary theory:

"Starting from the highly intelligent and social species of anthropoid ape as pictured by Darwin, we can imagine that this animal was accustomed to use its voice freely for the expression of its emotions, uttering of danger-signals, and singing. Possibly enough also it may have been sufficiently intelligent to use a few imitative sounds; and certainly sooner or later the receptual life of this social animal must have advanced far enough to have become comparable with that of an infant at about two years of age. That is to say, this animal, although not yet having begun to use articulate signs, must have advanced far enough in the conventional use of natural signs (or signs with a natural origin in tone and gesture, whether spontaneous only or intentionally imitative) to have admitted of a tolerably free exchange of receptual ideas, such as would be concerned in animal wants, and even, perhaps, in the simplest forms of co-operative action. Next, I think it probable that the advance of receptual intelligence which would have been occasioned by this advance in sign-making, would in turn have led to a further development of the latter,—the two thus acting and reacting on each other until the language of tone and gesture became gradually raised to the level of imperfect pantomime, as in children before they begin to use words. At this stage, however, or even before it, I think very probably vowel-sounds must have been employed in tone-language, if not also a few of the consonants. Eventually the action and reaction of receptual intelligence and conventional sign-making must have ended in so far developing the former as to have admitted of the breaking up (or articulation) of vocal sounds, as the only direction in which any further improvement of vocal sign-making was possible. I think it not improbable that this important stage in the development of speech was greatly assisted by the already existing habit of articulating musical notes, supposing our progenitors to have resembled the gibbons or the chimpanzees in this respect. But long after this first rude beginning of articulate speech, the language of tone and gesture would have continued as much the most important machinery of communication. Even if we were able to strike in again upon the history thousands of years later, we should find that pantomime had been superseded by speech. I believe it was an inconceivably long time before this faculty of articulate sign-making had developed sufficiently far to begin to starve out the more primitive and natural systems; and I believe that, even after this starving-out

process did begin, another inconceivable lapse of time must have been required for such progress to have eventually transformed Homo alalus into Homo sapiens." 1

Among all these hypotheses we may choose or not choose; and while we have dwelt briefly on this debated problem, whose literature is copious, we may yet have said too much on what is

mere conjecture.

One certain fact remains, that—notwithstanding the theory by which speech is likened to an instinct breaking forth spontaneously in man—it was at its origin so weak, so inadequate and poor, that it perforce leaned upon the language of gesture to become intelligible. Specimens of this mixed language are still surviving among inferior races that have nothing in common between them, inhabit-

ing regions of the earth with no common resemblances.

In some cases speech coexists with the language of action (Tasmanians, Greenlanders, savage tribes of Brazil, Grebos of Western Africa, etc.). Gesture is here indispensable for giving precision to the vocal sounds; it may even modify the sense. Thus, in one of these idioms, ni ne signifies "I do it," or "You do it, according to the gesture of the speaker. The Bushman vocabulary is so incomplete and has to be reinforced by so many mimic signs, that it cannot be understood in the dark. In order to converse at

night, the tribe is obliged to gather round the fire.

In other cases, speech coexists with inarticulate sounds (Fuegians, Hottentots, certain tribes of North America) which travellers have compared, respectively, to clinking and clapping. These sounds have been classified according to the physiological process by which they are produced, into four (or even six) species: dental, palatal, cerebral, lateral; it is impossible to translate them by an articulated equivalent. "Their clappings survive," says Sayce, "as though to show us how man, when deprived of speech, can fix and transmit his thought by certain sounds." Among the Gallas the orator haranguing the assembly, marks the punctuation of his discourse by cracking a leather thong. The blow, according to its force, indicates a comma, semi-colon, or stop; a violent blow makes an exclamation.²

It was advisable to recall these mixed states in which articulate language had not yet left its primitive vein. They are transitional forms between pure pantomime and the moment when speech conquered its complete independence. Having considered the origin of speech, we shall next study its development.

¹ Romanes, Mental Evolution in Man, pp. 377-379.

² For data, consult especially Tylor, Primitive Culture, V.; Sayce, Principles of Compara tive Philology, I., § 17.

PARENTHOOD.

BY THE EDITOR.

ROEBEL'S motto, "Come, let us live for our children," should be adopted as a maxim by all parents. Parents that cannot make up their mind to live for their children have no business to have children. Children are not dolls; they should not become toys for our amusement and diversion; children are pledges; the possession of children implies duties, and the fulfilment of these duties demands not only a painstaking labor and watchfulness, but also much discretion and wisdom.

The obligation of educating children exercises a most beneficial influence upon parents, and the proposition to discuss "the education of parents by their children" is not as paradoxical as it seems. We may say that no one, neither man nor woman, has grown to mental and moral maturity until he or she has been confronted with this noblest of all duties, the care of bringing up children. Carus Sterne² says:

"Every child requites much of the love bestowed upon it by the parents, by making them better and more perfect beings than they were before its advent into the family. In fact, the highest polish, the finishing touches of education, are given people neither by home, school, nor church, but by their own children. Should they be so unfortunate as not to have any, they will experience difficulties in replacing this lacking factor in the education of their affections."

Frequently sexual love is spoken of as the factor that exercises a civilising influence upon man; but Carus Sterne, "at the peril of exposing himself to heresy in poetical matters," declares that on the contrary it engenders cruelty, produces destructiveness and

1 This is the title of an article by Carus Sterne, which appeared in *The Open Court*, Vol.I. Nos. 22-23.

² Carus Sterne is the *nom de plume* of Dr. Ernst Krause, of Berlin, a well-known German author of scientific and popular-scientific works, his most celebrated work being Werden und Vergehen. He is counted among the foremost evolutionists of Germany, and did not fail from the very beginning to emphasise the moral significance of the doctrine of evolution.

brings about beneficent results only when resulting in a firm union, demanding reciprocal surrender and self-sacrifice. The religious aspirations of mankind develop from the relation between parents and children. Says the same author:

"Out of parental and filial love there develops, even in immature minds, a universal love for humanity. The infant becomes the Saviour—the earthly father becomes the prototype of the all-wise, all-bountiful Father in heaven."

Protestants as a rule object to Mariolatry as pagan. They are aware of the pagan features of a literal belief and are therefore disgusted with their Roman Catholic brethren. But belief in the divinity of motherhood contains no less truth than the belief in the divinity of fatherhood. Protestants, as a rule, believe in the latter, and are therefore not aware of the Protestant paganism that results from a sensual and grossly literal interpretation of the belief in God the Father. The family relation is not dual, but trinitarian. It is not parent and child, but father, mother, and child.

Carus Sterne, too, touches upon this point, saying:

"The early endeavor to elevate the mother into the realm of the divine is a deeply-felt and psychologically well justified factor in the development of Christian dogma. It was thus that the mother with the infant on her lap was made the chief picture at the shrines. The "Holy Family," so typically portrayed by Raphael, wins all hearts, even at this day, in Protestant countries, for it justly makes the nursery the sanctuary which produces and constantly feeds the pure flame of love of man and of God."

The possession of children is a blessing, and the joy that parents may derive from them is immeasurable. It would nevertheless be a grave mistake to think that such happiness can be had simply through the procreation of progeny and by indulging, simian fashion, in a love of one's own offspring. The bliss of parenthood has to be bought with many cares, with sacrifices, and with far-seeing forethought.

It is a common observation that the character of people changes for good the moment they become parents. The average man is thoughtless and perhaps even frivolous, but as soon as the duties of parenthood approach him, he begins to reflect and becomes considerate. Now he weighs his words and takes life more seriously. Many who never before gave a thought to the problems of religion, because they are lukewarm and do not care to have a settled opinion, pause for the first time in their lives and ask themselves whether they had better teach belief in God or unbelief. The moral views of people assume a decidedly more definite form when they think of their children, and our behavior is influenced

by the idea that we set with our habits an example to our youngsters.

What a wonderful plan it is of nature to split up the evolution of mankind whose life in its entirety forms one uninterrupted line of progress, into innumerable sections of individual lives. We could very well imagine a different arrangement. The individual and the race might coincide, and we should then have the growth and evolution of one immortal personality, in the place of an immortal race broken up into a progressive succession of mortal individuals. There would be no death in the dispensation of the unlimited life of such a race-individual; nor would there be any birth, and mankind would not need starting life over again with every new baby; there would be no need of education; no need of love. But where would the interest in life remain, if this mankind-individual lived through centuries and millenniums without being obliged to continue its existence through begetting and educating children.

Life would be unpalatable if it were not broken up into limited pieces and constantly started over again. An immortal mankind-individual would feel like Goethe's Mephistopheles, who says to Faust:

"Trust me, who for millenniums, year by year,
The same tough cud must masticate and test:
No mortal from the cradle to the bier
Can ever this unsavory stuff digest.
Trust one of us to whom this life is known;
The whole can be endured by God alone."

The mutuality of life is the condition of our moral ideals which naturally have a tendency to break through the narrow range of exclusively individual interests; it points beyond the sphere of individual life without annihilating the importance of the individual. It makes the individual the representative of superindividual aspirations which, through the inherited parental affections, have become sufficiently deep-seated as to well up spontaneously whenever needed, sometimes even in criminal characters, in spite of themselves. Egotism and altruism are both useful and beneficent instincts. They balance each other, and where either is missing the other will run to seed and do great harm.

Our ethics, our religion, nay, our whole interest in life, is simply an expression of the natural constitution of mankind, viz., of the system of mutuality.

It may be wrong to say that without the mutuality of life there would be no ethics at all, because another arrangement would sim-

ply imply other rules of conduct than those which we now call moral. In other worlds of a different constitution, with other interrelations, there would be other needs, and consequently its creatures would aspire after other ideals. It is difficult to say what might be; but this much is sure, that our moral and religious conceptions are a product of the conditions which have shaped our lives. However much religious truths have been represented as a contradiction to nature, they are nature in its highest efflorescence; and wherever for a time, through gross sensualism and childish immaturity, by a literal conception of parables and an unspiritual pagan interpretation of the nature of dogmas, mankind has drifted into a hostility to nature, religion lost its true significance, but showed always, even in the darkest ages, a tendency to return to a purer, more elevating, and more natural morality.

It is mutuality that gives zest to life and makes it worth living. The interest that keeps us in the world and attaches us to existence is like the vault of a massive structure, where stones keep one another up by inclining toward and pressing upon one another. Mutuality holds up the lofty arch as firmly and as solidly as the interrelation that obtains among the various members of human society naturally produces and sustains ethics; and the most important, because fundamental, mutuality of human life is the relation between parents and children. It is apparent that mankind would never have developed true humanity, had it never witnessed a mother's love. The sublimest and noblest sentiments would be still unknown, had not generation after generation been trained in the school of parental care and self-sacrifice. Men have learned the most valuable lessons of life by living for their children.

AMERICANISM AND EXPANSION.

BY THE EDITOR.

A MERICANISM is the principle of liberty, and expansion is growth. The United States have entered upon a new period in their development by acquiring new territory, some of which is situated in the distant Eastern Seas; and we hear again, as on similar occasions in the past, from a great number of the people, the vigorous protest that expansion as such is opposed to Americanism. Expansion reaches out into new fields as a tree in growing spreads over into an adjoining garden; and the question arises, Have we a right to acquire territory without the previous consent of the people who at present inhabit the territory into which, through the accident of historical occurrences, our power now extends? The present situation is by no means the first one of the kind, but it is new in so far as the territories do not directly touch our present boundaries, and part of them belong to another continent over 8,000 miles away.

The United States began their history as thirteen small colonies, and their progress has been one of constant expansion. The Colonies dared to resist the oppressions of the English government on the principle that taxation requires the consent of the governed; they established themselves as states, and laid down the maxims of their policy in the Constitution. There were from the beginning two parties, the Whigs, who were in power through having just succeeded in liberating the country and giving it independence, and the Federalists, who insisted upon a union of the states and a strong federal government. The Whigs are the men who shaped the principles of the new country, jealously guarding the liberty of the people, the independence of the states, and the self-government of every township; their maxim found the tersest and best formulation in Lincoln's words, "A government of the

people, by the people, and for the people." The Whigs are, as it were, the negative side of the evolution of our country, stating the difference between the government of the United States and the systems of the Old World, and declaring what our country should not be.

The Federalists were suspected by the Whigs of being royalists, and were frequently, even in and before the days of Washington, treated in party debates as traitors to democratic principles. The first great leader of the Federalists was Hamilton, who gave expression to his more vigorous policy in *The Federalist*, a paper that was discontinued with the controversies which called it into existence.

The Federalists were very weak at the time when peace was made with England, and played then a very minor part in our politics; but they gained in importance when the Whig principles proved utterly unequal to conducting the business of the new republic.

The general interest in the common affairs of the United States was so weak that only with considerable difficulty could a quorum of the members of Congress be obtained to ratify the treaty of peace with England.

In 1785, Algiers declared war against the United States, and Congress recommended the building of five forty-gun ships of war; but Congress had only power to recommend, and since the Whigs saw danger in the growth of a strong government, the ships were not built, and the Algerians continued to prey with impunity upon American commerce. At the same time, England treated the new republic with such disrespect that she neglected even to send a minister to Washington, and as our historians briefly state, "The Federal Government was despised abroad and disobeyed at home."

It was dire necessity that compelled the people of the United States to listen to the representations of the Federalists; and under the strain of circumstances, by a loose construction of the Articles of Confederation, the United States Government rose in power, and assumed the leadership of the new republic.

It is needless to enter into a recapitulation of the history of our country, to tell the old story over again of how the Whigs adopted the name "Republicans," and later on became known as "the Democratic party," while the Federalists are at the present day represented by the Republicans. Further, we must bear in mind that, on the principles of the Whigs, the Southern States were perfectly justified in breaking away from the Union, and es-

tablishing a confederacy of their own; and it is a matter of historical experience that liberty is always suppressed in the name of liberty, and slavery rests upon the maxim that everybody has the right to suppress his brother man, if only he has the power to do so. Nominally the South stood up for liberty, and the North for union, but practically the South insisted upon the right of slaveholding, while the North represented the ascendency of free labor. Their difference was a difference of principle which has been decided by the sword. The cause of the real freedom of the North, in the face of the sham freedom of the South, remained victorious, and thus the confederacy of the United States changed into a union; and now only the name United States became legitimate.

The idea prevailed among the founders of our nation that a weak government is the best guarantee for the liberty of the people, and on such grounds the Whig party and their heirs have always endeavored to prevent the increase of federal power; and yet the noble principles of democracy have always been used as a shield for the boldest boodling and maladministration. All good citizens of the United States agree that while our federal government is upon the whole well conducted, and may be considered as the best republic on earth, the municipal administration of our great cities leaves much to be desired, and the problem presents itself, How shall we, with the least disturbance of democratic principles, change the methods of city government which at present are subject to just criticism?

While it is true that American principles stand for liberty, we must not imagine in fond self-illusion that we have as yet discovered the proper method of realising the right use of liberty. So far, all progress and growth of the United States have been made in spite of the strict constructionists of the United States Constitution. A loose construction was adopted as a matter of necessity. The fact is that the United States are of a natural growth, and growth cares little for rules or regulations invented by theorists to prevent further expansion. The building up of our institutions has been guided by the principle of liberty, which upon the whole has been realised, but which if carried to extremes would simply have stopped the wheels of the machinery of our government.

The irony of fate, which is so often visible in history, placed the Anti-Federalists, led by Thomas Jefferson, in power, when, for the first time in the history of the United States, an independent action on the part of the government was required. James Monroe had been sent to France in 1803 as as official ambassador of the

United States, but when he reached Paris the political situation had been suddenly changed, and an unexpected opportunity for expansion offered itself which had to be acted upon at once. France was preparing for a renewed war with Great Britain, and offered to the United States for \$15,000,000 that large tract of territory then called Louisiana, covering the whole Mississippi Valley and extending northward to Canada. The war being imminent, the bargain had to be concluded at once or abandoned for good, and Mr. James Monroe transcended his instructions and accepted the offer. The president, who had been elected on Whig principles, did not hesitate to endorse Mr. Monroe's action, although it was fundamentally and directly opposed to his interpretation of the Constitution. He believed that it was in the interests of the liberty of the country to have a weak government, and that the Constitution gave the federal government no power to purchase foreign territory and make it a part of the Union; but he excused his conduct on the ground that "he acted like a guardian who makes an unauthorised purchase for the benefit of his ward, trusting that the latter will afterwards ratify it." He probably had the good intention of having the transaction ratified by the people of the United States, which, however, was never done. The only ratification consisted in the general acquiescence in it, but the inhabitants of "Louisiana" were never asked for their consent to being incorporated into the United States; nor have their wishes ever been considered; if they had been consulted at the time, there can be no doubt that the French population, at least a great part of it, would have voted as vigorously against it as the present Anglo-American and Anglicised inhabitants would vote for it. The fact is that whatever importance general principles may have, and I do not deny their great importance, the development of nations cannot be limited nor pre-determined by maxims, nor be confined within narrow limits; it is of a natural growth; and if there exist laws or institutions that hamper it or prevent the definite settlement of political issues, they will be shattered to pieces with the same power with which roots break the rock into which they descend.

The advantage of the Constitution of the United States consists in this, that it is, upon the whole, sufficiently elastic to allow expansion and to admit new interpretations under new conditions.

The question now arises whether under the present circumstances expansion is or is not in agreement with Americanism. Is it necessary to follow the maxims of the old Whig party who

wanted every American farmer to remain behind his plow, and not to bother himself with the people in the next township? Are we really so isolated that each community should be concerned only with its own affairs, and that all of them should not grow into a higher unity of state and national union? The spirit of the principles of the Whigs has always remained dominant in the evolution of the United States; but as soon as we would apply them in the sense of the strict constitutionists, whenever they would lead the country to wreck and ruin, they have been tempered by the ideals of the Federalists, who have always done good service in building up the institutions of this country, and giving it a strong and sometimes a very good government.

The truth is that a strong government is by no means dangerous to the liberties of the people, but on the contrary it is the best guarantee of them provided the general Whig sentiment of liberty prevails throughout the country. A strong government which respects Whig principles will never be in need of stooping to coup d'états, or assuring the continuance of its power by crooked means. It will unflinchingly stand for the right, and enforce justice. A weak government, however, as experience shows all over the world and at all times, does not shrink from using any means to remain in power,-a fact which is sufficiently proved in the republics and tyrannies of ancient Greece, in the autocratic countries of Turkey and Russia, and in the South American republics. The weakness of a government, as is proved by undeniable facts of history, is always a menace to the liberty of the people, while a government that is strong can afford to allow the people their full liberties, provided they do not infringe upon the liberties of their fellowbeings.

We have discussed the problem of the acquisition of Cuba in a former article, and have proposed as a policy of the United States to make our new acquisitions, especially Cuba, confederate republics of the United States. The Cubans should enjoy perfect liberty at home; they should elect their own magistrates, and attend to the policing of the country by men of their own choice, of their own language, their own nationality, according to principles which they deem best. But while in their own affairs they should be as free as any State of the Union, the defenses of the island should not be left to the accidents of their home politics, but should remain in the strong hands of the forces which represent the insoluble alliance of our Union with Cuba, at the head of which is the

¹ In the November number of The Open Court.

President of the United States. Cubans should be freely admitted to the army and navy, in proportion to the number of their population; but there ought to be no danger of a rupture in times of war, which would endanger the United States and the Nicaragua Canal, so important to the trade of the United States.

The idea that the business of the United States is at home, and that the Illinois farmer has no interest beyond the territory which he plows, is a grave mistake. The world is one great organism, and if we want to stand up for our principles in contrast to European principles, we must not forget that for the defense of our own country and our ideals, we must be in possession of those points of strategic importance which shall enable us to weather a political crisis in the eventual evolution of the history of the world. There is no need of subjugating the Cubans or the Filipinos; we need not interfere with their home politics; we should give them, as a matter of course, as much liberty as they can stand; but it would be a crime to give up the positions of strategic importance which we have gained, and which may in the future prove the salvation of our institutions in their struggle with European institutions. If we love Americanism, if we believe in the principles of liberty, we should not only not be opposed to expansion, but enthusiastically hail it. There is no reason to oppose it, and we may safely follow the example of the great Whig leader, Jefferson, when against his own principles he absorbed into the United States the Valley of the Mississippi, without either the consent of its population or even of the United States.

The present crisis is an occasion in which we can prove whether or not our American principles are good for anything; if they cannot be applied to Cuba or the Philippines, we may be sure that they are not justified in the United States. True, it is not so easy to transplant them forthwith to peoples who are not yet accustomed to the bracing air of liberty; and the probability is that mistakes will be made before the desired end is attained. But it is wrong to censure our government for permitting the United States to carry the spirit of Americanism to other nations merely because they are not yet ripe for it.

The truth is that our present expansion is not a new departure, but a repetition of antecedents which in all national matters are exactly the same. To begin from the very beginning, did the Pilgrims ever ask the Indians for their permission to settle at Plymouth Rock? It appears that they went there because they were exiled from Europe and had to seek a new home, and perhaps

they had the same right to the country as the Indians. It appears that the earth is open everywhere, and those people who are strongest take possession of the earth. According to the old view, those people who are the strongest conquer their fellow-beings by force of arms; but, according to the principles of a more highly developed humanity, those are the strongest who build their institutions upon the consent of the governed. It is therefore a matter of course that wherever the American flag is to be raised we shall endeavor to gain the consent of the governed. Should we within a reasonable time be unable to gain the confidence and good will of the inhabitants of the newly acquired territories, we should give them up, either abandoning them to themselves or to some other power who will be better able to administer their public affairs.

The policy of imperialism is a mistake, but for all that expansion is justified.

Because we believe that the safest foundation of any government is the consent of the governed, and that it is the duty of every government to allow full sway to the liberty of its citizens, it would be a very mistaken policy if for that reason our government would disarm and cease to protect itself against the armed governments of other nations. The new ideal of liberty as expressed in Americanism does not abolish the duty of looking out for our defenses, and of being ready to defend our principles in case they are attacked.

And what should we do with the Philippines if the policy of expansion be wrong? All Americans agree that it would be unfair to return them to Spain. Shall we then leave them to themselves, and allow them to adjust their own affairs according to their own pleasure? There can be no doubt that the result would be an internecine war which would be more bloody than the present struggle between the United States and Aguinaldo's forces. And in reply to those who have made themselves the advocates of the Filipinos, especially of Aguinaldo, we have to say that his ambition for Philippine independence would probably mean the suppression on the one hand of the white colonists, and on the other hand of the mountain tribes of the interior. That Aguinaldo's government would be just to other nationalities who are inhabitants of the islands cannot be expected, and the result would after all not be the independence of the Filipinos, but the interference of European governments on behalf of their colonists. As soon as we withdrew, leaving the Filipinos and the German colonists to their fate, Germany or some other power would acquire a perfectly just title to interference. The result would be that the Philippines would fall into the hands of another power, and we should have no right to complain, if we had turned from them in Pharisaic self-righteousness.

We should renounce expansion only if we believe that the American principles are for home consumption only, and are not applicable to other nations.

The expansion of the United States has not come by our own choice, but through the development of historical events; it has been forced upon us, and as the situation is at present, we must deeply regret that Aguinaldo has ventured upon a war with the United States. But there can be no doubt that it is the duty of the United States to re-establish order in the conquered territory, unless the Americans as a nation have lost faith in their competency to accomplish the task.

It is possible that the United States government has made some mistakes while assuming control of the Philippines; but we abstain from criticising its measures because it is all but impossible to judge of proceedings which have taken place at such a distance. At any rate, we must insist upon the justifiability of expansion and go even so far as to say that should the nation as such oppose it, it would amount to a self-condemnation and imply that Americanism, or rather the spirit of liberty that pervades our institutions, has no right to exist except within the narrow limits of the United States of America.

Our policy toward the Filipinos implies more difficulties than have been anticipated, and a protracted war is unavoidable. But in spite of their hostile attitude we should not lose sight of the hope to give them the liberty for which they are fighting now and allow them to constitute themselves as a Filipino Republic.

We might divide the country according to the nature of the population into various states with constitutions adapted to the conditions of the people. The city of Manilla might form a free city after the pattern of the Hanse towns; the Mohammedans might enjoy the privilege to live in accord with their traditions; the Filipinos and mountain tribes might choose a government that would suit them best; yet all of them, independent in local affairs, would be subject to the authority of the United States who would interfere only when the laws or administrations of the various people would seriously collide with the principles of humaneness as established in civilised countries.

The easiest way of governing people, be they colonists or a

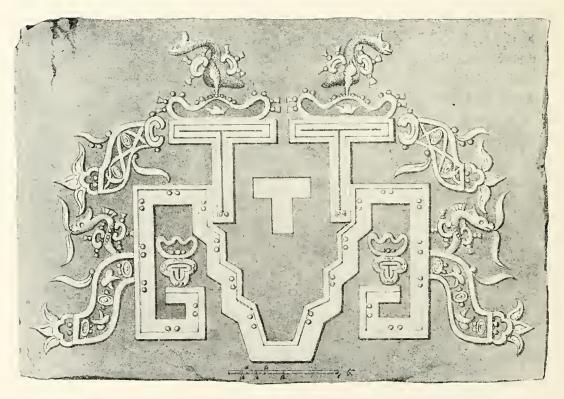
conquered race, is by giving them local self-government. The more independent they feel the more satisfied they will be. The most convenient way of maintaining order is by allowing them to do their own policing, by men of their own kind. This consideration alone should induce us to hand the responsibilities of administration in all local affairs over to men of the people's own choice.

The easiest, the cheapest, the most practical, method of governing Cuba, Porto Rico, and the Philippine Islands will be to give them as much independence as possible. We cannot (at least not at present) make of the Filipinos citizens of the United States, but we can make of all the conquered territories federal republics which stand under the protectorate of the United States.

THE CROSS IN CENTRAL AMERICA.

BY THE EDITOR.

THE religious use of the cross (i. e., the figure of two intersecting lines) was discovered among the Indians of Central America to the great astonishment of the Roman priests who ac-



T-Crosses on an Altar Tablet of a Temple in Central America.² companied the Spanish conquerors; and the deep significance the cross must have had among them appears from the two splendid "Temples of the Cross" among the ruins of Chiapas, Yucatan.³

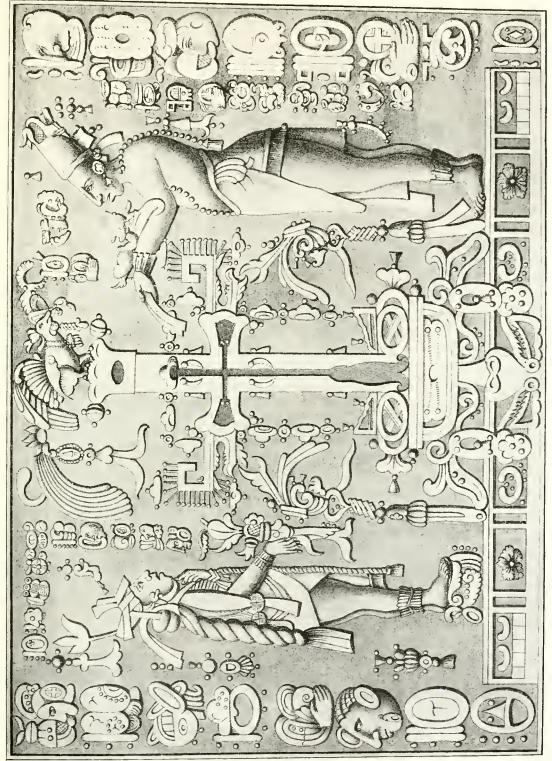
¹ The author expresses his deep obligation to the Bureau of American Ethnology, the Chicago Public Library, and the Field Columbian Museum, for the kind assistance rendered him in his investigations, especially in procuring illustrations.

² From Kingsborough's Antiquities of Mexico, Part III.

³ See W. H. Holmes, Archwological Studies Among the Ancient Cities of Mexico, Field Columbian Museum. Publication No. 16. (Anthr. Ser. I., i.)

(See p. 236 ff. THE ALTAR TABLET OF THE TEMPLE OF THE CROSS NEAR PALANGUE.¹

The inhabitants of that country were sun worshippers, and the cross may with them (as it still does with many of the Indians of



he U. S.) have meant the world, or, properly speaking, the earth, with its four directions—North, South, East, and West; or the sun

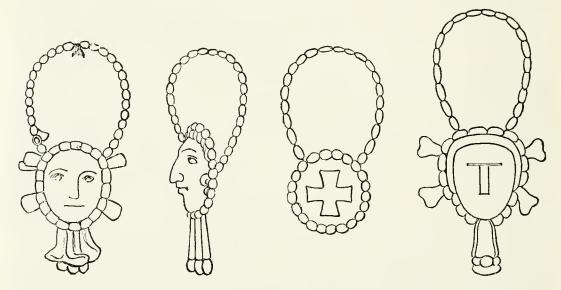
¹ From Kingsborough's Antiquities of Mexico, Part, III.

with its rays; or a tree as the symbol of vegetation; or the fecundating rain penetrating the earth; or the combination of two principles positive and negative, male and female, etc., into one.

Prescott, in his *History of Mexico*, on mentioning the crosses frequently found in Yucatan, says: "It is a curious fact that the cross was consecrated as the object of religious worship, both in the New World and in religions of the Old, where the light of Christianity had never come."

Count Goblet d'Alviella sums up the situation in these words:

"When the Spaniards took possession of Central America, they found in the native temples real crosses, which were regarded as the symbol, sometimes of a



NECKLACES WITH PENDANTS, FOUND IN THE SCULPTURES OF MEXICO AND YUCATAN.²

divinity at once terrible and beneficent—Tlaloc, sometimes of a civilising hero, white and bearded—Quetzacoalt, stated by tradition to have come from the East. They concluded from this that the cross had reached the Toltecs through Christian missions of which all trace was lost; and, as legend must always fix upon a name, they gave the honor to St. Thomas, the legendary apostle of all the Indies. Although this proposition has again found defenders in recent congresses of Americanists, it may be regarded as irrevocably condemned. It has been ascertained beyond all possibility of future doubt that the cross of pre-Columbian America is a kind of compass card, that it represents the four quarters whence comes the rain, or rather the four main winds which bring rain, and that it thus became the symbol of the god Tlaloc, the dispenser of the celestial waters, and, lastly, of the mythical personage known by the name of Quetzacoalt."

J. G. Müller, in his History of the Religions of the American Aborigines (on page 496) informs us that on the Island of Cozumel,

¹ Migration of Symbols, pp. 12-13.

²A.R., 80-81, plate XLV, facing p. 256.

the god of rain was worshipped under the symbol of a cross. He says:1

"One is accustomed to looking upon the cross as an exclusively Christian symbol, and wherever the cross is found the suspicion arises that there must have been some later Christian influence. This was the general opinion of the older Spanish historians, who regarded the crosses found in America as so many witnesses which prove that the Apostle St. Thomas had here preached the Gospel. . . . On account of the simplicity of the shape of the cross, we must not be surprised that it is found also among the ancient peoples of the Western Hemisphere as a symbol of nature. The Indians, Egyptians, Assyrians, and Phenicians used it. It appears on the head of the Ephesian goddess.² An explanation of the meaning of this natural symbol is, on account of its very simplicity, difficult, because it admits many possibilities. The attempts heretofore made to regard the cross as the key of the Nile, as a Phallus, as the sign of the four seasons, may be combined in the one idea of the fertilising power of nature. It is for this reason that the cross appears in combination with the solar gods and the Ephesian goddess; and thus the symbol would also be appropriate for the rain god of the tropical countries, whom it represents, according to the testimony of the natives.

"Among the Chinese, too, rain denotes fertilisation, and the Greek myth of the golden rain of Zeus, which coming from the clouds falls into the lap of Danaë, can have no other significance. It appears, therefore, that wherever we meet an aboriginal worship of the cross in Central America, we are probably confronted with the idea of the fertilising rain which crosses the soil of the motherly earth."

"Stone crosses are not only worshipped in Cozumel and Chiapa, but also over the whole of Yucatan.3

"Siguenza speaks of an Indian cross which was discovered in the cave Mixteca Baja. In addition, ancient crosses were discovered under the ruins of the Island of Zaputero, in Lake Nicaragua, but they were of a different form, representing a kind of head-dress. Further, old crosses of white marble were discovered on the Island of St. Ulloa in the Pacific, and wooden crosses were worshipped in the State of Oaxaca, and near Guatulco, or Aguatolco, and in the country of the Zapatecas. In North America, we can trace the existence of the cross as far as Florida. In South America, too, crosses are not infrequently mentioned. Also, in the eastern parts of Asia, and on the islands of the Pacific, cross-worship prevails; further, in eastern India, on the Nadak Islands, and on the islands of the Mulgrave-Archipelago, etc."

1 For the sake of making the passage more readable, we relegate the ponderous quotations to footnotes.

² See Lipsius, *De cruce* I., 8. Baumgarten, *Gesch.*, v. A. (1752, I., p. 203. Creuzer, *Symbolik*, I., p. 332 ff. II. p. 176. Augusti Chr. Arch. III., p. 599.

3Cf. Cogolludo, II., ch. 12. Gomara, *Hist. gen.* (1554) p. 68, 70. Picard, 165. Clavigo, I., 353, Prescott, I., 180. Squier, *Nicar.*, 493. The same is true of Mixtecas and Querétaro in Northern Mexico, according to Clavigo (I., 353) and Boturini.

4 See Squier, Nicaragua, pp. 492 and 309.

⁵ Juan Diaz in Ternaux Comp. X., 45.

6 Mühlenpfordt, I., 254.

7 Hazart, 285.

8 Irving, Conq. Florida, II., 206 and 219. Also, Cibola, Castaneda in Ternaux Comp. IX., 165
9 Gomara, III., 32. Antonio Ruiz, Conquista Espirituel del Paraguay, §§ 23, 25. Lafiteau, I..

425-450. Hazart, 284. Baumgarten, II., 219. I., 197. Müller, Gesch. d. a. Urr., §§ 85, 75. Garcilasso, II., 3.

Prof. J. G. Müller goes too far in explaining all these crosses as symbols of the rain god. The probability is that many of them are symbols of the sun, and others of the earth. Some slanting crosses signify death.

Among the ruins of Copán a strangely ornamented cross has been discovered which is here reproduced after the drawing of Heinrich Meye. Dr. Julius Schmidt describes it as follows: 1



A MAYA CROSS OR VOTIVE TABLET AT COPÁN.²

"It is undoubtedly a votive tablet, representing the worshipper making his offering to the Cross, the Maya divinity of the rain which awakens vegetation to new life. The form of the cross is a very curious one, not, however, destitute of a certain symmetry. The corresponding portions are not arranged in the way customary with us, either in horizontal or vertical correspondence, but diagonally, as is indicated by the letters inserted in the drawing. But there is no identity of the corresponding parts; it is merely a general similarity. The inner edges of the

¹ Schmidt and Meye's, Stone Sculptures of Copán and Quiriguá. London: Asher & Co.

² The tablet stands in a court of the ruins at the foot of the eastern pyramid.

rims are trimmed with beads (could they be rain-drops?), the outer edges with tooth-shaped projections. The figure sits with its legs crossed beneath it, and holds out in the palm of its right hand an object of uncertain nature placed on a shallow vessel, whose indefinite form escapes identification. The face turned in profile shows a large, almost square eye, a large ear adorned with a ring; the rest of the face suggests a crab as the model. Upon the breast is hung from the neck by a string of beads a medallion in the shape of a face, which has the features merely indicated, and is set in beads and a halo of rays. It is probably of the same sort as an object found by Colonel Galindo in the vault H, carved in a green-colored stone, intended to be strung on a cord as shown by two perforations. From the sleeve-cuffs on the figure's wrists we judge that the body is to be understood as clad. The ornamental free end of the girdle hangs down over the feet.

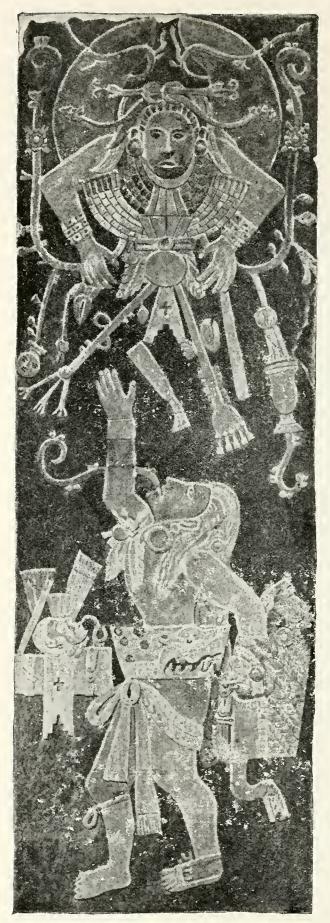
Dr. Julius Smith is a good authority on the significance of Central American monuments and his interpretation of this cross as the Rain-god who awakens vegetation to new life may be accepted as probable; yet I can find no suggestion of a crab in the figure, and am inclined to regard its head as that of a cock. The face at any rate has a bird's bill, and is crowned with a cock's comb.

The beads (with one exception where the artist's copy may be at fault) are here as well as the beads of the necklace of the solar face which is nodding over the head of the Mexican High Priest (reproduced further down on page 242) always five in number.

The figure that appears on the cross cannot, in our opinion, be "the worshipper making his offering," but is the deity worshipped.

The indigenous races of America are deeply religious; they are misguided and superstitious but devout to a fault, for they do not shrink from the ultimate consequences that result from the faith that is in them. We reproduce from the monuments of Guatemala two slabs representing scenes of worship that express a great intensity of religious devotion. The attitude of the priests is very expressive; the prayer rises up in the shape of a graceful curve, and the gifts of the deity are made visible in symbols the significance of which is still a secret. (See p. 230.)

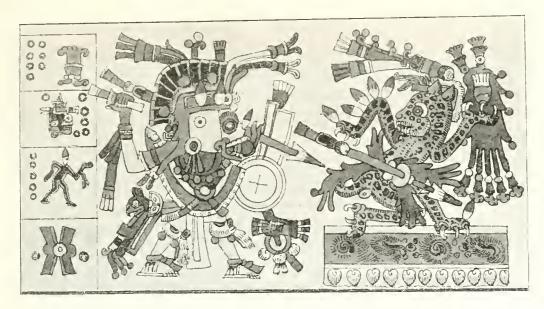
Judging from the halo-like disc of the tablet on the left hand, which is twelve feet long and three feet high, the deity represents some celestial body. According to Dr. Habel it is the goddess of the moon. The worshipping priest has a skull in his right hand, and on the altar before him lies a decapitated human head. An equilateral cross appears both on a pendant hanging from a disc on the breast of the deity and on the altar cover. (See A. R., 88–89, pp. 614–615.)





Guatemala Monuments. (R. A., 88-89, pp. 614 and 647.)

The monument on the right-hand side shows a man imploring an unknown deity, probably (as suggested by branches and flowers)



THE FIGHT OF THE SOLAR DEITY WITH THE TIGER DEVIL. (See p. 232.)



FIGHT BETWEEN BEL MERODACH AND TIAMAT.

From an ancient Assyrian bas-relief, now in the British Museum. After Budge.

the god of resurrected vegetation. The Latin cross above the head of the deity, as well as the little cross hanging down under

1 From an ancient Mexican manuscript-painting, preserved in the Library of the Institute at Bologna. Reproduced from the colored fac-simile of Kingsborough's Mexican Antiquities, Vol. II, plate ii.

the right hand of the god, may not be without significance. The priest holds a skull in his left hand, indicating the human sacrifices with which the god's favor had to be procured. (See A. R., 88-89, p. 647.)

Kingsborough, in his Mexican Antiquities, publishes a number of ancient documents which show the religious importance of the cross among the tribes of Central America. An interesting picture of an ancient manuscript, the original of which is preserved in the library of the Institute at Bologna, shows a deity, apparently a sun god, whose emblem or coat of arms is an equilateral cross on a round shield, driving away an evil demon with claws and tail. The god and the monster have the same attitude that can be observed in the Assyrian bas-relief of the fight between the god Merodach



ZEUS CONQUERING TYPHOEUS.

Picture of an antique water pitcher. (Baumeister, Denkm. d. class. Alt., p. 2135)

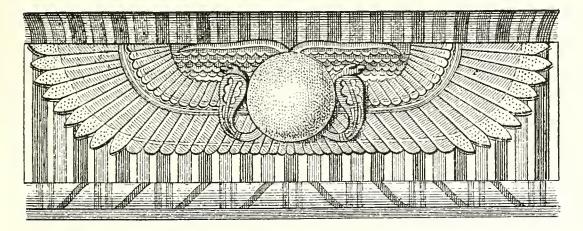
and Tiamat. The Devil, in the Mexican manuscript a tiger demon, in the Assyrian bas-relief a lion-shaped beast, has claws and a tail, and retires at the threatening approach of the god, who boldly attacks him with a thunderbolt; and mark that in both cases the attitudes of the combatants are similar, and that also the fingers of the right hand are wrongly placed in their relation to the thumb in the same way as they ought to appear on the left hand!

The idea that the sun-god struggles with the demon of darkness is almost universal. Thus Ahura Mazda smites Ahriman the fiend, and Zeus conquers Typhoeus.

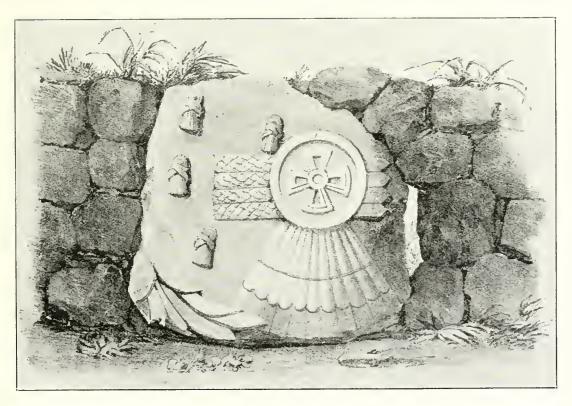
Judging from the style of architecture and sculpture, we may say that the tribes who built these temples had reached a civilisa-

¹ Kingsborough. M. A. Vol. II., plate 11.

tion resembling in many respects that of the early Carthaginians who offered human sacrifices on crosses to the sun. There is a striking similarity between the architectural styles of ancient Mex-



THE SOLAR DISC OF THE EGYPTIANS.



THE CROSS IN THE SOLAR DISC ON AN ANCIENT MONUMENT OF CENTRAL AMERICA. 1

ico and of Egypt and Assyria; and we cannot doubt that the winged discs with tail feathers represent the sun on the monuments of the Old World as well as of the New.

We reproduce winged solar discs from the monuments of

¹ Monuments of New Spain, by M. Dupaix. From original drawings executed by order of the King of Spain. Part 11., Vol. 1V.

Egypt, of Assyria, and of Persia, in addition to the winged disc of Mexico. The cross that appears in the last one mentioned is an exact counterpart to an Assyrian cross which we reproduced from the Layard's *Monuments* in the last number of *The Open Court* (p. 155). If the Hebrews had been artists we might easily have enriched our collection by a winged solar disc of Jerusalem, for the



THE SOLAR DISC OF THE ASSYRIANS.

Jews shared with their neighbors the same conception of Zebaoth, the Lord of the starry host, as being "the sun of righteousness with healing in his wings."

While the Egyptian and the Assyrian civilisation exhibits bold strength and tenacity, the Mexican is distinguished by artistic

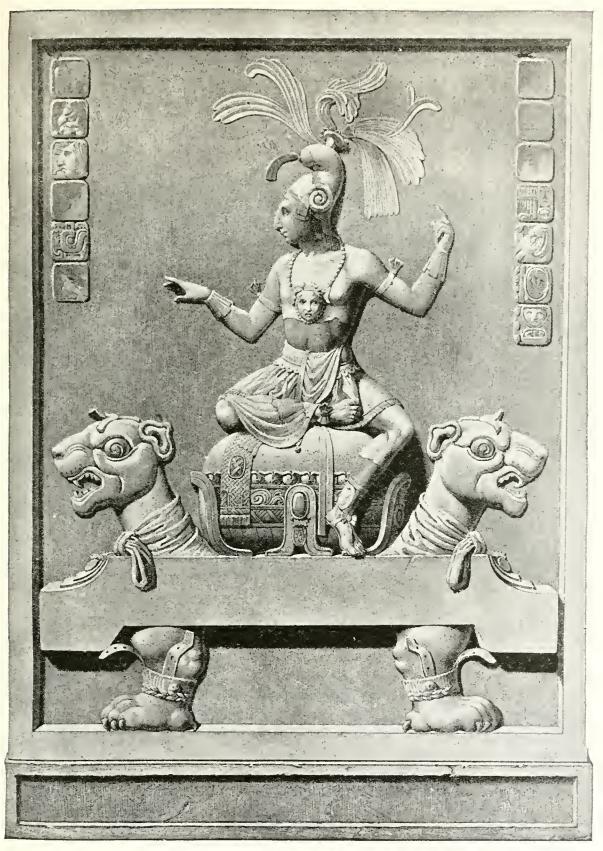


AHURA MAZDA, THE LORD OMNISCIENT.

The God of the Persians whose visible symbol is the sun.

taste, which is still noticeable in their descendants even to-day. We need but look at the altar tablet called the *beau-relief* and compare the freedom of its treatment to works of Egyptian or Assyrian art, to recognise the artistic superiority of the Mexican in spite of his many other shortcomings. There are many Raphaels slum-

¹ See Malachi IV, 2.

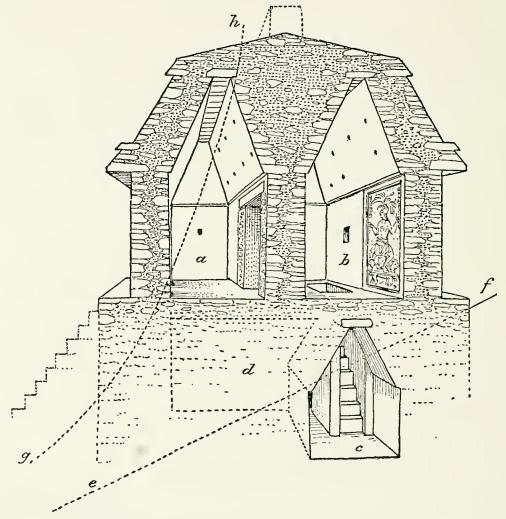


THE ALTAR TABLET OF THE BEAU RELIEF. 1

¹ Reproduced from W. H. Holmes, ibid., plate XX, facing p. 190.

bering in the undeveloped potencies of these tribes, and we may expect great things of them in sculpture and painting, if the spread of Western civilisation will give them a good training and an acquaintance with the artistic ideals of our age.

The most interesting cross of the American Indians has been discovered in a temple near Palenque, called the Temple of the Cross No. 1. The site is covered with temples which exhibit unequivocal traces of an indigenous sun-worship. The Temple of the



THE TEMPLE OF THE BEAU RELIEF, NEAR PALENQUE.1

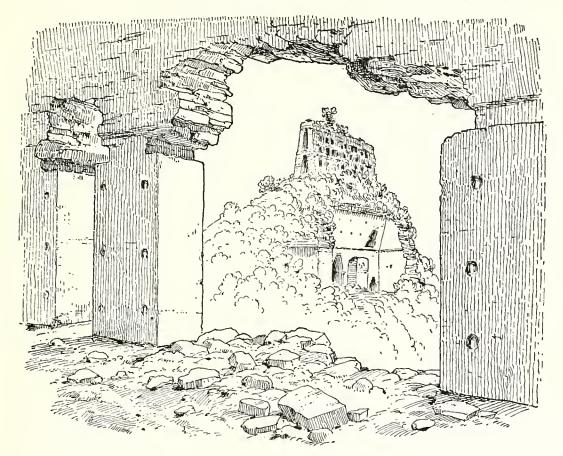
a, Vestibule showing entrance to sanctuary bordered by glyphic inscriptions. b, Sanctuary showing the Beau Relief and entrance to basement stair. c, Basement chamber at foot of stair north extension. d, East extension of basement chamber. e-f, Slope of mountain side. g-h Line indicating portion of front of building destroyed.

Beau Relief, so called by archæologists of to-day, contains the most beautiful piece of sculptural art of the aboriginal Indians, the socalled tablet of the Beau-Relief, representing a picture of a god. Two other temples are called "the Temples of the Cross." One of

¹Reproduced from William H. Holmes. Field Col. Museum Publ. 16, p. 189.

them contained as an altar-piece the famous stone tablet of the cross, which shows on an elevated platform a much ornamented Latin cross on which a bird is perched. A priest on the right-hand side offers a child as a sacrifice; another person to the left may be the chief or a prominent official of some kind.¹ (See p. 225.)

The temple of the cross No. 2 contains a similar altar-piece, the centre of which is filled out by a cross. It stands upon two crouching figures, and is surmounted by a terror-inspiring face



THE TEMPLE OF THE CROSS NO. 1, SEEN FROM THE TEMPLE OF THE SUN.

NEAR PALENQUE.²

behind which two rods are placed crosswise. The sacrificing priests on either side of the cross bear a close resemblance to the corresponding figures of the altar-piece in the Temple of the Cross No. 1.

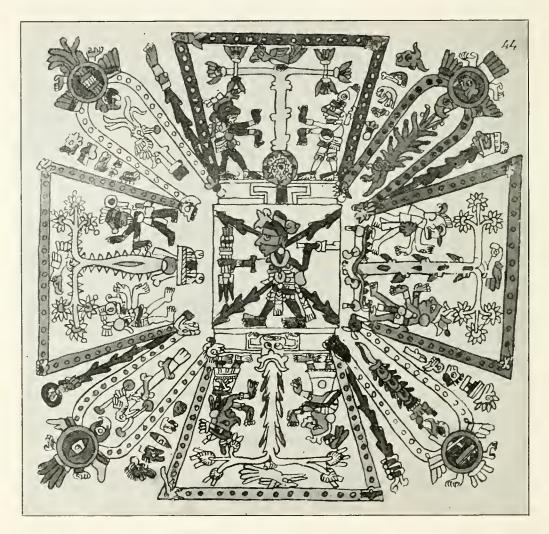
We have no tradition or definite information concerning the cross in the temples of the cross near Palenque, and can surmise its significance only by comparing it to similar productions of Central America.

¹ Most of the monuments have been destroyed or have suffered greatly. The tablet of the cross is broken, one piece being preserved in Washington, the other in Mexico.

² Reproduced from W. H. Holms, *ibid.*, p. 199.

Similar crosses have been discovered in various ancient monuments of Mexico, and we cannot doubt that every particular feature of it possesses a definite significance.

The Tejérváry Codex (Dresden) contains the illustration of a huge Maltese cross with broad fields and smaller beams inserted between them after the fashion of St. Andrew's cross. In the centre stands a blood-stained deity and every one of the four fields



THE CROSS OF THE TEJÉVÁRY MANUSCRIPT.1

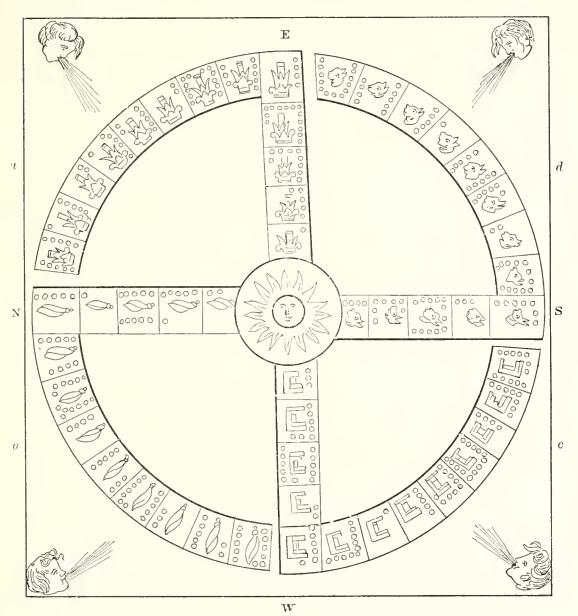
contains human figures standing on both sides of a T-formed cross, on the top of which a bird is perched.² Except for the T-form of the four tree-crosses in the fields of the Maltese cross, the scene is the same as on the altar tablet of Palenque. But then, T-crosses are almost as frequent as four-armed crosses on the old monu-

¹ The colors are on the top, red; on the right-hand side, green; at the bottom, blue; on the left-hand side, yellow. The illustration has been reproduced from Kingsborough's Mexican Antiquities, Vol. 111, plate 44.

² Müller, l. c., p. 498. Cf. Klemm, Kulturgesch, V., 142-143.

ments of America. Professor Müller explains the bird perched on the cross as "a symbol of the sky, which is the home whence the rain god descends."

The cross of the Tejéváry Codex remained a puzzle to archæologists until it was compared by Prof. Cyrus Thomas to a number of similar Mexican documents, especially the Tableau des Bacab



CALENDAR WHEEL FROM DURAN.1

of the Codex Cortesianus and the Borgian Codex, as well as calendar tables of the Codex Peresianus and the calendar wheel of Duran. The Bacab tableau resembles the cross of the Tejérváry Codex in its general arrangement, except that there is only one T cross which stands in the central field in the place of the blood-

stained deity, and the bird is missing. The calendar wheel exhibits the cross formation and is like a swastika whose extremities are rounded off into the shape of a tire. A picture of the sun in the centre proves that the tau cross and the blood-stained deity of the tableau represent the sun god Herrera. Mr. Cyrus Thomas explains the calendar wheel as follows:

"They divided the year into four signs, being four figures, the one of a house, another of a rabbit, the third of a cane, the fourth of a flint, and by them they reckoned the year as it passed on, saying, such a thing happened at so many houses or at so many flints of such a wheel or rotation, because their life being as it were an age, contained four periods of years consisting of thirteen, so that the whole made up fifty-two years. They painted a sun in the middle from which issued four lines or branches in a cross to the circumference of the wheel, and they turned so that they divided it into four parts, and the circumference and each of them moved with its branch of the same color, which were four, *Green*, *Blue*, *Red*, and *Yellow*; and each of these parts had thirteen subdivisions with the sign of a house, a rabbit, a cane, or a flint." ²

According to Mr. W. H. Holmes all these crosses resembling the Palenque cross, which abound in the ancient Mexican pictographic manuscripts are tree-crosses. The branches of these cross-shaped trees terminate in clusters of symbolic fruit, and the arms of the cross are loaded down with symbols which, although highly conventionalised, have not yet entirely lost their vegetable character. The bird perched on its top seems to be the most important feature of the group, and to it, or the deity which it represents, the sacrifice is offered.

We are inclined to regard the bird as a humming bird and the altar of the cross as dedicated to Huitzilopochtli, the god of the sky and of war. Nor is the name of the god of any importance for our purpose; for the worship of almost all Mexican gods demanded human sacrifices of infants as well as adults.

Here are some characteristic instances:

The humming bird is called by the Aztecs "Huitzilin," which means "sun-hair, or sun-ray," and Huitzilopochtli means "humming bird to the left. The humming bird, being the most ethereal creature among the fowls of the air, is the symbol of the sun god and the national deity of the Aztecs, like the Hindu Shiva. He wears a collar of human faces, human hearts, and torn human bodies, and human sacrifices characterise his cult.

¹ Hist. Amer. Dic., II., B. 10, ch. 3 Transl. Vol. III., pp. 221-222.

² A. R. 81-82, p. 44.

³ Torquemada Acosta, V., 9.

⁴ Diaz, II., 82. Clavig. I., 418. Müller, 597.

An ancient bas-relief preserved by Kingsborough in his Antiquities of Mexico shows the picture of a Mexican high priest in full pontifical robes, with medicine bag and staff, his girdle decorated with human faces. The rich ornaments on his head appear to be feathers decked with sunflowers or daisies. A mysterious head with a pipe in its mouth is attached to the priestly mitre on a projecting (probably forklike) stick. It must have nodded in a most theatrical manner with every motion of the priest, and we regard it as a representation of the face of the sun. On the top of the staff the head of a humming-bird emerges from other strange emblems. Further below the typical representation of the solar disc appears and the lower end is decorated with an X cross. We need not hesitate to say that the figure is a high priest of Huitzilopochtli.

The devout attitude of the two persons representing the congregation is quite in keeping with the religious spirit of the American races.¹

The explanation of the altar of the cross of Palenque as being dedicated to Huitzilopochtli has its difficulties, but they do not seem to be of weight. Tlaloc, the god of the water (or Tlalocteuctli), was associated with Huitzilopochtli as his ally and friend, and we know that he was worshipped in the City of Mexico in a temple that was situated by the side of the temple of Huitzilopochtli. He received human sacrifices in the form of little children that were bought for the purpose.² He is invoked whenever rain is needed and prisoners, dressed like the god, are offered him as a sacrifice.

The bloody sacrifices of ancient Mexico are of special interest because they preserve features of a past period in the history of religion embodying an idea which in a spiritualised form reappears in Christianity. The victim that is to be sacrificed is identified with the god himself to whom the sacrifice is made, and his body is afterwards eaten by the worshippers for the sake of partaking of his divinity. Professor Müller describes the rite of the annual sacrifice of the merchants of ancient Mexico to Quetzalcohuatl, the god of property, whose worship bears many important resemblances to the cult of Huitzilopochtli, as follows:

"Forty days before the festival, the merchants used to buy a slave that was without defect; he was bathed in a lake called the Lake of the Gods, then attired as the god Quetzalcohuatl, whom he had to impersonate for forty days. Dur-

¹ The two persons, being a man and a woman, the bas-relief may represent the solemnisation of a marriage.



A Mexican High Priest of the Sun God. 1

From Kingsborough's Antiquities of Mexico, Part III.

ing this season, he enjoyed the same reverence which was due to the god himself; he was placed upon an elevated seat, decorated with flowers, nourished with the most exquisite food. But, at the same time, especially during the night, he was carefully guarded to prevent his escape. When during processions through the city he sang and danced, the women and children came out from the houses to salute him and bring him gifts. In this way he lived until nine days before the festival; then two old priests approached him with reverent devotion and told him solemnly, 'Lord, know that in nine days thy dancing and thy singing will cease, for thou must die.' If he remained joyful, and continued dancing and singing, it was deemed a good omen; if not, a bad one. In the latter case, the priests decocted a potion of blood and cocoa for the purpose of taking from him the recollection of their words. When he had taken the potion, they hoped that he would regain his former joyfulness. On the day of the festival, he received even greater honors than ever before; music was played for him and incense burned. At last, at the hour of midnight, he was sacrificed. His heart was cut out from his body, lifted up to the moon, and thrown before the image of the god. Then the body was thrown down over the steps of the altar, and served to the merchants, especially the slave-traders, as a sacrificial meal. This festival and sacrifice took place annually; but in certain cycles in the divine year Teoxihuitl it was celebrated with an array of unusual festivity."

The highest god of the Mexicans was Tezcatlipoca, the shining mirror, and (according to Wuttke) another personification of the sun. He was the national god of the Tlalotlacs, but his cult was introduced among the Aztecs, who worshipped him as the brother of Huitzilopochtli and of Tlaloc. The three gods resemble one another almost enough to make them indistinguishable. Tezcatlipoca's festivals fall in May, when the first rain dispels the annual drought, in October, the best season of Central America, and in December on the death day of his brother Huitzilopochtli. We meet here the same pious cannibalism as in the cult of the other great Mexican deities. Prof. T. G. Müller says:

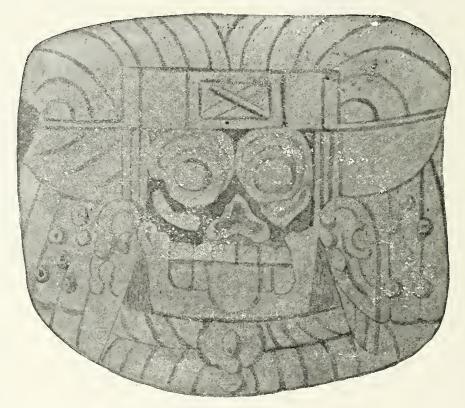
"The main sacrifice of Tezcatlipoca was the youngest and most beautiful prisoner of war or slave, whose duty it was to represent the god in his youthfulness. He was worshipped the whole year as a god. Twenty days before the festival he was married to four beautiful girls, and five days before the festival the most opulent feast was given him. On the day of the ceremony, he accompanied the image of the god which headed the procession, and was then sacrificed in a temple especially built for the purpose, with all due reverence, about a mile outside of the city, beyond the lake. The heart cut out from his breast was presented to the image, and then to the sun; but the body was not, as is the case with other sacrifices, thrown down over the steps of the temple, but carried down by the priests. Noblemen and priests received the arms and legs of the sacrifice as a sacrificial meal. The youths devoted to his worship performed a dance to the god, and the virgins offered honey cakes called 'holy flesh,' which was destined as a prize to the victors in the races which took place on the temple stairs."—p. 617.

This, as well as the human sacrifices of Huitzilopochtli, is ob-

viously an invocation to some life spending deity to return after the drought of the hot season. As the vegetation dries under the parching influence of the sun, so the god must die, but is resurrected in his former vigor.

The fact is remarkable that the worship of the cross among the Mexicans is closely connected with human sacrifices, and this seems to connect the cross worship of Central America with the cult of the sun god in the old world.

Human sacrifice and religious cannibalism was by no means



A STONE TABLET FOUND IN THE VICINITY OF SANTA LUCIA, GUATEMALA.

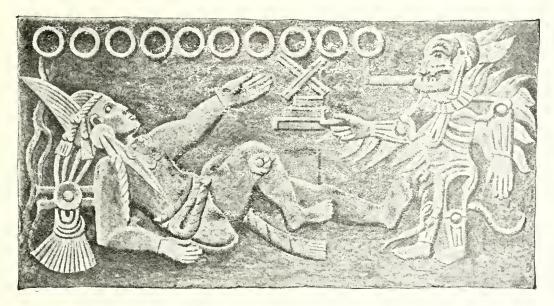
Representing a dead head with outstretched tongue and carrying the emblems of crossed bones on the forehead. We may assume that it served as a sepulchral monument. (See p. 246.)

limited to the Mexicans of America, but can be traced in the rituals of various people all over the world, a fact which is good evidence in favor of the antiquity of the underlying belief which leads to the slaughter of some god-incarnation. Mr. J. G. Frazer, in his curious book *The Golden Bough*, has collected rich material on the subject. The most important instance is a custom of the Babylonians, cited by Berosus, who tells that "during the five days of the festival called the Sacæa, a prisoner condemned to death was dressed in the king's robes, seated on the king's throne, allowed to eat, drink, and order whatever he chose, and even per-

mitted to sleep with the king's concubines. But at the end of five days he was stripped of his royal insignia, scourged and crucified."

This Babylonian rite is apparently, as Mr. Fraser suggests, a further evolution of a more ancient custom that is still practised among the savage tribes of Africa, according to which the king, who is believed to be the incarnation of the deity, usually of the sun or heaven, is sacrificed in his best years and before his physical powers can give out. Mr. Frazer says:

"We must not forget that the king is slain in his character of a god, his death and resurrection, as the only means of perpetuating the divine life unimpaired, being deemed necessary for the salvation of his people and the world."



THE X Cross of the God of Death. (See p. 246.)

With the advance of civilisation the old custom was modified Mr. Frazer says:

"When the time drew near for the king to be put to death, he abdicated for a few days, during which a temporary king reigned and suffered in his stead. At first the temporary king may have been an innocent person, possibly a member of the king's own family; but with the growth of civilisation, the sacrifice of an innocent person would be revolting to the public sentiment, and accordingly a condemned criminal would be invested with the brief and fatal sovereignty."

All these savage notions reappear in a purified form in Christianity, and incidental features, such as the previous recognition as god and king, the hosannas and flowers offered during a solemn procession, the buying of the victim that has to suffer death, add strength to the more essential similarities. We deem it specially significant, although the fact may be after all incidental,

¹ Reproduced from the Annual Reports of Bureau of Ethnology.

that the cross worship is almost always closely connected with human sacrifices offered to the god of the sun, be he Baal or Huitzilopochtli.

* *

We conclude this sketch on the cross in Central America with a mention of an instance in which the *crux decussata*, or St. Andrew's cross (\times) , symbolises two dead bones, and is the attribute of the deity of death. Prof. J. G. Müller (l. c., p. 98) says:

"Pauguk, the god of death, is armed with a club or bow and arrows, and is pictured without flesh and blood, covered only with a thin skin. He is a hunter of men, and his appearance is a sure sign of the approach of death. Whenever any one dies suddenly or unexpectedly it is said that he met the eye of Pauguk. Warriors, reaching out for the prize of victory, frequently grasp his cold and bony hand." (Conf. Schoolcraft, Wigwam, 215 ff. Alg. ver. II., 226-241.)

MISCELLANEOUS.

ST. PAUL AND THE THEATRE HAT.

Nations among which the Christian religion has been introduced so as to practically exclude all other forms of religion are called Christian nations. That does not imply that all members of such a nation profess faith in Jesus Christ. In our own country but a minority of the inhabitants belong to Christian churches. Still, Christianity is, so to speak, the only religion which exercises and has exercised for centuries a visible and tangible influence upon our people and their ancestors. Our manners and morals, public as well as private, have consequently become thoroughly imbued with Christianity. There may be some who are ignorant of this fact and inclined to deny it. It is, however, easily proved, especially as far as our manners and customs are concerned.

That our manners and customs are influenced by Christianity, even where it should least be expected, can be demonstrated with the greatest facility. The "theatre hat," for instance, which of late has been so often discussed and generally condemned, at least by the stronger sex, is an old Christian apostolic institution. That is the more surprising, since church and theatre are by numerous persons thought to be utterly opposed to each other. But, a closer examination of the first part of chapter xi. of the First Epistle to the Corinthians will make it perfectly clear that no less an authority than the Apostle Paul is responsible for the "theatre hat,"

In that passage the Apostle commands the male members of the congregation at Corinth to be uncovered during divine services, while he urges the women to cover their heads. The Apostle does, indeed, not expressly use the term "divine services." He says that the men should be bare-headed when praying and prophesying, and that the women should wear their head-dress when doing the same. His words to that effect are found in verses 4 and 5: "Every man praying and prophesying, having his head covered, dishonoreth his head. But every woman that prayeth and prophesieth with her head uncovered dishonoreth her head. For that is even all one as if she were shaven." Praying and prophesying formed, as is generally known, the two principal elements of the public, religious services of the Christians at the time of the Apostle Paul, just as they do at present. It is, therefore, not to be doubted that the Apostle's commandment refers to the head-dress of the Christians at Corinth when they were attending church.

The precept of the Apostle, as far as woman is concerned, centers in verse 10, which in our English translation reads: "The woman ought to have power on her head." This rendering is incorrect, inasmuch as it omits the indefinite article be-

fore the word power. It should be: "The woman ought to have a power on her head." The corresponding Greek word must mean something worn by women on their heads; and our English Bible has added on the margin the note: "That is a covering, in sign that she is under the power of her husband." Whether that be the real meaning of the strange Greek word, I am unable to state. The word signifies either in its abstract sense, power, or, in its concrete sense, officers that exercise power. Neither meaning suits our passage. If it could be shown that it also meant protection, and a thing that protects, it would be quite acceptable. It is, however, possible that the word found at present in our passage has been inserted by an old copier, instead of the original word meaning head-dress (for instance, $\mathring{\epsilon}\pi\iota\kappa\rhoa\tau i\delta a\varsigma$), or that it was the popular name of a certain kind of head-gear worn by women at that time. One thing is absolutely sure, and is nowhere denied, it must be the name of something in the line of veils, hoods, or bonnets, used by women to cover their heads.

The Apostle enjoins his command concerning the head-dress of men and women among the early Christians at Corinth with so much force and earnestness that it is but natural to assume that they have obeyed him. Besides, as he did not preach another religion at Corinth than at other places, he must have given the same command wherever he succeeded in founding congregations. The Apostle Paul being the founder of the Christian Church among the Gentiles, among all nations not of Jewish descent, is also the father of our churches, because our ancestors were Gentiles, not Jews. For this reason it is to be taken for granted that the direct influence of the Apostle must appear in many things even among us; and it cannot be wondered at that such precepts of his as that of covered and uncovered heads, are still religiously observed in all Christian churches. Up to this present day men take off their hats as soon as they enter church, while women do not think of removing them. This latter custom, far from being the outgrowth of female vanity and the desire to publicly display their good or bad taste in selecting fashionable head-gear, has been introduced by the Apostle Paul, and proves how conservative the gentler sex is in matters of religion.

But the Apostle's influence in this respect is by no means confined to the churches; it rules supreme even at such places of worldly pleasure as the theatre and the concert-hall. Every one knows that the theatre of the ancient Greeks was a religious institution; theatrical performances with them were religious services of the highest importance. A similar connexion exists between the Christian Church and the modern theatre. The migration of the Teutonic tribes swept away Greek and Roman culture from the confines of Western Europe. The Church alone preserved the germs of that old and venerable civilisation, and cultivated as well as imparted them to the people which acknowledged its spiritual rule. Thus it happened that during the Middle Ages the Christian Church became the mother of all modern arts and sciences. Modern music, poetry, sculpture, painting, architecture, etc., served their apprenticeship as handmaids of religion. Christmas plays were the beginnings of modern drama and opera. Those plays were given at the usual places of public worship and were regarded as public religious services of even a higher order than the ordinary services. The necessary consequence was that men removed their hats and women did not on such occasions, just as at the regular services.

When, by and by, the theatre became emancipated from the control of the Church, that custom had become so firmly established that it was a matter of course for women not to be seen in public places unless with covered heads. The origin

of that custom had long been forgotten; nobody cared to learn its real meaning; everybody was convinced that it was the only proper thing for decent women to do; and women themselves would have been ready to fight for what they believed to be their privilege. And this position our women can hardly be said to have abandoned. That is, in short, the historical evolution of the "theatre hat"; and I hope to have been successful in proving that the Apostle Paul is its father, in so far at least as he induced all Gentile Christians to conform with an old, religious observance of the Greeks and Romans.

Among the Jews, both sexes, men as well as women, had to cover their heads while praying, a custom still observed in all orthodox synagogues. Among the Greeks and Romans, however, men prayed with bare heads, but women had to be veiled. Juvenal, for instance, tells us, Sat. VI., 390–392, of a certain Roman lady (quaedam de numero Lamiarum ac nominis Aeli):

Stetit ante aram, nec turpe putavit, Pro cithara velare caput, dictataque verba Pertulit, ut mos est, et aperta palluit agna.

(She stood before the altar, nor did think it disgraceful to veil her head in favor of a cithara, and completed the prescribed words religiously, and watched closely, as the lamb was opened.) Paul, who was very careful not to introduce Judaism among his Gentile disciples, accepted and sanctioned, also in this respect, the old established heathen custom.

Many people will, as I believe, find it somewhat queer that the Apostle should have occupied himself seriously with such a question, and especially that he should have made so great a distinction between man and woman. The more carefully will we have to consider his reasons. These, as furnished by himself, are three in number. The Apostle, in the first place, states that it is not "comely that a woman should pray unto God uncovered." According to him, such a woman should also be "shorn or shaven." The long hair given her indicates that she must cover her head while attending church. The second reason consists in woman's natural inferiority. The Apostle says: "The man is the image and glory of God; but the woman is the glory of the man. For the man is not of the woman, but the woman of the man. Neither was the man created for the woman, but the woman for the man." Such inferiority demands an outward token, and, in order to furnish that, the Apostle decreed that women should keep their heads covered at church. third reason is found in verse 10: "The woman ought to have a power on her head because of the angels." The expression "because of the angels" has to be explained more fully.

It refers to an old Jewish myth or superstition which, as is shown by our present passage, was shared by the Apostle Paul. In the first verses of Genesis vi. the following remarks occur: "It came to pass when men began to multiply on the face of the earth, and daughters were born unto them, that the sons of God saw the daughters of men that they were fair, and they took them wives of all which they chose." "There were giants in the earth in those days, and also after that when the sons of God came in unto the daughters of men, and they bare children to them, the same became mighty men which were of old men of renown." "God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually." We further are informed that this experience induced God to destroy the inhabitants of the earth by the great flood. On these short and unconnected remarks, in later times, the story of the fallen angels was built up. Angels became enamored of mortal women, begot

the giants, and introduced all kinds of wickedness and evil among the dwellers of the earth. God was finally compelled to punish those angels by imprisoning them in a deep, dark hole in the desert of Dudael, and the mortal sinners by drowning them in the deluge. This story is handed down to us in the first part of the Book of Enoch, an apocryphal writing which originated in Palestine about one hundred and twenty-five years before the Christian era, and which was very popular both among the Jews as also afterwards among the early Christians. It is impossible to cite the whole story of the fallen angels. A few sentences, however, will enable us to form a sufficiently clear idea of its character.

In chapter vi. we read: "It happened, after the children of men had multiplied in those days, that fair and beautiful daughters were born to them. And the angels, the sons of the heavens, saw them and lusted after them, and said unto each other, 'Come, let us choose wives among the children of men and beget children.' And Semjaza, the first of them, said unto them, 'I fear lest ye may not want to accomplish that deed, and then I alone shall have to suffer punishment for that great sin.'" The next chapter continues: "And they took them wives, and each selected one for himself, and they began to go in unto them, and mixed with them, and taught them witchcraft and incantations, and informed them how to cut roots and different kinds of wood. But they became pregnant and brought forth mighty giants whose length was three thousand cubits."

The Apostle evidently believed that women, by covering their heads when appearing before God, would avoid the danger of tempting the angels, some two hundred of whom had fallen easy victims to womanly loveliness and beauty in olden times, and had thereby brought fearful ruin and destruction upon themselves and upon all the inhabitants of the earth. He was afraid such an awful thing might occur a second time, and, therefore, thought it but prudent to warn all Christian women not to show their bare heads when in presence of God and His angels.

The first of the apostle's reasons is a mere question of taste in regard to which there has taken place a very decided change. We are not at all shocked when we behold a woman with bare head; nor do we consider it as unbecoming when a woman, be it from choice or necessity, wears her hair short, or is, as the Apostle would express it, shorn. Neither does the second reason impress us as strong and convincing. The Apostle rests his decision upon the report of the creation of man in Genesis ii., where we are told that the first woman was formed out of a rib of the man, and was created for the purpose of finding a help meet for him. there are at present not very many people who implicitly believe in that tradition. Modern science has formulated other theories concerning the origin of man, and modern public opinion does certainly not countenance the idea that man is a superior being as compared with woman. Man and woman are certainly different from each other in more than one respect; but, for all that, they are without doubt of exactly the same rank and dignity, and nobody is more strongly convinced of this truth than woman herself. If they were asked in earnest whether they considered themselves as beings occupying a lower position than man, and whether they felt themselves in duty bound to publicly confess their inferiority by wearing such a badge as the Apostle has prescribed for them, they would rise of one accord to indignantly protest against such an outrageous insult.

The third reason is even weaker than the first two. Many Christian poets and thinkers, for instance Milton, have become interested in the old myth of the fallen angels, but they invented their own explanation, and would never have believed in

the report of the Book of Enoch, notwithstanding the fact that its truth has never been doubted among the early Christians, and that it was even accepted by Paul and other Apostles. We are absolutely unable to imagine that angels could be tempted by womanly grace and beauty; and we can cite in confirmation of such a doubt the following words of Jesus Christ himself: "In the resurrection they neither marry nor are given in marriage, but are as the angels of God in heaven."

We have, therefore, to admit that the Apostle Paul absolutely fails to support his commandment with convincing reasons. It is, according to our way of feeling and thinking, as little uncomely for women to remove their hats at church or at other public places, as it is for men. We cannot believe that the virtue of angels may in any way be affected and tempted by women. And, least of all, may women be ordered to wear a badge of inferiority, because they are not inferior to men.

The apostle very likely had, although he entirely fails to mention it, still another reason which would have to be accepted as valid, as far, at least, as his own contemporaries were concerned. His precept was undoubtedly called forth by an attempt of Christian women at Corinth to demonstrate that they were man's equals by discarding their customary head-dress at the meetings of the congregation. That would have been, if successful, not only an injudicious but also a very dangerous move. Those rumors, circulating among pagans that the Christians were practicing all kinds of animal sin at their meetings, would thereby have been confirmed. For prostitutes alone appeared in public, clothed in a toga and bareheaded, while decent matrons always wore the stola which included a covering for the head.

The result of this investigation in that we to-day disagree from the Apostle Paul on a question considered by himself as important enough, but which is and remains after all not a question of faith and ethics, but simply of temporary expediency and fashion, which, as such, does not stand in any connexion with religion. We might draw the conclusion that modern women ought to abolish the old custom introduced by the Apostle, and thereby demonstrate that they have the same rights as are enjoyed by men. Such a course would at once become necessary when it ever should be claimed that women must not uncover their heads because they are not man's equals. But, since only few know anything about the origin and the real meaning of the custom, we may even imagine that women wear their head-dress at public places where men have to uncover because chivalrous men have granted them such a privilege. Nevertheless, considerations of Christian charity should induce Christian women to willingly renounce such a privilege wherever other people suffer from it. True womanhood as well as true manhood does not consist in covered or uncovered heads, but in perfect charity, the laws of which are exactly the same for both sexes. In Christ there is neither man nor woman.

St. Paul's Church, Belleville, Ill.

WM. WEBER.

COUNT TERACHIMA ON THE RELATIONS OF JAPAN TO THE UNITED STATES.

[The following remarks were made by Count Terachima, of Japan, a graduate of Pennsylvania University, who is now taking postgraduate studies in law at the University of Paris. Count Terachima replied to the sentiment, "The Foreign Students of the American Universities," at the Washington's Birthday banquet in

Paris, given under the auspices of the American University Dinner Club. The toast was proposed by the chairman, Consul-General Gowdy.

Paris, March 10, 1899.

THEODORE STANTON.]

Mr. Toastmaster and Ladies and Gentlemen:—It gives me a double pleasure to-night to find myself, on this brilliant occasion, with you, gentlemen from the American universities and colleges and their honorable and distinguished guests. In the first place, because this is my first attendance at the University Club dinner to celebrate one of the greatest men in human history, the father of your country. Secondly, because I find here a fitting place to state that not only myself but Japan owes much to the United States, and to express again, as I have already done many a time, the words of sincere gratitude to you, gentlemen, who represent the best political, social and intellectual elements of your country.

Further, that I have been called upon to respond to the toast "Japan" adds still more to my pleasure, for as a Japanese who made the United States his second home, living there some number of years, and who received his liberal education at the University of Pennsylvania, I always love to speak to my American fellow-graduates of that marvellous change and development which has taken place in Japan since the first treaty of commercial intercourse was concluded between us and your Commodore Perry in 1854.

I shall venture to say a word or two in response to your call, trying to give a very brief outline of the state of things, as they exist at present, in Japan and in the Far East.

We hear much of China lately as to the advisability of opening up the Celestial Empire to the commerce of the world. But only think a moment; it is but little more than forty years ago that we, the same Japanese who are now the pioneers of Western progress and civilisation, were refusing to allow the foreigners to come into the country for any purpose whatever. We wanted to be left alone, undisturbed in the deep slumber which had lasted centuries. Our foreign policy up to that time, if there was any, was hostile to the rest of the world except a few cases of clandestine commerce with Portuguese and Spanish adventurers and also with the Chinese, Coreans and the other Asiatic people. In principle, therefore, the country had its entrances strictly closed to strangers, and there was no place for the "open door" doctrine. It was only after the memorable visit of Commodore Perry that we came to the conclusion to enter into peaceful intercourse with the Americans and subsequently with the Europeans. Gentlemen, thus the great influence of the nineteenth century civilisation has penetrated into the heart of the country where the system of feudalism had reached its highest perfection and where the sole principle of diplomacy was "isolation." Then and there we became the earnest partisans of the open door policy in the countries of the Far East, and are endeavoring to promote the realisation of the highest ideals of modern civilisation. We waged the war against China in which we sacrificed much of our best blood in order to uphold the disputed right of Corean independence and sovereignty, in much the same way as in the last great war the United States acted with Spain. And, now, as the representative and the most powerful native state in the Orient, Japan has a new and difficult task to perform, namely—to maintain peace and to guarantee the security of international commerce in that far-away portion of the world! To accomplish this very responsible but important mission, we welcome the co-operation of all true partisans of peace and humanity. This is what the leaders of the Land of the Rising Sun are striving to achieve.

Allow me to add a few words about the Japanese graduates of the American institutions. I know I am not saying too much when I tell you that they are more or less prominent in the sphere of work they have chosen—in politics, diplomacy, science, religion, and jurisprudence. As an example I may present you the name of His Excellency Mr. Kourino, the present Japanese minister in France, who is a graduate of the Harvard Law School and whom we esteem as one of the ablest and most accomplished diplomats we have the good fortune to call ours. They all endeavor to bring the Japanese Empire to the high position in the family of nations which destiny has designed for her.

In Japan you will be sure to find friends warm enough to give you very welcome reception and earnest enough to afford you sympathetic support in any lofty work the United States may undertake in the interest of universal peace and for the promotion of human welfare.

May the bonds of friendship existing between your country and mine become in future stronger and stronger, and may they add much to the realisation of higher principles than those of egoism and of oppression.

S. Terachima.

AMERICANISM IN THE ROMAN CHURCH.

The Pope's encyclical has created a stir in America. The Italian party, as we may call those who are in favor of continuing the present conditions of the Roman Church, which practically is governed by Italians, claim that His Holiness has condemned Americanism, a movement which tends to broaden the Church and adapt it to the spirit of the times: and the general tone of the encyclical tends to support their view. But Archbishop Ireland, the leader of progressive thought among the American Roman Catholics, can find in it no trace of condemnation of his own position. The fact is that the Pope makes general statements only, which are mere hints and not definite decisions. There is no doubt, however, that he censures Father Hecker and his followers for their lack of appreciation of the purely ascetic saintliness of the saints, which does not find expression in helpful work; but otherwise no names are mentioned, and thus Archbishop Ireland is left at liberty to interpret the words in the sense in which he reads them. The Pope, he says, censures only certain excrescences of Americanism, but not Americanism itself.

In America we understand by Americanism love of freedom, self-reliance, and the consciousness of responsibility.

Father McGlynn showed the spirit of Americanism when he braved the curse of excommunication, a feat of heroism for a believer in Rome's authority which Protestants cannot properly appreciate, because they have ceased to fear the thunder of Rome that for centuries has been showered upon them without any visible effect.

Whether the followers of Father Hecker are imbued with Americanism remains to be seen. In response to the censure which has been passed on the doctrines of their venerable founder, they have at once cabled their unreserved allegiance to Rome and sent a letter of submission, the publication of which is left to the discretion of the Pope. Submission to church authority, and, above all other things, to Rome, is a virtue according to the Roman view, but the reward will be that those who submit will be regarded as good subjects of Rome. Whenever a man is strong enough to assert his independence he will be respected as a man with backbone. The weak must not expect the leniency which Father McGlynn

received, who, after his apostacy, was honored with a personal and most cordial interview with His Holiness. Backbone always enforces consideration, and he who bows his neck under the yoke must carry it. He who insists on his rights, and stands up for them without fear of ban and interdict, must be reckoned with even in the fold of the Roman Church. American Catholics are looked upon with a certain suspicion among the partisans of reactionary policy in Europe, but they are after all more respected than their submissive European co-religionists.

We may be allowed to express briefly our views on the subject.

We recognise in the Roman Catholic Church a most powerful institution which serves the spiritual needs of large masses of people who without the discipline of their priests would be without a guide in life. Every man has the religion he deserves; and the religion which a man deserves is in most cases the religion which he needs. The sensual man needs a sensual religion that drives home to him truths in concrete allegories which he could not understand in a direct statement; he must literally believe in the flames of hell in order to see harm in wrong-doing and to understand that the curse of sin is real and inevitable. The Roman Catholic Church is adapted to large masses of mankind. According to the opinion of outsiders the methods of the Church are gross; but they are effective. They have originated through an accommodation to the needs of gross minds, while the sentiments of the more cultured are satisfied by the subtler sensuality of art.

The organisation of the Church is perfect, but its politics are far from the high ideal which it claims to fulfil.

The Church is Roman, but not catholic; it is an Italian institution, not a church universal. This is apparent even in external and trivial things. The great mass of cardinals are Italians; in addition there are a few of other European nationalities, French, German, Slav, Spanish, but only one American cardinal.

The very name "Roman Catholic" is a contradiction in terms. Rome is a city in Italy with a glorious though bloody history; it is not a city through which the life of to-day pulses; it belongs more to the past than to the present time; but at any rate, it is one particular spot on earth. "Catholic" means that which appertains to the whole world, to the entire earth wherever it is inhabited. Thus "Roman Catholic" is a "particular universal"; and it is obvious that a church which is Roman cannot be catholic, and one that is catholic cannot be exclusively Roman.

Catholicism is a good thing, for catholic doctrine is exactly the thing we want. Let us have truth that is universal and principles that are applicable everywhere. We need not despair of finding them, for truth universal is no impossibility; in fact, we possess it in "science." Thus there is only one religion in the world that is truly catholic,—the Religion of Science. All other religions are catholic in the measure in which they accept truth universal.

The aspiration after catholicity is always wholesome, even when it is not realised. The Roman Catholic Church is practically a Roman church; yet there are men in it who tolerate its Romanism for the sake of its ideal of catholicity.

"Roman" might mean the Catholic Church as it is in Rome; but in that case we ought to have German, French, American, etc., Catholic churches as well. This is the position of the Anglican Church.

Further, "Roman" might mean that the Catholic Church has its centre in Rome, which should be regarded as a matter of accident, and the seat of the popes might as well be Avignon or New York or Chicago. If this view were accepted, the representatives of the Church should see to it that other nationalities should be rep-

resented in the Church government according to their importance; but the policy of Rome has always been to admit to its internal affairs as few outsiders as possible; and they have so far almost succeeded in paralysing American influence. It appears that they can no longer keep it out without a struggle; hence the disturbance which is caused by the American movement in the Roman Church.

We cannot help sympathising with the American movement in the Roman Church; it is still weak in Europe and met by most powerful opponents, but we hope that the time will come in which it will be recognised by the highest church authorities as legitimate in its aspirations.

The Roman Catholic Church needs a regeneration, and Americanism is the leaven in the dough which will prove a vitalising element of great value. Sad would be the day on which the Church officially rejected Americanism as un-Catholic, for it would doom the Church to stagnancy.

Americanism in the Roman Catholic Church is a sign of spring; it proves that some life is still left in the old tree. So long as Americanism remains a factor in the politics of the Church, there is hope that she may keep up with the progress of Protestaut countries. In the interest of the many millions who blindly follow the authority of Rome, we are anxious for the success of the good cause of wider freedom and higher spirituality.

P. C.

APRIL MONIST.

The April Monist is more popular than the general run of its predecessors and with one or two exceptions the subjects treated are of quite general interest. The opening article is by Prof. G. Sergi, on "The Primitive Inhabitants of Europe." It sets forth in an intelligible manner the criteria which the well-known ethnologist has established for distinguishing the various types of human races Prof. Sergi's theory is that the race in Europe which followed the Neanderthal type was Eurafrican and came from Africa; the Asiatic, or Indo-European, civilisation followed. As the criterion for distinguishing race, Professor Sergi has substituted the form of the skull for the more transitory features which have been adopted by other anthropologists.

William Romaine Paterson, a well-known English novelist, has contributed an article on "The Irony of Jesus," in which the intellectual and critical attitude of Jesus is emphasised. The new voluminous work of Shadworth H. Hodgson, "The Metaphysic of Experience," finds a full and competent résumé in an essay entitled "Actual Experience," by Dr. Edmund Montgomery.

In an illustrated paper on "Yahveh and Manitou," Dr. Paul Carus traces the analogies which exist between the character of the ancient Yahveh, or Jehovah, as described in the records of the Old Testament, and the God-conception of the North American Indians. The ancient God of Israel was a God of the desert, and as his people were brought into contact with civilisation the burden of all prophecy was to the effect that his ancient religion and rites were being abandoned for the gods of a false culture. The constant refrain is a return to the old conditions, and this, trait for trait, has been the development of the religion of the North American Indian, since the advent of the white man.

"The Contemporary Philosophical Movement in France" has been treated by Prof. L. Lévy-Bruhl, who is now writing a series of articles on French Philosophy for *The Open Court*. There is at present great activity in philosophical circles in France, and the survey of Professor Lévy-Bruhl will give information which can scarcely be found elsewhere. M. Lucien Arréat has contributed his usual criticisms

of the latest French philosophical books; while the book reviews cover an unusually wide sphere of interest, including theology, the history of religion, philosophy epistemology, mathematics, physics, biology, anthropology, and so forth. (Chicago The Open Court Publishing Co. Price, 50 cents.)

The work which Dr. Félix Le Dantec published a couple of years ago on a New Theory of Life was very favorably received by the thinking world, and his new book on Individual Evolution and Heredity displays the same characteristics of careful research and moderate speculation which marked his initial work. M. Le Dantec, while not a materialist, has a decided bias to looking at the phenomena of life from the point of view of physics and chemistry, or at least he believes that the scientific description of life in its ultimate form will be stated in terms of physical and chemical laws. He believes that he has established by his studies the fact that it is impossible to find between living bodies and inert bodies, so called, any other difference than the presence or absence of the property known as assimilation, and is apparently of the opinion that no other property can be made the basis of biological research. From this foundation the research must proceed deductively, and will exclude the errors based on teleology and anthropomorphism. He seeks a high scientific ideal. His work has all the semblance of mathematical rigor. The treatment, though concise, is highly suggestive, giving evidence of profound study which has not excluded important American contributions to the subject.

* *

Dr. A. Binet and Dr. V. Henri, of Paris, who have shown themselves indefatigable in the production of experimental researches in psychology and in the publication of journals and works relating to their department, embarked last year on a new literary enterprise which has taken the form of a library of pedagogy and psychology. The first book of the series is on Intellectual Fatigue,² a series of experimental researches on the general feeling of lassitude and on the general physiological alterations which follow mental exertion. The first part is devoted to the influence of intellectual labor on the action of the heart, on the capillary circulation, on the pressure of the blood, on the temperature of the body, on the production of heat, muscular force, and the changes of nutrition. The second part is devoted to a consideration of the methods of studying such effects and to a discussion of the influence of intermittent periods of rest upon intellectual labor. The experiments have been conducted partly in the laboratory and partly in the school-room. The book is very complete in its description of instruments, methods of registration, and interpretation of results. Upon the whole, it is rather a physiology of intellectual work, and it can hardly be said that the results justify any definite conclusion as to the real problem involved, which is the determining of the duration and arrangement of the working hours of schools. But the methods for further work and the directions in which this work is to be done have been indicated by the authors. The old pedagogy, which they characterise as pure verbiage, has been supplanted by a new pedagogy which is based upon observation and experiment. To have furnished some of the instruments by which these observations and experiments can be conducted has been the purpose of the authors; the rest remains to be done.

¹ Evolution Individuelle et Hérédité: Théorie de la Variation Quantitative. By Félix Le Dantec. Paris: Félix Alcan, 108 Boulevard Saint-Germain. Pp., 308. Price, 6 francs.

²La Fatigue Intellectuelle. By A. Binet and V. Henri. 90 figures and 3 plates. Paris: Schleicher Frères, 15 rue des Saints-Pères. 1898. Pp., 338.

The Principles of Bacteriology

By DR. FERDINAND HUEPPE
Professor of Hygiene in the University of Prague

Translated from the German and annotated by *Edwin O. Jordan*, Ph. D., Assistant Professor of Bacteriology in the University of Chicago. 28 Cuts. Five Colored Plates. Pages, 465 +. Price, \$1.75 (9s.).

Invaluable Information for the Physician, Scientist, and General Reader.

Bacteriology is now in a state of transition. From having been descriptive and classificatory, it is now becoming a genuinely organised body of scientific knowledge, with its own principles, its own methods, and independent powers of scientific inference. Dr. Hueppe's book represents this latest phase of development. He seeks to give to his science a critical and logical setting, and to free it from all metaphysics. It is on its philosophical character, in fact, that the greatest emphasis must be laid. The book is new, just translated, and may be regarded as the only rigorous and strictly scientific introduction to bacteriology yet written.

Press Commendations of the Original.

"Those who have already followed Professor Hueppe through his 'Methods' and through his 'Forms of Bacteria' will be quite prepared to find here a philosophical treatment of bacteriology such as has seldom been attempted; in place of a mere repetition of methods and enumeration of species Professor Hueppe has grappled with the fundamental questions concerned and has in clear language given a cogent, philosophical, and scientific account of bacteria and their relations to the processes with which they are said to be associated. . . . It is the work of a master of the subject, who is not only a scientific man in the sense of being an observer, but also in the sense of having a truly philosophical mind."—

The Lancet, London.

"Books of bacteriological technique have been somewhat common in recent years but nothing has hitherto appeared which, leaving out laboratory methods and systematic details, gives a summary of the important discoveries of modern bacteriology. . . . To any one who wishes to know what bacteriology has accomplished and what problems are still undergoing solution, nothing can serve better that this outline of Professor Hueppe."

"This work of Professor Hueppe is useful to two classes of readers. Those who are not

"This work of Professor Hueppe is useful to two classes of readers. Those who are not bacteriologists, but who desire to learn the general facts which the last quarter of a century has discovered, will find here a brief but intelligible summary. Those who are already familiar with the general facts will, perhaps, find the book of even more value in giving a clear and simplified conception of the various confusing facts which have so rapidly accumulated in recent years."—Science, New York.

THE OPEN COURT PUBLISHING CO., 324 Dearborn St., CHICAGO.

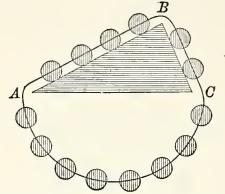
London: Kegan Paul, Trench, Trübner & Co.

Popular Scientific Lectures

A Portrayal of the Methods and Spirit of Science

By ERNST MACH, Professor in the University of Vienna. Translated from the German by Thomas J. McCormack. Third Edition. Pages, 415. An Elegant Volume. In Cloth, Gilt Top, \$1.50 net. (7s. 6d.)

Lectures on Mechanics, Sound, Light, Electricity, the Conservation of Energy, Philosophy,



Illustrating proof of the law of the inclined plane. The whole string of balls is in equilibrium; cut away the lower part, and the balls on the sides still remain in equilibrium; hence the powers on the sides are as the number of the balls, or as the lengths.

and Education. The thoughts of the Master Minds of Science are here presented in popular form by one of its foremost living representatives.

Verdicts of the Press:

"A most fascinating volume, ... has scarcely a rival in the whole realm of popular scientific writing."—Boston Traveller.

"Truly remarkable.... May be fairly called rare."—Professor Crew, N. W. University.

"A masterly exposition."-Scotsman, Edinburgh.

"A very delightful and useful book."—Daily Picayune, New Orleans.

"Will please those who find the fairy tales of science more absorbing than fiction."—Pilot, Boston.

"Have all the interest of lively fiction."—Commercial Adver-

"Its literary and philosophical suggestiveness is very rich."— Hartford Seminary Record.

Send money by post office order, express order, or in stamps.

THE OPEN COURT PUBLISHING CO., CHICAGO, 324 Dearborn St.

LONDON: Kegan Paul, Trench, Trübner & Co.

Mathematical Essays and Recreations

By HERMANN SCHUBERT

Professor of Mathematics in the Johanneum, Hamburg, Germany.

Translated from the German by THOMAS J. McCORMACK.

Just Published.

Pages, 149. Cuts, 37. Price, Cloth, 75c. (3s. 6d.).

Contents:

Notion and Definition of Number. Monism in Arithmetic. On the Nature of Mathematical Knowledge The Magic Square.
The Fourth Dimension.
The Squaring of the Circle.

The mathematical essays and recreations in this volume are by one of the most successful teachers and text-book writers of Germany. The monistic construction of arithmetic, the systematic and organic development of all its consequences from a few thoroughly established principles, is quite foreign to the general run of American and English elementary text-books, and the first three essays of Professor Schubert will, therefore, from a logical and esthetic side, be full of suggestions for elementary mathematical teachers and students, as well as for non-mathematical readers.

THE OPEN COURT PUBLISHING CO., CHICAGO, 324 Dearborn St.

LONDON: Kegan Paul, Trench, Trübner & Co.

Books of To-day for Americans.

THE WAR AS A SUGGESTION OF MANIFEST DESTINY. By Prof. H. H. Powers, of Stanford University . . Price, 25c. The development of our new policy of imperialism. The manifest destiny of an Anglo-American alliance for world domination. A book of the most striking present interest. THE NICARAGUA CANAL AND THE ECONOMIC DEVELOPMENT OF THE UNITED STATES. By Professor E. R. Johnson, of the University of Pennsylvania Price, 10c. The essay shows what great commercial benefits the canal will bring to the United States. It shows also why the canal itself should prove a paying investment for American capital. THE NICARAGUA CANAL AND THE MONROE DOCTRINE. By Professor L. M. Keasbey, of Bryn Mawr College . Price, 25c. A history of the struggle between England and America to control the canal when built, dwelling especially on the Clayton-Bulwer treaty. INTERVENTION AND THE RECOGNITION OF CUBAN INDEPENDENCE. By Professor Amos S. Hershey, of the University of Indiana Price, 25c. The author explains the right, according to international law, of the United States' intervention in Cuba, and the bearing of the Monroe Doctrine upon such intervention. In addition, he discusses intervention from the standpoint of humanity, and reviews the history of Spanish misrule. THE STUDY OF THE NEGRO PROBLEMS. By Professor W. E. B. Du Bors, of the University of Atlanta Price, 25c. The negro question, so long of vital interest in America, has now added importance and new phases, since our recent acquisitions of territory. PROPOSED REFORMS OF THE MONETARY SYSTEM. By Professor Jos. F. Johnson, of the University of Pennsylvania Price, 25c. A statement of the principles which must be observed in any sound reconstruction of the currency system; with a criticism of the monetary commission and Gage's plans. The above six books will be sent postpaid for \$1.00.

American Academy of Political and Social Science, STATION B, PHILADELPHIA.

topics will be sent free on application.

A new and complete catalogue of over 230 publications on political, social, and economic

Psychology and Philosophy.

The Monographs of Th. Ribot.

"The best statements concerning attention, personality, and will."

Journal of Education.

(1) Psychology of Attention. (2) The Diseases of Personality. (3) The Diseases of the Will. Cloth, 75 cents each. Full set, cloth, \$1.75.

Briefer Works by Max Mueller.

"The old fascination and still riper wisdom."

Watchman.

(1) Three Introductory Lectures on the Science of Thought. (2) Three Lectures on the Science of Language. Cloth, 75 cents each.

By Alfred Binet.

"An original and valuable contribution." Evening Journal. On Double Consciousness. New Studies in Experimental Psychology. Pages, 93. Paper, 15 cents.

By Ludwig Noiré.

"No Reason without Speech; No Speech without Reason." On the Origin of Language. Pages, 57. Paper, 15 cents.

By Ewald Hering.

"A veritable little classic."

On Memory, and the Specific Energies of the Nervous System. Pages, 50. Paper, 15 cents.

The Works of Paul Carus.

"A good introduction to the study of philosophy." The Scotsman. (1) The Primer of Philosophy. A Simple and Concise Exposition. Pages, 242. Cloth, \$1.00.
(2) Fundamental Problems. A More Exhaustive Philosophical Treatise. Pp., 373. Cloth, \$1.50.
(3) The Soul of Man. A Treatise on Physiological and Experimental Psychology. 125 Cuts. Pages, 458. Cloth, \$3.00.

By the Same.

" Very clear."

The Nature of the State. Pages, 56. Paper, 15 cents.

World's Fair Lectures.

(1) The Philosophy of the Tool. Pages, 24. Paper, illustrated cover, 10 cents. (2) Our Need of Philosophy. Pages, 14. Paper, 5 cents. (3) Science a Religious Revelation. Pages, 21. Paper, 5 cents.

THE OPEN COURT PUBLISHING CO., CHICAGO, St. 324 Dearborn St.

THE GOSPEL ACCORDING TO DARWIN.

By Dr. Woods Hutchinson of the University of Buffalo. Pages, xii+241. Price, \$1.50 (6s.). A collection of homiletic essays treating the crying religious and ethical problems of the day in the light of the revelations of modern science.

"Not the least of the virtues of those essays is their stimulating vigor of thought. Dr. Hutchinson owns allegiance to no school; what he gives us is plainly the outcome of earnest personal thought. Touching as he does upon matters which are still under discussion, it is inevitable that the reader should frequently disagree with him. But no amount of disagreement on minor matters can blind the impartial reader to the manifest virtues of the book as a whole; to the width of knowledge displayed, the keen desire for truth, the terse and picturesque style, the originality and independence of mind. These qualities are displayed most conspicuously in the essays on 'Love as a Factor in Evolution' and 'Lebenslust,' but are visible in all. They make The Gospel According to Darwin a book which is worthy of study by all to whom the scientific view of the problems of life possesses any interest."-The Saturday Weekly Citizen, Glasgow.

"It is in no sense the purpose of this little volume to furnish a system of ethical or religious thought, or the germ of a new religion, as perhaps its title might lead some to infer, least of all to enunciate truths which are original with, or peculiar to, its author. It is merely an attempt to get a bird's-eye view of a few of the influences affecting human hope and human happiness from the standpoint of that view of, and attitude towards, the universe, which is best expressed by the term Darwinism."—From Author's Preface.

"Is one of the most thoughtful and stimulating of recent publications.... In these pages are discussed, in frank, manly, straightforward, manner, many of the themes that are most vital to the race.... We may not agree with all Dr. Hutchinson says, but we cannot deny the freshness and vigor of his argument, nor the force of his facts, and we shall all find in his pages very much food for profitable meditation."—The Chicago Chronicle.

A Recent Work in Biology.

A MECHANICO-PHYSIOLOGICAL THEORY OF ORGANIC EVO-LUTION. Summary. By Carl von Nägeli. Translated by V. A. Clark and F. A. Waugh, of the University of Vermont. The only original account of Nägeli's theories in English. Pages, 52. Price, paper, 15c. (9d.)

A Chinese Philosophical Classic.

LAO-TZE'S TAO-TEH-KING. 老子道德經 Chinese-English. With an Introduction, Transliteration, and Notes. By *Dr. Paul Carus*. Pages, 360. Price, cloth, \$3.00. (15s.)

Just Published.

THE ETHICAL PROBLEM. Three Lectures on Ethics and Science. By Dr. Paul Carus. Second edition, enlarged by a discussion of the subject by William M. Salter, John Maddock, F. M. Holland, Prof. Friedrich Jodl, Dr. R. Lewins, Prof. H. Höffding, and Prof. L. M. Billia. With replies by the author. Pp. 351. Cloth, \$1.50. Paper, 50c.

THE OPEN COURT PUBLISHING CO., CHICAGO, 324 Dearborn St.

London: Kegan Paul, Trench, Trübner & Co.

History of the People of Israel

From the Earliest Times to the Destruction of Jerusalem by the Romans.

By Prof. C. H. Cornill, of the University of Breslau, Germany. Translated by Prof. W. H. Carruth. Pages, 325+vi. Cloth, \$1.50 (7s. 6d).

Not yet published in German. A fascinating portrayal of Jewish history by one of the foremost of Old Testament scholars.

An Impartial Record. Commended by both Orthodox and Unorthodox.

COMMENDATORY NOTICES:

"Many attempts have been made since Old Testament criticism settled down into a science, to write the history of Israel popularly. And some of these attempts are highly meritorious, especially Kittel's and Kent's. But Cornill has been most successful. His book is smallest and it is easiest to read. He has the master faculty of seizing the essential and passing by the accidental. His style (especially as freely translated into English by Professor Carruth of Kansas) is pleasing and restful. Nor is he excessively radical. If Isaac and Ishmael are races, Abraham is an individual still. And above all, he has a distinct heroic faith in the Divine mission of Israel."—The Expository Times.

"I know of no work that will give the beginner a more admirable introduction to the study of the history of Israel than this little volume. There is a fine discrimination of those events which are really important and an extraordinary ability in exhibiting their genetic relations. The place of Hebrew history in universal history is shown with accurate knowledge of recent archæological discovery. The religious significance of Israel's history is appreciated to a degree that is unusual in an adherent of the radical school. It is refreshing to find Samuel regarded as more than a mere fortune-teller, David as more than a robber chief, and Solomon as more than a voluptuary. In this respect as well as in many of his historical conclusions Cornill represents a reaction against the extremes of Stade and Wellhausen. One is much struck in reading this book with the similarity of its own story to the traditional idea of the course of the history of Israel. If the author did not occasionally warn his readers against the traditional view, I doubt if the average layman would find anything that would startle him. The professional Old Testament student recognises how here and there details have been modified by criticism, but still the sweep of the narrative is the same as that to which we are accustomed. This is significant as showing how even the more radical criticism leaves untouched the main outline of the history of Israel as presented in the books of the Old Testament. The publishers are to be commended for their enterprise in securing the publication of this work in English before it appeared in German. The translation is admirably done. The book reads as if written originally in English."-The Hartford Seminary Record.

"Professor Cornill has an unusually direct and pithy style for a German, and especially a theologian, and is a master of condensation. Added to these qualities there is a strength and beauty of expression, with occasional touches of eloquence, betraying a feeling and earnestness which are perhaps the more effective because unexpected. To the student this work will not only be of interest as illustrating a method of reconstructing history, but of positive value for its scholarly use of all the results of research which throw light upon the history of Israel and its relations to other peoples. Taken in connexion with the Scripture records it becomes at many points an instructive and illuminating aid."—The Watchman.

"A good example of the cultured taste which is making history accessible to the desultory reader who lacks time or inclination, or both, for the study of ponderous tomes, may be found here. While most of us have a certain familiarity with Greek and Roman history, we question if there is anything like so widespread a knowledge of historical facts concerning the Jews, save what we remember of what we have read in the Bible."—Public Opinion.

"It will be found an excellent accompaniment to the study of the Old Testament Scriptures, written, as it is, from the dignified standpoint of the conscientious and truth-loving historian, respecting honest religious convictions, and at all times avoiding the tone of cynicism so commonly displayed at those times when historical investigation seems to conflict with the statements of avowed inspiration."—Chicago Evening Post.

THE OPEN COURT PUBLISHING CO., CHICAGO, 324 Dearborn St.

LONDON: Kegan Paul, Trench, Trübner & Co.

Important Publications.

Scientific Books.

THE ANALYSIS OF THE SENSATIONS. By Ernst Mach, Professor of the History and Theory of Inductive Science in the University of Vienna. Pages, xi., 208. Cloth, \$1.25. Cuts, 37.

".... Like everything he writes, a work of genius."-Prof. W. James, of Harvard.

"There is no work known to the writer which in its general scientific bearing is more likely to repay richly thorough study. We are all interested in na-ture in one way or another, and our interests can only be heightened and clarified by Mach's wonderfully original and wholesome book."—Prof. J. E. Trevor in The Journal of Physical Chemistry.

THE SCIENCE OF MECHANICS. CRIT-ICAL AND HISTORICAL. By Prof. Ernst Mach. Cuts, 250. Pages, 534. Half Morocco, \$2.50.

"A remarkable work."—Nature.
"A masterly book."—Engineering News.

"As a history of mechanics, the work is admirble."—The Nation. able.

"The book as a whole is unique and a valuable addition to any library of science or philosophy."—
Prof. D. W. Hering in Science.

"Sets forth the elements of the subject with a clearness, lucidity, and force unknown in the mathematical text-books."—Canadian Mining and Eng. Review.

Works on Ancient India.

ANCIENT INDIA: ITS LANGUAGE AND RE-LIGIONS. By Prof. H. Oldenberg, of Kiel. Cloth, 50 cents. Pages, ix., 110.

Contains (1) The Study of Sanskrit; (2) The Religion of the Veda; (3) Buddhism. A popular exposition by the foremost European authority.

"Matter divested of its technical form coming from so eminent an authority is certain to find a welcome reception awaiting it at the hands of the many who are interesting themselves in Hindoo antiquities at the present time."-Chicago Tribune.

THE PHILOSOPHY OF ANCIENT IN-DIA. By Prof. Richard Garbe. Containing (a) A Brief History of Indian Philosophy; (b) The Connexion between Greek and Indian Philosophy; and (c) Hindu Mo-Pages, 89. Cloth, 50c. 2nd. ed.

"The value of this little work as a contribution to the history of philosophy may be justly termed great."—Baptist Union.
"Though the work is scholarly, it is written for the

general reader who need not have previously studied the matter."—*Bookseller and Newsdealer*,

The Works of Gen. M. M. Trumbull.

WHEELBARROW: Articles and Discussions on the Labor Question. With Portrait of the author (Gen. Trumbull). ges, 300. Cloth, \$1.00.

"Written with vivacity and wit, and with a Cob-bett-like terseness of English and felicity of illus-tration."—Home Journal, New York.

THE FREE TRADE STRUGGLE IN ENGLAND. Second edition, revised and enlarged. Pages, 296. Cloth, 75c.

Mr. Edward Atkinson says: "This history ought to be read by every man who desires to make up his mind how to act in this country at the present time."

Religious and Ethical.

THE RELIGION OF SCIENCE. By Dr. Paul Carus. Pages, 103. Extra edition, paper, 50 cents.

"The best and briefest possible popular exposition of the scientific attitude towards the religious sentiment that we have read."—New England Mag-

THE IDEA OF GOD. By Dr. Paul Carus. Fourth edition. Pages, 32. Linen cover, 15 cents.

"An effort to purify our 'Idea of God' that it may be greater, sublimer, and more awe-inspiring to future generations than it has ever been yet."— Literary World, London.

THOUGHTS ON RELIGION. By G. J.Romanes, F. R. S. Third edition. Pages, 184. Cloth, \$1.25.

"Will rank among the most valuable books the century has produced."—Chicago Tribune.

ENGLISH SECULARISM, A CONFES-SION OF BELIEF. By George Jacob Holyoake. Pages, xiii., 146. Cloth, 50 cents.

"George Jacob Holyoake is a sincere, gifted, and scholarly thinker, and his exposition of secularism will be read with interest by all followers of contemporaneous movements."—The Chicago Evening

THE GOSPEL OF BUDDHA. By Dr. Paul Carus. Fifth edition. Pages, 275+xiv.

"In addition to a very luminous and suggestive preface, he furnishes a table of references, showing at an eye-glance the sources of his extracts and the parallelisms in the Gospels. He gives, also, a glossary of names and terms, a method of pronunciation, and a good index. The simplicity of this presentation, the freedom of the text from notes or uncouth and outlandish diacritical points, and the general arrangement of the work are admirable. . . . It is admirably fitted to be a handbook for the single reader or for classes," -The Critic, New York.

MUNICIPAL AFFAIRS.

\$1.00 Per Year.

The only magazine devoted exclusively to the consideration of municipal problems from the standpoint of the taxpayer and citizen.

Besides the leading articles, each number contains a Bibliographical Index of all the literature that has appeared during the preceding quarter, thus making it possible to ascertain in a few moments what articles, pamphlets, books and reports have appeared upon any phase of city government; Digests of Periodical Literature which are exceedingly valuable to the busy reader who wishes to secure the gist of the best articles without extended reading; and Book Reviews of the most important works, by persons entirely familiar with the various subjects.

The December Number, 1898, is devoted to a world-wide survey of

Municipal Functions: A Study of the Development, Scope and Tendency of Municipal Socialism, by Milo Roy Maltbie, Ph.D.

8 vo., 223 pp. Index. (Separately, paper, 50 cents; cloth, \$1.50.)

Contents:

The Historic City—The City of To-day—Protective Functions—Charities—Education—Recreation—Street Facilities—Industrial Functions—Causes of Increased Municipal Activity—Future City Functions—Index.

"The present monograph is certain to attract very wide attention and to be in great demand for purposes of reference. It is a remarkably thorough compilation of facts as to the nature and extent of actual municipal undertakings in the principal cities of the world."—Review of Reviews.

An Unparalleled Offer.

All subscribers to Municipal Affairs for 1899 may secure a copy of Weber's

Growth of Cities.

at \$1.00 per copy (\$1.50 cloth), postpaid.

This exceptionally valuable work of about 500 octavo pages, soon to be issued by the Macmillan Company and sold for \$3.00 and \$3.50, has been described as "the most thorough, comprehensive and scientific discussion of the subject yet presented. No library is complete without it." This offer expires May 1st.

Send for description of this work and other publications of universal interest. Address all communications to

COMMITTEE ON MUNICIPAL ADMINISTRATION, 52 WILLIAM STREET, NEW YORK CITY.

The Religion of Science Library.

A collection of standard works of The Open Court Press, issued bi-monthly. Yearly \$1.50; single numbers, 15, 25, 35, 50 and 60 cents (9d., 1s. 6d., 2s., 2s. 6d., 3s.), according to size. The books are printed on good paper, from large type.

The Religion of Science Library, by its extraordinarily reasonable price, will bring a number of important books within reach of all readers.

The following have already appeared in the series:

- No. 1. The Religion of Science. By Paul Carus. 25 cents.
 - 2. Three Introductory Lectures on the Science of Thought. By F. MAX MÜLLER. 25 cents.
 - 3. Three Lectures on the Science of Language. By F. MAX MÜLLER. 25 cents.
 - 4. The Diseases of Personality. By Th. Ribot. 25 cents.
 - 5. The Psychology of Attention. By Th. Ribot. 25 cents.
 - 6. The Psychic Life of Micro-Organisms. By Alfred Binet. 25 cents.
 - 7. The Nature of the State. By Paul Carus. 15 cents.
 - 8. On Double Consciousness. By Alfred Binet. 15 cents.
 - 9. Fundamental Problems. By Paul Carus. Pages, 373. 50 cents.
 - 10. The Diseases of the Will. By TH. RIBOT. 25 cents.
 - 11. The Origin of Language, and The Logos Theory. By Ludwig Noiré. 15 cents.
 - 12. The Free Trade Struggle in England. By Gen. M. M. Trumbull. 25 cents.
 - 13. Wheelbarrow on the Labor Question. 35 cents.
 - 14. The Gospel of Buddha. By Paul Carus. 35 cents.
 - 15. Primer of Philosophy. By Paul Carus. 25 cents.
 - 16. On Memory, and The Specific Energies of the Nervous System. By Prof. Ewald Hering. 15 cents.
 - 17. The Redemption of the Brahman. A Novel. By R. GARBE. 25 cents.
 - 18. An Examination of Weismannism. By G. J. Romanes. 35 cents.
 - 19. On Germinal Selection. By August Weismann. 25 cents.
 - 20. Lovers Three Thousand Years Ago. By T. A. GOODWIN. 15 cents.
 - 21. Popular Scientific Lectures. By Ernst Mach. 50 cents.
 - 22. Ancient India: Its Language and Religions. By H. Oldenberg. 25 cents.
 - 23. The Prophets of Israel. By C. H. Cornill. 25 cents.
 - 24. Homilies of Science. By Paul Carus. 35 cents.
 - 25. Thoughts on Religion. By G. J. ROMANES. 50 cents.
 - 26. Philosophy of Ancient India. By Richard Garbe. 25 cents.
 - 27. Martin Luther. By Gustav Freytag. 25 cents.
 - 28. English Secularism. By George Jacob Holyoake. 25 cents.
 - 29. On Orthogenesis. By Th. Eimer. 25 cents.
 - 30. Chinese Philosophy. By Paul Carus. 25 cents.
 - 31. The Lost Manuscript. By Gustav Freytag. 60 cents.
 - 32. A Mechanico-Physiological Theory of Organic Evolution. By Carl von Nägeli. 15 cents.
 - 33. Chinese Fiction. By the Rev. George T. Candlin. 15 cents.
 - 34. Mathematical Essays and Recreations. By H. Schubert. 25 cents.
 - 35. The Ethical Problem. By Paul Carus. 50 cents.

THE OPEN COURT PUBLISHING COMPANY.

324 DEARBORN ST., CHICAGO, ILL.

LONDON: KEGAN PAUL, TRENCH, TRÜBNER & Co.

Buddhism and Its Christian Critics

By *Dr. Paul Carus.* 8vo. Pages, 311. Price, \$1.25.

Contents:

THE ORIGIN OF BUDDHISM.
THE PHILOSOPHY OF BUDDHISM.
THE PSYCHOLOGICAL PROBLEM.
THE BASIC CONCEPTS OF BUDDHISM.
BUDDHISM AND CHRISTIANITY.
CHRISTIAN CRITICS OF BUDDHISM.

"Every religious man should study other religions in order to understand his own religion; and he must try to trace conscientiously and lovingly the similarities in the various faiths in order to acquire the key that will unlock to him the law of the religious evolution of mankind."— From the author's Preface.

The Open Court Pub. Co., Chicago



Address:

Wyckoff, Seamans & Benedict

144 Madison St.,

CHICAGO, ILLINOIS.

AN ORIENTAL ART WORK

Scenes from the Life of Buddha

Reproduced in Colors

from the Paintings of Keichyu Yamada, Professor in the Imperial Art Institute, Tokyo.

With a Handsome Cover-Stamp

especially designed for the volume by Frederick W. Gookin, in imitation of a Buddha-painting of the Fifteenth Century.

Just Published. Price, \$2.50.

These pictures, which are a marvel of daintiness, have been reproduced by the new and expensive three-color process. The inimitable delicacy of tint of the originals has been brought out in this way with scarcely any loss of quality.

Unique and Original.

The illustrations are eight in number and occupy each a separate leaf, with the descriptions and references intervening.

The publishers will send the work on inspection to subscribers to The Open Court, provided the same be returned uninjured and carefully packed within two days after its receipt, if not satisfactory.

The Open Court Publishing Co.,

324 DEARBORN ST.,

Chicago, = = = Illinois.

THE

BIBLIOTHECA SACRA

A Religious and Sociological Quarterly

CONDUCTED BY

G. FREDERICK WRIGHT

Z. SWIFT HOLBROOK

OBERLIN, O.

BOSTON, MASS.

Associated with

EDWARDS A. PARK, NEWELL DWIGHT HILLIS, FRANK WAKELEY GUNSAULUS, FRANK H.
FOSTER, JUDSON SMITH, D. W. SIMON, WM. M. BARBOUR, SAMUEL IVES
CURTISS, CHAS. F. THWING, A. A. BERLE, W. E. BARTON, E. H.
JOHNSON, JACOB COOPER AND E. W. BEMIS.

Contents of January, 1899:

The Outlook in Theology.
The Place of a Miracle.

Edward L. Curtis S. Leroy Blake

Warp and Woof.

Frederick A. Noble

The Nature of the Divine Indwelling.

Calvin B, Hulbert

The Philosophical Disintegration of Islam.

Henry Woodward Hulbert

Christianity and Idealism. Sentimental Sociology. A Side-Light on Luther.

The New Political Economy.

Dr. Driver's Proof-Texts.

James Lindsay George Luther Cady R. Clyde Ford Frank Parsons G. Frederick Wright

The Christian Conception of Wealth.

Charles C. Merrill

Partial Contents of April, 1899:

The Books of the Old Testament Versus Their Sources...Willis J. Beecher.

The Trial of Jesus: Its Value in the Foundation of Faith.....F. J. Lamb.

The Holy Scriptures and Divorce.......Noah Lathrop.

The Christian Conception of Wealth......Charles C. Merrill.

Kant's Theory of the "Forms of Thought."......James B. Peterson.

Vision of St. Paul on the Road to Damascus.....Edward I. Bosworth.

Caedmon, the First Great English Poet......D. S. Gregory.

The Delusions of "Christian Science.".......G. Frederick Wright.

Semitic, Critical, Sociological Notes, and Book Reviews in each Number.

800 pp. Three Dollars a Year; 75 Cents a Number.

Address

THE BIBLIOTHECA SACRA CO.,

OBERLIN, OHIO, U.S.A.

A Proposition

To Old and New Readers of The Open Court.

Goldthwaite's Unique Folding Globe of the World.

Among the advantages which this Globe presents are the following, viz.:

1. The water is colored a dark blue, which, besides being more natural than white, shows the land more

distinctly, and makes it appear elevated above the level of the water. A globe of this color does not soil easily.

- 2. The ocean currents are plainly shown, and aid much in explaining physical geography.
- 3. The attachments are very simple, enabling one to handle the globe without much effort.
- 4. Outlines of natural and political divisions are distinctly
- 5. The Isothermal lines are distinctly and accurately given, showing the mean annual temperature for the two extreme seasons all over the world.
- 6. They are made of expensive material, and covered very carefully, and cannot be easily broken. When soiled, the maps may be cleaned with a damp cloth or sponge dipped in ben-
- 7. This globe is convenient for measurement, being about 670 miles to every inch on the surface.
- 8. Every tenth parallel of latitude and twenty-four meridians of longitude are represented, making the reckoning of time easy, one hour for each meridian.,
- 9. Hence it is the most convenient for general use.

STATE OF NEW JERSEY ATTORNEY GENERAL'S OFFICE

January 31, 1899.

Wm. M. Goldthwaite:

I purchased from you in '97 a folding globe, and have found it a very great convenience. Within a narrow compass it



Weight, 6 Ounces.

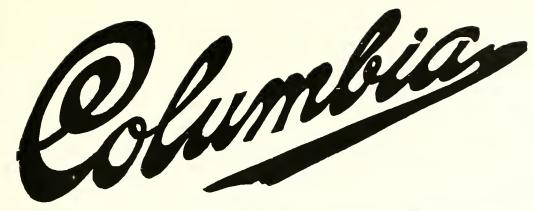
gives you all the information of a geographical character which under ordinary circumstances you require; and best of all, it keeps the seas and land of this world in their due relation to each other, so that no one is confused in looking over your most admirable globe. Truly yours, S. H. GREY.

Special Offer:

Goldthwaite's Folding Globe, as here repre-		,	
sented, with beautiful extension brass stand,	-	\$5.00	Both for \$5.00.
		\$1.00	
Goldthwaite's Folding Globe, as here repre-			
sented, without stand,	-	\$3.75	Both for \$3.75.
The Open Court for one year,	_	\$1.00	10 70

The above price includes delivery in a neat substantial case to any address in the United States, Canada, or Mexico. Address:

Agents Wanted. WM. M. GOLDTHWAITE, Hyde Park, Chicago, Ill.



Hartford and Vedette Bicycles

Have the confidence of the cycling public. For weeks we have been running our immense factories 22 hours daily to meet the demand of our new 1899 models.

The Longest Experience,

The Greatest Resources,

The Largest Factories,

The Best Devised Machinery,
The Most Scientific Methods.

A combination of advantages which produces the standard bicycles of the world.

Columbia Chainless, Models 59 a	nd	6	0,	•	•		•	•	\$75
Columbia Chain, Models 57 and 5	8,		•	•	•	•	•	•	50
Hartfords, Patterns 19 and 20, .		•	•		•	•	•	•	35
Vedettes, Patterns 21 and 22,		•	•	•	•	•	•	\$25	, 26

ENTIRELY NEW MODELS.

We are closing out the limited number remaining of 1898 Columbias and Hartfords (the leaders of last season) at greatly reduced prices.

Juvenile Bicycles, all sizes, \$20 to \$25.

POPE MANUFACTURING COMPANY, Hartford, Conn.

Catalogue free from any Columbia dealer, or by mail for one 2-cent stamp.

A 25° NOVEL FREE!

Have you seen CARTER'S MONTHLY, the Chicago illustrated magazine edited by the well-known author, Opic Read? As a special inducement to interest you in this popular magazine, we make you the following offer: We will send you a sample copy for to cents in silver or stamps, and in addition will mail you ABSOLUTELY FREE your choice of any of the following list of standard novels by well known authors. This list has been carefully selected; the books average about 200 pages, and are published at the retail price of 25 cents. We guarantee that you will not be disappointed in any particular.

You will be amused and entertained by Opie Read's new stories, which appear in nearly every issue. You should not miss a single chapter of the story of The Great Chicago Fire, by John McGovern. A series of articles is now being published on a tour through Europe on a bicycle, by Edgar Magness, entertaining and instructive. Other interesting stories and poems.

A COLLEGE EDUCATION FREE.

Do you desire to take a course in Stenography or in any of the professions, such as Medicine, Law, Music, Oratory or Dentistry?

If you feel that you cannot afford the expense, write to us and we will send particulars How to Obtain a College Education Free.

CARTER'S MONTHLY,

159 LA SALLE STREET,

CHICAGO, ILLINOIS.

Preparatory Courses For Universities.

Students are prepared for Yale, Vassar, and other universities.

In One Year.

The preparatory course of academies comprises four years.

Three Years are Gained,

because but very few pupils are instructed together, and on account of twenty years' experience in teaching. Circular will be sent on application. Correspondence is invited. Address:

REV. WM. WEBER, Belleville, Ill.

The International

A monthly illustrated magazine for cultured people at the prevailing popular price.

Self-Instruction French Lessons

Prepare for the great Paris Exposition Universal of 1900.

Self-Instruction Spanish Lessons

For wideawake business men and women.

The Graphophone—Taking Machine

A marvellous language teacher—introduced by us. Our language courses are complete in themselves, but with the talking machine as teacher they are peerless.

How Do You Pronounce

Aguinaldo, Sienkiewicz, desuetude? "Current Words" tells you and keeps you posted as to new words and phrases.

10 cts. a copy 25 cts. a quarter \$1.00 a year A. T. H. BROWER,

Ed. and Prop'r,

358 Dearborn St., Chicago, III.

Philosophical and Psychological Portrait Series.

(Now Complete.)

Suitable for framing and hanging in public and private libraries, laboratories, seminaries, recitation and lecture rooms.

The portraits, which are 11 x 14 in., have been taken from the best sources, and are high-grade photogravures. The series is now complete.



HUME. (Original 11×14 in.)

PYTHAGORAS SPINOZA
SOCRATES LOCKE
PLATO BERKELEY
ARISTOTLE HUME
EPICTETUS MONTESQUI
THOMAS AQUINAS VOLTAIRE
ST. AUGUSTINE D'ALEMBER
AVERRHOES CONDILLAC
DUNS SCOTUS DIDEROT
GIORDANO BRUNO
BACON LEIBNITZ
HOBBES WOLFF
DESCARTES KANT
MALEBRANCHE FICHTE
SCHELLING

CABANIS
MAINE DE BIRAN
BENEKE
E. H. WEBER
FECHNER
HELMHOLTZ
WUNDT
HERING
AUBERT

Philosophical:

SPINOZA HEGEL LOCKE SCHLEIERMACHER BERKELEY SCHOPENHAUER HUME HERBART MONTESQUIEU FEUERBACH LOTZE D'ALEMBERT DUGALD STEWART CONDILLAC DIDEROT SIR W. HAMILTON COUSIN L.EJBNITZ COMTE WOLFF ROSMINI KANT I. STUART MILL FICHTE HERBERT SPENCER

Psychological:

ROMANES MACH STUMPE PAUL JANET EXNER RIBOT STEINTHAL TAINE BAIN FOUILLEE SULLY BINET WARD G. STANLEY HALL C. L. MORGAN G. T. LADD

To Subscribers:

TERMS: For the whole series (68 portraits) on regular paper, \$7.50 (35s.); on heavy Imperial Japanese paper, \$11.00 (50s.).

The Philosophical Series, 43 portraits, Imperial Japanese paper, \$8.75 (40s.); the same on the best plate paper, \$6.25 (30s). The Psychological Series, 25 portraits, on Imperial Japanese paper, \$5.00 (24s.), the same on the best plate paper, \$3.75 (18s.). (The higher prices in parentheses refer to foreign countries. Carriage prepaid.) Single portraits on regular paper, 25 cents.

For subscribers who may prefer not to frame the portraits, a neat portfolio will be provided at a cost of \$1.00 additional.

On Inspection: A specimen portrait will be sent to any reader of *The Open Court* giving his or her full business and home address on condition that it be returned within two days after its receipt, if not satisfactory.

"I have received the first instalment of the series of portraits of philosophers, and am very much pleased with them."—*Professor David G. Ritchie*, St. Andrews, Scotland.



SPINOZA. (Original 11×14 in.)

"I congratulate you on the magnificent character of the portraits, and I feel proud to have such adornments for my lecture room."—J. J. McNulty, Professor of Philosophy in the College of the City of New York.

THE OPEN COURT PUBLISHING CO.,

CHICAGO, 324 Dearborn St.

London: Kegan Paul, Trench, Trübner & Co.

Lectures On Elementary Mathematics

By JOSEPH LOUIS LAGRANGE

Being the Course of Lectures Delivered at the École Normale, Paris, 1795

Translated from the French by THOMAS J. McCORMACK

With a Fine Photogravure Portrait of the Great Mathematician, Notes, Bibliographical Sketch of Lagrange, Marginal Analyses, Index, etc. Handsomely Bound in Red Cloth. Pages, 172. Price, \$1.00 net. (58).

A Masterpiece of Mathematical Exposition

First Separate Edition in English or French

- "I intend to recommend Lagrange's Lectures on Elementary Mathematics to the students of my course in the Theory of Equations, for collateral reading, and also to the teachers of elementary mathematics who attend my summer conferences on the Pedagogy of Mathematics. I trust that this valuable translation is but the forerunner of others in the same field by your house."—J. W. A. Young, Professor of Mathematics in the University of Chicago.
- "I put the book aside for a careful and leisurely perusal, in the first rush of my return from Japan, and now have reached it, and am truly surprised at it. It makes Lagrange human and personal to me. How he knew his Euclid!"—Dr. George Bruce Halsted, Prest. Texas Academy of Science.
- "Probably never equalled in the peculiar quality of leading the mind to see and enjoy the beauty as well as the accuracy of the science. It sets forth not only the bare science, but makes clear its correlation with history and philosophy."—The Chicago Chronicle.
- "The book ought to be in the hands of every high-school teacher of mathematics in America, for the sake of getting Lagrange's point of view."—Prof. Henry Crew, Northwestern University, Evanston, Ill.
- "Can we not get Lagrange before the mass of the teachers? No teacher should teach elementary mathematics who has not mastered the matter represented by this work."—L. Graham Crozier, Knoxville, Tenn.
- "I am very thankful to you for publishing such works, and will be a steady customer."—Levi D. Wines, Ann Arbor, Mich.
- "Teachers of elementary mathematics, who desire to improve their methods of instruction, adding richness and vitality to the subject, should read this book."—American Mathematical Monthly.
- "When the next book of this series is out send it along. It is the most valuable series published. I would not sell these books for a good many dollars. You are doing a great work for mathematical teachers. Keep it up."—W. Bellis, B. Pd., Mathematical Department Central Michigan Normal, Mt. Pleasant, Mich.

On the Study and Difficulties of Mathematics

By AUGUSTUS DE MORGAN.

Just Published—New corrected and annotated edition, with references to date, of the work published in 1831 by the Society for the Diffusion of Useful Knowledge. The original is now scarce.

With a fine Portrait of the great Mathematical Teacher, Complete Index, and Bibliographies of Modern Works on Algebra, the Philosophy of Mathematics, Pangeometry, etc.

Pp. viii + 288. Cloth, \$1.25 (5s.).

- "A Valuable Essay."—Prof. Jevons, in the Encyclopædia Britannica.
- "The mathematical writings of De Morgan can be commended unreservedly."—Prof. W. W. Beman, University of Michigan.
- "It is a pleasure to see such a noble work appear as such a gem of the book-maker's art."—Principal David Eugene Smith, Brockport Normal School, N. Y.
- "The republication of De Morgan's work is a service for which you should receive high commendation."—JOHN E. CLARK, New Haven, Conn.

THE OPEN COURT PUBLISHING CO., CHICAGO, 324 Dearborn St.

London: Kegan Paul, Trench, Trübner & Co.

THE MONIST.

A QUARTERLY MAGAZINE

Devoted to the Philosophy of Science.

PUBLISHED BY

THE OPEN COURT PUBLISHING COMPANY, CHICAGO, ILL.

Monon Building, 324 Dearborn Street. Post-Office Drawer F.

Annually \$2.00 (9s. 6d.). Single Copies, 50 cents (2s. 6d.).

AGENTS AND TERMS OF SUBSCRIPTION.

SINGLE COPIES	ICARLI
London: Kegan Paul, Trench, Trübner & Co., Paternoster House, Charing Cross Road 2s. 6d.	9s. 6 d.
Leipsic: Otto Harrassowitz M. 2.50	M. 9.50
ROTTERDAM: H. A. Kramers & Son	Fl. 6.60
Turin: Libreria Carlo Clausen	Lire 12
Milano: Ulrico Hoepli, Librario della Real Casa	Lire 12
Boston: Damrell & Upham, 283 Washington Street 50 cents	
New York: Lemcke & Buechner, 812 Broadway 50 cents	\$2.00.
Postpaid to New South Wales, Victoria, Queensland, Tasmania, and New Zealand, and all co	intries in

Postpaid to New South Wales, Victoria, Queensland, Tasmania, and New Zealand, and all countries in U. P. U., for one year, \$2.25.

Recent and Forthcoming Features:

A Series of Articles on General Philosophy. Princifal C. Lloyd Morgan, Bristol, England. Myths in Animal Psychology. Prof. C. O. Whitman, Chicago.

A Study of Job and The Jewish Theory of Suffering. Prof. J. A. Craig, Univ. of Mich.

The Primitive Inhabitants of Europe. Prof. G. Sergi, Rome.

On General Biology. Prof. Yves Delage, Paris.

On Pasigraphy. Prof. E. Schröder, Carlsruhe.

On the Foundations of Geometry. Prof. H. Poincaré, Paris.

On Science and Faith. Dr. Paul Topinard, Paris.

On the Education of Children. Dr. Paul Carus.

General Review of Current German, French, and Italian Philosophical Literature. By Prof. F. Jodl, Vienna M. Lucien Arréat, Paris, and Prof. G. Fiamingo, Rome.

SOME RECENT CONTRIBUTORS:

In General Philosophy:

PROF. KURD LASSWITZ
PROF. RUDOLF EUCKEN
PROF. F. JODL
THE LATE PROF. J. DELBŒUF
PROF. C. LLOYD MORGAN

In Logic, Mathematics, Theory of Science:

CHARLES S. PEIRCE PROF. FELIX KLEIN SIR ROBERT STAWELL BALL PROF. ERNST MACH PROF. HERMANN SCHUBERT

In Blology and Anthropology:

PROF. AUGUST WEISMANN PROF. C. LLOYD MORGAN PROF. JOSEPH LECONTE PROF. MAX VERWORN DR. EDM. MONTGOMERY THE LATE G. J. ROMANES PROF. C. O. WHITMAN DR. PAUL TOPINARD DR. ALFRED BINET PROF. JACQUES LOEB PROF. ERNST HAECKEL PROF. TH. EIMER PROF. E. D. COPE PROF. C. LOMBROSO DR. JAMES CAPPIE

In Psychology:

PROF. TH. RIBOT PROF. JAMES SULLY DR. G. FERRERO DR. J. VENN DR. ERNST MACH PROF. C. LLOYD MORGAN

In Religion and Sociology:

DR. PAUL TOPINARD
DR. FRANCIS E. ABBOTT
PROF. HARALD HOEFFDING
DR. PAUL CARUS
PROF. G. FIAMINGO
PROF. E. D. COPE

THE OPEN COURT PUBLISHING CO., 324 Dearborn St., CHICAGO

THE PROHIBITED LAND

THE TRAVELS IN TARTARY, THIBET AND CHINA

Of MM. HUC and GABET

New Edition. From the French. Two Vols. 100 Illustrations. 688 Pages. Cloth, \$2.00 (10s.). Handsomely Bound in Oriental Style.

A Classic Work of Travels.

One of the Most Popular Books of All Times.

Read the Following Commendatory Notices:

"The work made a profound sensation. Although China and the other countries of the Orient have been opened to foreigners in larger measure in recent years, few observers as keen and as well qualified to put their observations in finished form have appeared, and M. Huc's story remains among the best sources of information concerning the Thibetans and Mongolians."—The Watchman.

"The book is a classic, and has taken its place as such, and few classics are so interesting. It deserves to be put on the same shelf as Lane's *Modern Egyptians*. Recent investigations only strengthen the truth of the intrepid missionary's observations—observations which were once assumed in Europe to be sensational and overdone. These reprints ought to have a large sale. It would be a good time for the Catholic libraries to add them to their stock of works on travel. They will find that few books will have more readers than the missionary adventures of Abbé Huc and his no less daring companion."—The Catholic News.

"Our readers will remember the attempt of Mr. A. Henry Savage Landor, the explorer, to explore the mysteries of the holy city of L'hassa, in Thibet. The narrative of the frightful tortures he suffered when the Thibetans penetrated his disguise, has been told by Mr. Landor himself. But where Mr. Landor failed, two very clever French missionaries succeeded. Father Huc and Father Gabet, disguised as Lamas, entered the sacred city, and for the first time the eyes of civilised men beheld the shocking religious ceremonials of L'hassa. The complete story of their extraordinary experiences is told in the book Travels in Tartary, Thibet, and China, published by The Open Court Publishing Co., Chicago."—New York Journal.

"Fools, it is known, dash in where angels fear to tread, and there are also instances of missionaries dashing in where intrepid and experienced travellers fail. Such was the case with MM. Huc and Gabet, the two mild and modest French priests who, fifty years ago, without fuss, steadily made their untortured way from China across Thibet and entered L'hassa with the message of Christianity on their lips. It is true that they were not allowed to stay there as long as they had hoped; but they were in the Forbidden Land and the Sacred City for a sufficient time to gather enough facts to make an interesting and very valuable book, which on its appearance in the forties (both in France and England) fascinated our fathers much in the way that the writings of Nansen and Stanley have fascinated us. To all readers of Mr. Landor's new book who wish to supplement the information concerning the Forbidden Land there given, we can recommend the work of M. Huc. Time cannot mar the interest of his and M. Gabet's daring and successful enterprise."—The Academy.

"They two visited countries of which Europe was, at the time, all but absolutely ignorant, and their record struck the reading world with almost incredulous wonderment."—The Agnostic Journal.

"Has become classical. The work is still an authority on Thibetan Buddhism, and by its pleasant narration of varied adventures will always be readable."—The Dial.

THE OPEN COURT PUBLISHING CO., CHICAGO, St. 324 Dearborn St.

LONDON: Kegan Paul, Trench, Trübner & Co.