The Open Court

A MONTHLY MAGAZINE

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

Founded by EDWARD C. HEGELER

VOLUME XXXIX (No. 10) OCTOBER, 1925 (No. 833)

CONTENTS

Frontispiece. The Tomb of Confucius.

Japanese Confucianism. W. G. Blaikie Murdoch. 577

Empiricism and Philosophic Method. Victor S. Yarros. 586

Religion and Morality. Edward Bruce Hill. 593

The Function of Money. T. B. Stork. 604

Jesus the Great Teacher. Rev. Roland D. Sawyer. 617

The Origin of Species. Smith W. Cardenter. 621

The Fruit of Conscience. Warren Scholl. 637

The Open Court Publishing Company

122 S. Michigan Ave.

Chicago, Illinois

Per copy, 20 cents (1 shilling), Yearly, \$2.00 (in the U.P.U., 9s. 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

Founded by EDWARD C. HEGELER

VOLUME XXXIX (No. 10) OCTOBER, 1925 (No. 833)

CONTENTS

Frontispiece. The Tomb of Confucius.	AGE
Japanese Confucianism. W. G. Blaikie Murdoch	577
Empiricism and Philosophic Method. VICTOR S. YARROS	586
Religion and Morality. Edward Bruce Hill	593
The Function of Money. T. B. Stork	604
Icsus the Great Teacher. Rev. Roland D. Sawyer	617
The Origin of Species. Smith W. Carpenter	621
The Fruit of Conscience. WARREN SCHOLL	637

The Open Court Publishing Company

122 S. Michigan Ave.

Chicago, Illinois

Per copy, 20 cents (1 shilling). Yearly, \$2.00 (in the U.P.U., 9s. 6d.)

Entered as Second-Class Matter March 26, 1887, at the Post Office at Chicago, Ill., under Act of March 3, 1879.

Copyright by The Open Court Publishing Company, 1924.

Applying the Project Principle

Young People's Projects

By Erwin L. Shaver

Here are six separate projects, each designed to cover a period of three to four months, and each a challenge to young people to think through the problems of the Christian life:

A CHRISTIAN'S LIFE WORK.

A project plan suggesting how Christian young people of high-school and college age may be helped to find that form of life-work to which they are best suited.

A CHRISTIAN'S RECREATION.

A project plan to guide young people of high-school age and older in the discovery and use of Christian types of recreation.

A CHRISTIAN'S ATTITUDE TOWARD THE PRESS.

The object of this project program is to develop among young people by group discussion and activity an intelligent and effective attitude on the Christian level toward the public press.

CHRISTIAN WORLD-BUILDERS.

The aim of the program of activities offered here is to help young people interpret and use the resources of the world in accordance with the Christian purpose.

CHRISTIAN YOUNG PEOPLE AND WORLD-FRIENDSHIPS.

The activities of this program are designed to enlist young people in the knowledge of and participation in missionary work of the world.

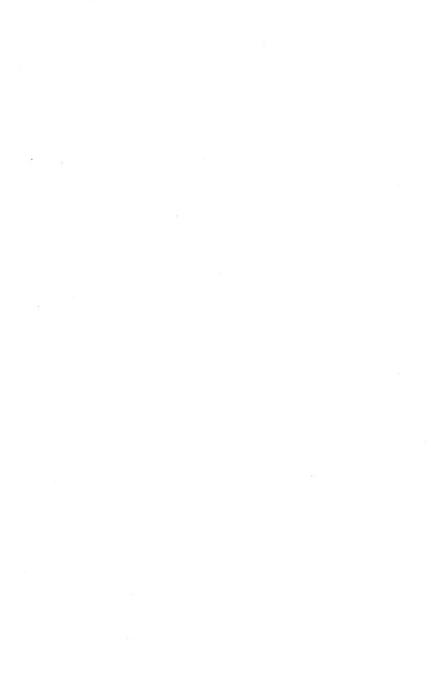
YOUNG PEOPLE AND THE CHURCH.

Suggested procedure for a unified program of educative activities for young people with the aim of developing a more intelligent, devoted, and active loyalty to the church.

Each project is bound in paper and is 60 cents, postpaid 65 cents. A leader's guide with suggestions for the use of all the projects will be sent free on request.

RIGHT LIVING. By MAURICE J. NEUBERG. A discussion for Boys and Girls. Twenty-six problems and cases offering material dealing specifically with problems of child-life. There is a teacher's manual to accompany the text with directions and suggestions for the most effective use of the lessons. Text in cloth \$1.25, paper 75 cents, posttage 10 cents extra; Teacher's Manual 75 cents, postpaid 80 cents.

THE UNIVERSITY OF CHICAGO PRESS
5832 ELLIS AVENUE CHICAGO, ILLINOIS



THE TOMB OF CONFUCIUS

Frontispiece to The Open Court.

THE OPEN COURT

A MONTHLY MAGAZINE

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

Vol. XXXIX (No. 10)

Остовек, 1925

(No. 833)

Copyright by The Open Court Publishing Company, 1925

JAPANESE CONFUCIANISM

BY W. G. BLAIKIE MURDOCH

MONG the color-prints by the exquisite master, Hiroshige. there are several which depict a tiny house of prayer, perched charmingly on the end of a promontory, in a little lake. But if Hiroshige is a notably favorite artist in the West, apparently no Occidentals, in descanting on him, have spoken of the historic interest of the miniature fane, which he drew so beautifully. For the Buddhist priest who founded it. Iiken Daishi, living at the outset of the seventeenth century, was a close friend of the wonderful statesman, Tokugawa Ivevasu. And it was their time, which witnessed the advent of Confucianism, as a force in Japanese life. On one occasion, Jiken was invited to go to a scholastic establishment, the Seido, or Hall of the Wise Men, there to uphold the merits of Buddhism, while another person, Havashi Rasan, championed those of Confucianism. And this debate was symbolic of the epoch in which it occurred, the Tokugawa period (1603-1868). For it was an age, seething with the spirit of inquiry.

Confucius was not the originator of the faith which bears his name. Inculcating an orthodox code of morality, it acknowledges the rule of one supreme god, which belief notwithstanding. Chinese Confucians pray to their own dead ancestors, for mundane blessings. And this montheistic and ancestral cult had obtained in China, fully two thousand years before the birth of Confucius, in 551 B. C. It is maintained, that he edited certain ancient writings; it is supposed, that he added chapters to some other things of that kind. There is a book, regarded as being exclusively by him; there are other books, which claim to give his spoken wisdom, as set down by his disciples. This voluminous mass of literature, part of it historical, part poetical, here concerned with divination, there with

morality, elsewhere with statescraft, forms the Confucian Canon. And there grew up around it, in China, a body of exegesis, diverse in the extreme, and of colossal size.

It appears to have been towards the close of the fourth century, A. D., that the Japanese first heard of Confucianism, but it evoked slight interest with them. A hundred and fifty years thereafter, it had brought no step forward with the people of Nippon, from their primitive condition. In sharp contrast, as shown in the present writer's former article, when Buddhism reached Japan, in the mid sixth century, it quickly united with the indigenous Japanese cult, Shinto. The dual creed, thus formed, soon became the universal one, in the Island Empire, straightway espousing moreover, the current civilization of the Asiatic mainland. It is the case that, a university being established in the Land of Sunrise, towards the close of the six hundreds, the Confucian Canon was made a part of the curriculum. It is the case that, about the middle of the seven hundreds, a Japanese Empress tried zealously, to popularize an item in that Canon. the Book of Filial Piety. Nevertheless, the University was but a tiny affair; and the popularizing of a book was scarcely possible. since, as yet no printed volumes were produced in Japan. The inauguration, in 1192, of the Shogunate, or military dictatorship, which presently became the real governing factor, the crown devolving into a shadow of authority, was followed ere long by a marked development in printing. In 1317 there was published, Sanken Itchi Sho, or the Union of the Three Wisdoms, in which book a Japanese Buddhist priest, Dairen, sought to harmonize the teachings of Buddhism and Confucianism, together with those of the latter's chief rival in China, Taoism. But if the publication of this work demonstrates, that liberal thought was not unknown in Nippon in the fourteenth century, it was no written word, but a series of strange happenings, which brought Confucianism its titanic vogue in the Tokugawa period.

In the second half of the sixteenth century, Portuguese and Spanish missionaries settled in large numbers in Japan. Owing to the ceaseless baronial wars, there was harrowing privation with the commonalty. People were therefore ready to listen to a novelty, and literally thousands became Christians. Certain Japanese nobles tried, to coerce their tenants into accepting the Western religion. For the tyrants felt that, if Christianity grew omnipresent, in the estates they personally owned, this would bring commerce between those domains, and the Portuguese possessions in the Orient. And

this commerce would yield wealth, for the nobles at issue. When, in 1562, Oda Nobunaga set out, to pacify the land by armed force, he saw well that a backing of many swords was at disposal, with the Christian nobles, and he enlisted them in his service. But the pacification he achieved was only a lull, in the storm of internecine strife. And now there went forth the tale, that the Christian missionaries were plotting, to facilitate a naval invasion. Who would save the Land of Sunrise from wars at home and peril from abroad?

No doubt, the curiously sad nature of his childhood was partly the thing, which engendered in Tokugawa Iyeyasu the habit of thought. For he grew up, homeless, motherless, during twelve years a boy hostage, which circumstances were due to his father having suffered a reverse in the baronial wars. On a morning in 1600 two armies gathered at Sekigahara, not far from Kyoto, one army being nearly twice the size of the other. But how should the men of the smaller dread defeat, when their general was Iyeyasu? And as evening approached, his clarions sang triumph. Some of his followers, hastening to congratulate him, spoke of the wealth which would be his, since surely all Nippon lay in his hand, as it were. He replied that he cared nothing for riches, nor personal glory: declared that his sole dream was the welfare of the Japanese people. He added memorable counsel: "After a victory, tighten the strings of your helmet." And the night came down.

A myriad questions must have surged through the mind of the brilliant leader, as gloom enveloped the battlefield. If the civilizing spell of Buddhism, huge as that spell was, had not brought immunity from baronial strife, what moral force could be discovered, conducive to a central government of enduring stability, a government which should break forever, the turbulence of the feudal lords? It is the easier to imagine the great soldier pondering thus, for he was a man of wide reading. Once, prior to Sekigahara, he had heard that, near his camp, there was resident a scholar who, having begun life as a Buddhist priest, had renounced Buddhism and was eliciting attention as an exponent of Confucianism. On that occasion, Iyeyasu had expressed a desire to make the acquaintance of this person, Fujiwara Seikwa (1561-1619). And scarcely was the signal fray of 1600 over when the triumphant soldier besought the ex-priest to come and expound the Chinese cult. But when the lecture was about to begin, it was noticed that the general wore his ordinary clothing. "The wisdom of the Chinese sages

demands ceremonial robes," was Seikwa's cutting remark. And Iyeyasu went humbly to change his raiment!

Yedo, nowadays called Tokio, was chosen seat of Shogunal rule. when the victor of Sekigahara was appointed Shogun in 1603, and the office made hereditary with his family, the Tokugawa. Scholarship had waned sadly in the long storms preceding this event. Of the old university of early Buddhist times, all that remained was sundry academic titles which passed from father to son in various families. Ivevasu therefore started at Yedo, a college for young samurai, or men of the military caste, a band of which swordsmen each noble had the right to have in his service. It was this college which acquired the name Seido, the place being a direct ancestor of the present Imperial University. The Confucian Canon was from the first, the staple, in fact the dominating thing in the curriculum at the Seido; it continued to have that position in the learning imparted there till the end of the Tokugawa period. Seikwa's pupil, Hayashi Rasan (1583-1657), was nominated principal of the new educational institute by Iyevasu. And it was the great soldier personally who organized the debate there in which the Buddhist. Jiken Daishi, confronted the Confucian, Hayashi. With the latter. as with Jiken, the Shogun formed an intimacy, and he remained very cordial towards Seikwa, despite that scholar's rudeness to him above mentioned. But with all his interest in Confucianism, Ivevasu was a member of the Buddhist church, and expressed a wish that his descendants should never leave its fold. What was it, in the Confucian Canon which he desired to impress on the young men of the military aristocracy, the governing class?

In contrast to Buddhism, primarily concerned with teaching people how to win salvation in the hereafter, Confucianism says nothing about the life after death. And, with the Chinese expositors of their national cult, it was common to assail Buddhism for its want of practicality. Where, they would ask, are its rules for the manipulation of the state? Confucius saw, in the perfect family, with parents tending the children, and children obeying the parents, a picture in miniature of the perfect country. And in consonance with preaching the excellence of filial piety, the sage and his exceptists descanted on the need of unswerving fealty with people to government. But the duty of the governors, towards the governed, was also expatiated on by the philosophers, and their conception of the divine right of kings was notably sane. The Emperors of China, they would say, give proof of holding a charge from God, only so

long as they rule for the benefit of the realm. Kings exist for the nation, not the nation for Kings. The Chinese expositors would enlarge on the desirability of each individual thinking of the common good first, his own second. He should always be ready to sacrifice his personal interests for those of the majority. And of Confucius himself it is told that, challenged to name in a single word a force which would keep everything right, he answered. Reciprocity. The Buke Shohatto, or Statutes for the Military Caste, is sometimes thought to be of Ivevasu's own composing; in the opinion of seemingly all Japanese biographers of Hayashi Rasan, he had much to do with compiling the code; the surmise is tenable, since that outstanding Confucian was secretary to Iveyasu, besides head of the Seido. And, apart from containing definite citing of the Confucian Canon as an authority, the Shohatto is rich, on page after page, in memories of Confucian literature in general. It represents an endeavor to give Japan the reciprocal regime, which the thinkers of China had upheld as the ideal one.

If crime abounds in the country, the Shogunal government is to blame, says the Shohatto characteristically. It is the duty of the Shogunate, to preserve tranquillity throughout the land. If a man drinks and gambles, the point to be inquired about is, whether he was taught these actions are wrong, and if he was not so taught, those responsible for his education ought to be penalized. Expanding on the need of finding for government posts, men of integrity and wisdom, the code duly inveighs against such nobles as oppress the common people. But it holds that, if a samurai receives offence from a commoner, the former is entitled himself to punish the offender. The samurai, however, should he be most severely dealt with by the government, should he be convicted of going forth without his sword, badge of his caste, he should never forget, that his sword is the very soul of a gentleman.

This last comment in the Statutes is remarkably illuminative. Iyeyasu appears to have marked clearly that, would he strengthen the central government, would he create towards it that fealty which Confucianism advocated, the reform movement must be led by the nobles and their men-at-arms. The Statesman saw that there must be heightened with the military aristocracy the sense of honor. They must be taught that, even as they had the privilege to go armed, they must show themselves worthy of it, setting to the other classes an example of fine manly conduct. In a little, the great Shogun might well congratulate himself, on the results of his various meas-

ures since Sekigahara. Through his pacification of Nippon, prosperity was dawning for the masses. And meanwhile, the ruler had shown amply that he was anything but prejudiced against the Occident. He had sent a young compatriot to Italy, there to study Western civilization, and bring home a report: he had allowed British and Dutch merchants to settle in Japan, and the Shogun had personally won the friendship of a British seaman, Will Adams. But now, there went forth again the terrifying story about the Christian missionaries trying to facilitate a naval invasion. Had he labored in vain. Iveyasu may have asked himself, to set his beloved country in order? Convinced that a dynamic move was needful, he sternly interdicted the profession of the Occidental faith, and he ordered all the foreign churchmen to leave Nippon instantly, at peril of death. The third Tokugawa Shogun, Ivemitsu, made of the Island Empire a very hermit. He ejected the European traders; he closed the seaports to Western commerce, and he absolutely forebade Japanese to go abroad. There were still many people, however, who clung to Christianity, and there was launched against them a harrowing persecution. How should this sad event fail to quicken the philosophic bias which had been heralded by Fujiwara Seikwa in turning from Buddhism to Confucianism?

It was through feeling the need of a foil to Christianity that, as told in the present writer's former article, the Tokugawa Shogunate demanded that every mature Japanese male should be on the membership roll of some Buddhist temple. Accordingly, although Confucius was canonized in Japan with the name of Bunseno, and although there was placed in the Seido an image of him, to which his admirers paid obeisance, Confucianism never became an actual church in the Land of Sunrise. It never had a priesthood there, and was simply a force, which moulded the thought of the country. It could scarcely have become a church there, since the ancestral worship, which is a salient part of the Chinese cult, was also a part of Japanese Buddhism, having acquired this from the old creed of Nippon, Shinto. Iyemitsu granted revenues to the Seido, and soon in divers places, other than Yedo, there were philosophers who gathered youths around them, and instructed them in the Confucian Canon. In the course of the Tokugawa period, upwards of twenty men gained wide repute by such expounding. Most of them were likewise writers on the Chinese religion, and several of them openly criticised Buddhism. Ere long, a stupendous mass of literature had grown up in Japan around the ancient sacred books of China. If the pages of the Japanese exegetists are often crytic a splendid passion for learning was shown by a number of these men. And it illustrates well, on the one hand, the mental activity of their epoch, on the other hand, the rigor of the anti-Western policy, that the fourth Tokugawa Shogun, coming to power in 1651, found cause to issue an edict against the translating of any books from European tongues.

Not Buddhism alone, but also Taoism, was assailed by the Chinese Confucians. For they were worshippers of hard logic, whereas Lac Tsu, the alleged founder of Taoism, inculcated an idealistic charity as of Jesus Christ. "Recompense injury with kindness," said Lao Tsu. And Confucius being asked what he thought of the doctrine, he answered with the logic his compatriots were afterwards to extol: "Recompense kindness with kindness, injury with justice." In the Book of Rites, an item in the Confucian Canon, it is claimed as just, to avenge the death of a father or brother. And, in Japan, this conception of filial piety and justice became only too prevalent in the Tokugawa age. Long before, namely in the twelfth century, two brothers names Soga waged a victorious vendetta on the assassin of their father. And early in Tokugawa days, there was maugurated a festival to keep fresh the memory of the brothers, with what was viewed as their excellent and dutiful action.

In the Confucian expositions of Fujiwara Seikwa, it is held that a samurai should always be ready to testify his devotion to his lord. even unto death. Hayashi Rasan harps on the fineness of loyalty, without saving explicitly what he signifies by the word. In the Confucian discussions of a later writer, Yamaga Soko (1622-1685). who was a pupil of Rasan, Seikwa's sentiments above-named are echoed. And, imbued with the Confucian notion of justice, Soko writes lengthily on how a samurai should act, in wreaking vengeance on one, who has wronged the noble whom the samurai serves. The man-at-arms should disguise himself, should craftily study the ways of the enemy, should lie in wait for him till a fit hour for striking. In the Occident there is familiar the story, The Forty-seven Ronin. about a band of warriors who, exacting the penalty of death from a person, who had insulted him whose liegemen they were, then disembowelled themselves. And this story is based on veritable events. which occurred in 1701-03. The leader of the vengeful, Oishi Yoshio (1659-1703), had studied the Confucian Canon under none other than Yamaga Soko. And, in his gory exploit, Oishi employed the very tactics which his preceptor had written about!

It was perhaps inevitable that in Japan, feudalistic, her governor's swordsmen, the Confucian Canon should bring forth a fruit. somewhat other from that which it yielded in China, industrial, her rulers owing their posts to having passed scholastic examinations. It was perhaps inevitable that in the Sunrise Land the extolling of filial piety, reckoned by the Chinese Confucians the golden virtue. should engender the related element, loyalty. For remember, and be this emphasized, Oishi and his band acted in accordance with a lofty sense of duty and honor. And not these men only, but others of the samurai caste, manifested towards the feudal lords they served, a nobly sacrificial loyalty. A cult, whose originators exalted the logical, and scouted the idealistic, fostered in Nippon something illogical yet extraordinary beautiful. Iyeyasu had not acted in vain when he worked to make the Confucian Canon the staple of education with the military aristocracy. Seikwa had not written in vain a remarkable passage, in which he pointed out that "learning is of value, only in so far as it creates character."

The material prosperity which Iveyasu had brought by giving stability to the central government was anything but swept away by the anti-Western or hermit policy. The veneration for loyalty on the part of samurai to his chief, was largely the moral force which underlay the social fabric in the Tokugawa period. Its popular literature demonstrates that the commoners bowed before the merit, enthusiastically admiring samurai fidelity. Observe, too, in 1783, when there was much distress owing to a volcanic eruption, a noted Confucian expositor, Kameda Hosai, parted with the most precious of all things to a scholar, his library, so that he might distribute money to the distressed. This was merely one of a number of generous acts, by outstanding exponents of the Confucian Canon in Nippon. They endeavored to practice the orthodox virtues they wrote about; they made sacrifice for their parents. They illustrated true filial piety, instead of the sanguinary thing, mistaken for it by votaries of the Soga brothers.

It is customary with Japanese historians to divide their bygone Confucians into sundry schools or groups. In 1790, so various had become the ideas of the apostles of the Chinese cult, that the Shogun Iyenari made an abortive attempt to prohibit the teaching of any code of philosophy, save what this ruler called Shushi. This is the Japanese version of the name of the Chinese sage, Chu Hi (1130-1200). He was of those Confucians who notably upheld fealty to government, and this explains why the Shogunate favored his writ-

ings on the Canon. A distinction with Chu was that he was very explicit about the riddle of the universe, explaining that in nature there existed two forces, an active and a passive, which united. whence out of chaos was born cosmos. Of the Shushi school were Seikwa and Rasan, the latter being a doubly significant figure, in that he wrote a book about Christianity. He assaulted it fiercely, quite misunderstanding it, his main trouble being the first text in the Book of Genesis! Another group of Japanese Confucians are known as the Classicists, concerned as they were more with the Canon itself than with the interminable Chinese essays on it. and of this group was Yamaga Soko The Ovomei was the designation of still another band, the name being that whereby the Japanese spoke of the Chinese writer, Wang Yang Ming (1472-1528). With his writings as their authority, they put a democratic construction on the Confucian Canon. Of the Ovomei set was Kumazawa Banzan (1619-1691), who declaimed noisily against the nobles being allowed to maintain armed retainers, who did no work. An Oyomei man was Okumiya Zosai (1811-1876), who had the boldness to express something of friendship towards Christianity. Nor did the democrats prove themselves a clawless dragon, for among them was Saigo Takamori (1827-1877), who played a leading part in subverting the Shogunal rule in 1868. And this event, being followed by the complete opening of Japan to Occidentals, soon brought the books of Western thinkers into the country.

At first the Japanese philosophers studied their Confucian Canon exclusively in the Chinese original. The thing was read aloud at the Seido, the purport of page after page being told to the audience. It was through his precocity in learning Chinese that Hayashi Rasan first elicited his fame. And it was not till the nineteenth century that the sacred Chinese volumes were printed in Japanese. If the Confucians of Nippon are deeply memorable, as symbols of the tense intellectual vitality of their time, perhaps the prime interest which attaches to Japanese Confucianism, is that the faith helped a brilliant legislator to serve his country. It assisted him in forming, after a time of chaos, a government which had sound stability for close on three hundred years. Many centuries will elapse ere yet the name of Iyeyasu shall have passed from the cognizance of some among those

"Who bear the burden of the pride of thought."

EMPIRICISM AND PHILOSOPHIC METHOD PROFESSOR DEWEY'S VIEWS

BY VICTOR S. YARROS

OME two or three years ago, in a stimulating volume of essays on Critical Realism, one of the more polemical contributors to the symposium attacked the philosophy of Prof. John Dewey and pointed out that one could not determine whether that eminent Pragmatist was an idealist or realist. The critic added that Professor Dewey's appeal to "experience" was of little significance, since "only God knew what the Pragmatists meant by experience."

It must be admitted that the impartial bystander found considerable point or force in those complaints. Professor Dewey had not up to that time made sufficiently clear what his full definition of experience was, nor what his neutrality toward the belligerents in the renewed warfare between neo-idealism and neo-realism implied, or how it was justified.

In the more elaborate and solid series of lectures on philosophy, entitled "Experience and Nature," recently given by Professor Dewey on the Paul Carus Foundation, however, legitimate doubts are set at rest, questions of acute critics indirectly but satisfactorily answered, and ambiguities cleared up. Professor Dewey, unfortunately, is at times unnecessarily involved and heavy; the lighter touch and the simpler style of his Reconstruction in Philosophy or his Human Nature and Conduct would have made his new and important work profitable to thousands of lay students of contemporary thought whom highly technical language may intimidate and discourage. But the attentive and earnest reader will find the volume rich, pregnant, deep and well worthy of the intellectual effort it requires.

The present writer intends to devote two or three short papers to Professor Dewey's mature exposition of his philosophy and to

make certain comments upon some of his propositions or conclusions. The first lecture, devoted to the question of method in a philosophy which claims to be rational and scientific, is so fundamental and so important that it will be treated here as an independent essay.

Professor Dewey is a frank champion of the empirical method. Not because he finds it to be superior to any other, but because, as he has little difficulty in showing, there really is no other method available to philosophy. Those schools which reject empiricism reason in a vacuum, as it were; they arrive nowhere and do not even make a start. The schools which half-heartedly or inconsistently adopt empiricism become sterile and rhetorical at the precise point at which empiricism is dropped or ignored.

The empirical method, says Professor Dewey, involves a conscious, bold repudiation of two bad traditions in philosophy. In the first place, the empiricist appeals to universal human experience, and does not claim "a private access to truth." Indeed, "the final issue of empirical method," writes Professor Dewey, "is whether the guide and standard of belief and conduct lies within or without the shareable situation of life." The mystic has his claims, but he offers no guide or standard; he offers nothing "shareable," and no tests can be applied to exclusive "psychical" possessions. The empiricist works in the open with the materials supplied by life and by verifiable facts. He does not turn his back on common sense; he seeks to enrich, organize and aid common sense.

In the second place, the empiricist scorns "loaded dice." By this Professor Dewey means that the empiricist does not beg the question, does not frame premises which assume the very thing that is to be proved; he does not flout or violate the requirements of logical procedure; he does not ask you to embark with him on a journey with a set of alleged ultimates, or alleged irreducible elements, which condemn the whole discussion to futile word-play.

The empiricist, then, builds upon experience. But what does the term "experience" mean in philosophy? Professor Dewey's answer is startling enough. He is content to accept the definition of the average practical man. Why make a mystery of a perfectly plain and intelligible affair? The trouble with too many philosophers has been precisely this—that they have indulged in unnecessary mystification and either laboriously solved unreal problems, problems no one ever encounters in science or in life, or else have offered purely verbal solutions of very real and disturbing problems. Now, there is nothing about the term experience that troubles the reason-

able layman. He knows what he means by such phrases as business experience, legal experience, esthetic experience, and he expects you to know it. Experience means working, trading, dealing with men and things, suffering, enjoying, reading, thinking, dreaming, waking, and the like. "Experience," in Professor Dewey's words, "is political, religious, industrial, intellectual, esthetic, mine, yours." It is not limited to what the Gradgrinds call "hard facts"; ideas, fancies, impulses resisted, impulses yielded to, fears felt and overcome, inward struggles, self-reproaches, all these things are as *real* as houses, bridges, food to be eaten, clothes to be worn, money to spend or to save

The difference between the common sense notion of experience and that of the scientific, philosophic thinker is a difference of degree. The parrower the life, the more elementary the education. the smaller is the quantity of one's experience. We all know that persons who study, read, travel, look through telescopes and microscopes, visit museums and institutes and zoological gardens, have more experience than the uncultured, ignorant, provincial persons possess. We all know that where the ordinary man sees a round and smooth table, and asserts rightly that he sees such a table, the man of science is aware that the same table is neither round nor smooth. But we have no quarrel with the layman; the scientist merely point out that, if you look at the table through certain spectacles, you will realize that it is not really round or smooth. And the layman will be convinced by the demonstration and be grateful for it. He will observe, without knowing that he is pragmatic, that, to all intents and purposes, and functionally speaking, the table was round and smooth, but that indubitably from the viewpoint of science, it was deficient in both of those qualities. The man's experience will have been enlarged.

Professor Dewey insists that philosophy loses nothing and gains everything by taking experience for its foundation and guidance. Of course, as he stops to explain, no science, and therefore, no philosophy, can take all experience for its province. Experience is all-inclusive; the earth, the sun, the moon, the stars, the planets are severally parts of our experience. So is the past of our planet and of organic and other life. Science selects, as art does, each science deals with a section of the field of experience and seeks to illuminate it. Philosophy cannot hope to escape the limitations of human thought or of science, and, therefore, must select, classify, exclude and interpret. Well, select what; execlude what; interpret what?

This question is pertinent and even crucial. Professor Dewey does not blink it or underestimate its significance. His answer is significant and big with consequences. Here it is, in his own words: "... In some sense, all philosophy is a branch of morals.

"Our constant and inalienable concern is with good and bad, prosperity and failure, and hence with choice. We are constructed to think in terms of value, of bearing upon welfare. The ideal of welfare varies, but the influence in it is pervasive and inescapable. In a vital, though not the conventional, sense, all men think with a moral bias and concern, the 'immoral' man as truly as the righteous man; wicked and just men being characterized by bents toward different kind of things regarded as good."

Professor Dewey's meaning is clear—philosophy seeks to give men understanding and wisdom in order to enable them to choose that which is ethically good, lovely and desirable—that which conduces to abundant life and to the greatest possible rational happiness. But philosophy does not know what is good when it sets out on its quest: it should beware of its bias and refrain from making "eulogistic predicates" or tacit estimates. It should not use such terms as "permanence, real essence, totality, order, unity" to describe the foundations of a given system; these terms, and others like them, are terms of self-praise. The philosopher may have unity, permanence, order, etc., for his objectives, but he must not claim them as implicit in his postulates, for in that case he has nothing left to demonstrate and, besides, he naively repudiates the only rational method of demonstration. The bias in the philosopher's mind is inevitable but he must be on his guard against it. Professor Dewey has no use for any "will-to-believe" in philosophy.

But Mr. Dewey has still another answer to the objection that, to take all experience for one's province, is to suffer from an embarrassment of riches, to lack standards, to lose one's self in a jungle of disconnected facts, perceptions and emotions. This other answer is somewhat difficult to grasp, though the thought, once grasped, is clear and sound. It is, briefly, this—that the term experience as used by empirical philosophy designates not alone stuff, subject-matter, to sum total of things experienced, but also a method. To think constantly of experience, in the human sense, is to escape all sorts of snares. Thus it prevents the empirical philosopher from accepting as primitive, original, simple distinctions that are the result of reflection, study and experience. It also warns one against the confusion between characteristics of objects viewed in a certain

light, or organized in a certain way, and the so-called "reality" or essence of the object, no matter what its form or mode of organization. Finally, it tells us that we must begin with things in their bewildering entanglements rather than with arbitrary simplifications. To realize the value of the method of experience is to understand that there is no such a thing as a "problem of knowledge" in a peculiar sense. Knowledge itself is and must be experienced. On this point, Professor Dewey must be quoted lengthily. He writes:

"A problem of knowledge in general is, to speak brutally, nonsense. For knowledge itself is one of the things we empirically have. While skepticism may be in place at any time about any specific intellectual belief and conclusion, in order to keep us on the alert, to keep us inquiring and curious, skepticism as to the things which we have and are is impossible. No one ever frankly engaged in it. Its pretentiousness is concealed, however, by the failure to distinguish between objects of knowledge where doubt is legitimate, since they are matters of classification and interpretation, of theory, and things which are directly had.

"A man may doubt whether he has measles, because measles is an intellectual term, a classification; but he cannot doubt what he empirically has—not, as has so often been asserted, because he has an immediately certain knowledge of it, but because it is not a matter of knowledge at all; not an intellectual affair, not an affair of truth or falsity, certitude or doubt, but one of existence."

There must be *something*, in other words, present in experience, something that may be recalled later, pointed to in reflection, acted upon, before there can be subject-matter or objective for knowledge. A may says to himself or to a friend: "There is something the matter with me." Here is the primary and immediate stuff. Something is *given*, and it is irreducible. The man may not know what his ailment is; he may not know its name, its cause or its course and proper treatment. Those things science must tell him, if it can, or philosophy, if it can. But to deny the given something is to commit intellectual suicide.

And here we strike the question Professor Dewey's critics have asked concerning his position in the old-but-ever-new controversy between idealism and realism—namely, whether he is a neo-idealist or a neo-realist. His answer is definite and lucid. The empirical method and the empirical philosophy are realistic, but in the unsophisticated sense of that term, the term of common sense. Says Professor Dewey:

"Things are first acted toward, suffered; and it is for the things themselves, as they are followed up, to tell, by their own traits, whether they are subjective or objective. . . . Practically, the distinction drawn between subjective and objective, personal and in personal, is of immense importance, but for theory it falls within a continuous world of events. . . . Political institutions, the household arts, technologies, embodied objective events long before science and philosophy arose. Political experience deals with barriers, mountains, rivers, seas, forests and plains. Men fight for these things; for them they exercise jurisdiction, fight and rebel. Being and having, exercising and suffering such things as these exist in the open and public world."

That "open and public world" is *not* a dream, and no rational person really thinks it is. No one certainly is a skeptic for any purpose other than so-called philosophical, and Professor Dewey sees no reason or rhyme in isolating philosophy and putting before it problems that have no real meaning, no relation to behavior, no possibility of scientific or practical treatment.

Let it be understood, however, that Professor Dewey is not bound to contend that the question whether the world we know is a reality or an illusion, a fact or an idea, is not a legitimate one for any set of thinkers to take up and endeavor to solve. What he is concerned to emphasize and establish is the proposition that the controversy between the realists and idealists is not a philosophic controversy. Just as the politician, the moralist, the educator, the soldier, the engineer, the physician, the artist ignore that controversy and rightly ignore it, so should the scientific and the empirical philosopher serenely ignore it. His business is with the world in which we all live, suffer, rejoice, build, destroy, co-operate and quarrel. What would the advocate of prison reform, or the strenuous opponent of capital punishment say to the metaphysician or philosopher who should ridicule his efforts, his sacrifices, his whole appeal, on the ground that the world was, or might be, nothing but an illusion, a fancy, an idea in his brain? What would a nation attacked by an enemy say to the philosopher who should urge it to remain passive and calm on the ground that the enemy, the machine guns, the bombing planes, the battleships, the poison gas are only "ideas"?

Well, Professor Dewey maintains that the controversy between idealism and realism is about as empty, irrelevant and absurd to the true philosopher as it is to the statesman, ethical leader, reformer, lawmaker, or lover of beauty. The issues of philosophy are either significant and vital, or else they are not issues at all.

One can imagine Professor Dewey saying to the idealists, or to the sophisticated realists, for that matter: "I might agree with you as to the ultimate issues, as you are pleased to call them, but pray do not drag any such issues into the discussion of the methods, objectives and mission of philosophy. As philosophers we take certain things as given, or for granted, and existence is one of those things. Experience, not in any occult, peculiar, "subjective" sense, but in the ordinary sense is another of the given things. We face life as it is, with its terrible problems. We must help the men and women to solve those problems. If we cannot offer any help, we are bankrupt. If we cannot expect ever to be of use to struggling, groping humanity, then we are worse than bankrupt, for there is no hope of future solvency. We had better shut up shop and retire from a business so flat, unprofitable and futile.

We have summarized and attempted to interpret Professor Dewey's introductory lecture. His position being clear and his critics being silent, at least for the moment, we shall next ask what Professor Dewey has to say in the volume under consideration of the essential business of philosophy, and of the metes and bounds of the philosophic province. Here, too, there are objectors and critics to deal with. The present writer has already shown in a paper in *The Open Court* (Oct., 1923) that he does not regard Professor Dewey's definition and delimitation of philosophy as quite satisfactory. We must see, however, what light the new and serious work throws on this initial and pivotal question. Method is indeed important to science, to art and to philosophy, but method implies a problem conceived and formulated, a goal or objective.

RELIGION AND MORALITY

BY EDWARD BRUCE HILL

RELIGIO, the word from which the modern word "religion" comes, means, as is generally known, respect for the gods. The religious man, in the classical sense, was he who showed them respect and reverence.

The word has not greatly changed in passing over into modern speech, in meaning any more than in form. The religious man is still he who respects and loves God, who seeks to please Him and takes pleasure, or, at any rate is scrupulous, in His worship, avoids impiety and profanity, is reverent, and observes carefully all such rules and ceremonies as in whatever form he has adopted them, show his submission to and sense of dependence on Him.

Owing to our changed conception of God, by which He has become a morally and ethically good Being, we expect now other things also from a religious man. We expect him to be ethically good, because we consider the service of God to include this, and we look to see in one who, ceremonially and by formal acts, shows himself religious, conduct which ethically is such as we should consider in accordance with morality, which we have come to consider the will of God.

But this ethical conduct is still not a part of religion, or is so only in a secondary or derivative way. Religion, in itself, is concerned only with pleasing God. He may be pleased by certain ceremonial observances, he may be pleased by right conduct, but from the standpoint of religion both things belong to the same class. With right conduct, as right conduct, religion has nothing to do. It is only when right conduct is considered as an obedience to God's will and as an action taken with a view to pleasing Him, that it comes within the scope of religion at all. Whenever gods have been (as has often been the case) without any particular moral

character, religion has not concerned itself with conduct in an ethical sense. That has been left in the domain of philosophy and morals; a domain, under such circumstances, wholly foreign to that of religion.

Morality on the other hand has no natural relation to God. It involves only the relation between men, and the right conduct of men to each other. Acts in the highest degree reprehensible from the religious point of view may be indifferent, or even laudable. morally, while acts which violate every principle of morality may be indifferent or even meritorious when viewed from the standpoint of religion. Thus atheism or blasphemy, for example, are indifferent morally, though among the worst of religious offences, while such acts as the massacres described in the Book of Joshua, while horrifying to the moral sense are, religiously, highly laudable.

The essence of religion is to please God, whatever be the conduct which will have that result. The essence of morality is to act ethically. If the two principles agree in prescribing or approving certain conduct, the agreement is purely fortuitous. Religion cares nothing for the ethical character of the act, so long as it will be pleasing to God; morality cares nothing for the will of God with respect to it, so long as it is ethically right.

Ethics or morality has always labored under one great difficulty. the lack of a sanction. Admitting that certain conduct is morally right, and admitting, also, that certain other conduct is morally wrong, still why should the former be followed and the latter avoided? Many attempts have been made to answer this question and all have failed. The most generally received answer at the present time is that God commands ethical conduct and will punish unethical conduct. That does, indeed, afford the needed sanction, but it changes the nature of morality and makes it only a subdivision of religion. We are to do right, not because it is right, but because God commands it. Morally right conduct, then, is a phase of respect for God, and stands with attendance at public worship. Sunday observance, or any other like formal acts.

Without any sanction and without any answer to the question stated in the last paragraph, morality has more than held its own. The sense of right and wrong, however arising, and upon whatever it may be based, with or without religious belief and regardless of the particular nature of that religious belief, where any is to be found, has in general been men's guide and tends constantly to become so to a greater degree. Imperfect as it is, has been and

must be, it is nevertheless based upon a feeling of obligation to the rest of mankind, and of distinction between right and wrong conduct which there is a duty to observe. No doubt it is undergoing constant modification as to its classification of certain conduct or its judgment of certain acts. Dependent for its being upon enlightenment and social development, and varying as these vary, it keeps pace, for the mass of the community, with these, and represents at any given time, inevitably, the state of general feeling.

This sense of right and wrong is the most valuable social asset of the community. It can be satisfied, in each individual, only by conduct which is in accord with the standards of the time. It may be said, in a sense, to need no sanction, for it imposes itself upon the individual and its elevation and force increase with his enlightenment. Well-founded or not, subject to a theoretically adequate sanction or not, it is powerful and effective and is the only efficient means by which social conditions are maintained in a tolerable state or are improved. Upon it all teachers of higher morality must rest, and by and through it alone can progress in the direction of a better life be made. Without minute examinations as to its source or validity, it must be taken into account as the one vital force upon which we can rely for the advancement of the race.

That we may utilize this force to the utmost we must strengthen it as far as possible. We must make it felt by men's consciences to the fullest extent. We must do all that in us lies to make it the sole criterion of conduct, to enlighten it by the highest moral ideas, and to set every possible obstacle in the way of those evasions of the obligations which it imposes to which men are so prone. Its power is already so great that few men run openly counter to it. As a rule men will not do what they acknowledge to themselves to be wrong. They must find some way of justifying to themselves their intentional act before they can do it. Enlightenment makes the justification of a wrong act more difficult, but on the other hand there is a more dangerous and more subtle influence which undermines the whole structure of the rule of conduct established by the sense of right. This influence comes from religion.

As has been said before, religion, by setting up for morality a sanction in the will of God, instead of strengthening it as might, a priori, have been supposed, has changed its nature and reduced its importance. Morally right conduct, since it has been based upon the will of God, becomes important only as an act which will please Him. While no doubt it is taken that God desires right conduct.

yet if He could conceivably desire wrong conduct, then the obligation which exists to do right would become, with equal force, an obligation to do wrong. That is, the quality of the act has ceased to be important, but only the attitude of God toward it has importance.

So, too, the value and force of the sense of right and wrong is thus destroyed, and morally right conduct falls into the same class with acts morally indifferent, but which are supposed to please God. This is one of the most serious and harmful effects of the religious view. What conduct is in accord with the moral standards of the time is a matter comparatively easy of determination. Every man carries in himself the touchstone of his action, nor is there usually any considerable divergence of views upon this subject in the community. But what conduct will please God is a very different matter, and one far more difficult to decide. Without revelation it would be impossible and with revelation the door is opened so wide, the interpretations of texts and the claims of those who assert their authority to speak in His name afford so much room for dispute and uncertainty, that no satisfactory conclusion acceptable to all, or capable of anything resembling a demonstration, is possible. When once the principle that God requires or is pleased with any acts other than those which morality dictates has been admitted, all standards of conduct are gone.

The notion that God is pleased with or requires acts as to which morality is silent, or which it condemns, is of course far more ancient than any association of morality with His will or service. So long as early anthropomorphism lasted, and the gods were only greater or more powerful lords or kings, capable of love or hate, having likes and dislikes similar to those of men, exacting tribute. obedience and respect exactly as the local earthly ruler did, no such association was possible. Of course, as the king, in general, punished, and repressed crime, enforced order and protected ordinary legal rights, God would probably do the same, but regard to all these things were not matters of service to Him. By refraining from crime, disorder and wronging others a man would escape punishment, but would commend himself to God only negatively. To win His favor, to be "a man after God's own heart" (in the phrase of the Old Testament) he must be assiduous in His worship, liberal in his sacrifices, punctual in all of the ceremonial observances which marked his respect and reverence for Him. To one who sedulously did all this, much would be pardoned which otherwise would have

brought punishment. Upon one who neglected any one of them, no matter how moral his conduct, punishment was sure to fall.

A striking and familiar instance which illustrates this is to be seen in the cases of David and Uzzah. The former's life was certainly marked by a course of conduct in which morality had no part. There are few offences which he did not commit, but he was devoted in his service of his God, and was beloved and blessed by Him accordingly. Even when he had committed an offence so great as to make some punishment unavoidable, Nathan announced that punishment to be only that he would not be permitted to build the temple for his God which he had intended. Uzzah committed (and that quite unintentionally) an act which the same God construed into one of disrespect. He was punished at once with death. Of course, profane history is full of such instances, but no parallel could illustrate better than that of David and Uzzah the wholly unimportant character attributed to moral conduct, and the vast importance given to religious conduct in early times.

So long, however, as morality stood by itself, it could hold its own. To be moral was never unpleasing to the gods (except in certain rare cases where they wanted a man to act wrongfully, to give an excuse for punishing him) and so morality occupied a field by itself where it developed fully under the care of philosophers and moral teachers, who did not seek to meddle with religious affairs.

But when the time came when God was regarded as primarily a moral being, when morally right conduct was supposed to be as necessary, or almost as necessary to please Him as religious conduct, and when the basis of morality was placed in the will of God, the downfall of morality came. No longer something by itself, of eternal and independent validity and obligation, but only a means of pleasing God, like the offering of sacrifices, the building of a temple or a church or attendance at public worship, it became uncertain, shifting, and of doubtful obligation.

So long as it stood by itself the answer to the question why a man should do or refrain from a given act was simple; it was because he felt it to be right or wrong. When the answer was because God willed it or forbade it, no man could decide for himself. It might be morally right, but if God forbade it it must not be done: it might be morally wrong, but if God commanded it it must be done. Had not God commanded the sacrifice of Isaac, even though he stayed it finally as a reward for Abraham's obedience? Had He not accepted the sacrifice of Jepthah's daughter? Had He not com-

manded the slaughter of the Canaanites, approved the murder of Sisera, and in innumerable other cases commanded or blessed acts revolting to the moral sense? It might be, in a given case, His will that the prescriptions of morality should be disregarded and until His will was known the conduct which the inner sense of right and wrong most strongly approved might be precisely that which must not be followed. If that will could be known it must be followed, and however repugnant to man's natural sense of right and wrong it might be, it was the infallible declaration of what he must do

Thus, in making morality spring from and be dependent upon the will of God, any true criterion became impossible. There was no longer any right or wrong. The will of God had swallowed them up. Ordinarily, no doubt, men might take their inner feeling as itself an indication of God's will, but it was a feeble and faulty indication, always subject to be over-ridden by a more authoritative declaration. The conflict between religion and morality was thus established.

For many centuries there was no doubt as to the victor in that conflict. Religion won. Prophets, priests, and even at a later time, ministers, drove unwilling sovereigns and people to acts repugnant to every feeling of morality and humanity by proclaiming such acts to be the will of God. Through all the long and dreadful series of religious persecutions, from the slaughter of the priests of Baal to the hanging of the Quakers in New England, the supposed will of God overrode the moral law.

Pagan nations were less subject to the evil. Their gods were not necessarily perfect, nor did morality, in their view, depend solely upon the will of the gods. The gods might force their will on men, whether right or wrong, but they could not change the quality of their acts, and men might sometimes be laudable for braving the anger of the gods rather than do wrong. For a Christian such a thing was unthinkable. Right, in their view, was what God commanded, wrong was what he forbade, and he who acted contrary to God's will necessarily, by that fact, did wrong.

Indeed it has been, and even now is, common to hear morality condemned by the clergy. Men who lead moral lives without having any religious belief are denounced because a morality which has not its source in a desire to obey God is considered of no value in itself, and of a nature to lead men astray. No doubt this attitude is due, in part, to the doctrine of justification by faith, which makes

morally right conduct, in itself, unimportant. This attitude towards morally right conduct is less prevalent than it was once. In the eighteenth century the deists and sceptics were almost as much denounced for their moral lives as for their doctrines. We have passed that stage but, in some places the remains of the old attitude are to be found.

In general, at the present day however, morality has regained much of its ascendancy. The clergy are not now regarded as oracles of God, and their utterances do not rank as revelations of His will. While, therefore, the old vicious theory still persists, it has lost in this respect the power to do harm.

Only when some misled fanatic succeeds in persuading a relatively small band of followers that God speaks through his mouth do we see morality succumb to religion. Mankind in general, while still considering right and wrong as consisting solely in obedience or disobedience to the will of God, have come to regard their moral sense as the only declaration of that will, and so to act, in general, as if no such doctrine had been adopted.

We have therefore again reached a satisfactory condition, so far as our moral judgments are concerned. We are not now in any great danger of thinking conduct right which our moral sense tells us to be wrong because we believe that we have some revelation of God's will to the contrary. But while, on this part of the field, morality has been victorious over religion, in another quarter the case is not the same.

As has been said, the essence of morality is to do right, while the essence of religion is to please God. If we have largely escaped from the danger of thinking that morally wrong conduct can ever please God, we have not escaped from the worse, because more prevalent and far-reaching evil, of thinking that God can be pleased by other things as well. While morality has pretty well freed itself from the deadly clutch in which religion held it, it must still face it as an antagenist conducting the battle in another way.

Religion primarily consisted in worship, sacrifice, the paying of honor to God by external acts, the public and private observance of the formal prescriptions of that particular form of faith which the particular person professed. In this form it still persists, not in its pristine vigor, not holding such a sway as once it did over so large a portion of mankind, but nevertheless still of a very considerable importance.

That "no man liveth and sinneth not" is so obvious as to be axiomatic, and hence he who would please God must frequently fail. Accepting morality as the will of God, in the form in which man's consciousness declares it, yet no one can perfectly comply with that will by leading a morally perfect life. All must, to a greater or less degree, fail to comply with the highest moral standards, and thus fail to comply fully with the will of God. If that were all, man could only bend his efforts to approaching as near as possible to that idea! moral perfection which he cannot actually attain. Only so could he hope effectually to please God. As his whole fate and fortune in this world and the next depend upon his pleasing God (leaving aside, for the present, the doctrine of justification by faith) he would have the strongest possible incentive to a right life. God may be expected to recognize that human weakness cannot attain perfection, and to accept an earnest, sincere and constant effort as the best offering which can be made. Were right living the only way of pleasing God, this would be the strongest of motives for right living, and the most powerful support of morality.

But unfortunately religion appears to destroy, in great measure. all the beneficial effects of such a belief. Religion presents to man another method of pleasing God, far easier and less repugnant to his tendencies. It assures him that right living is only one of the ways in which God may be pleased, and perhaps not the most effectual. Indeed, religion depends for its very existence upon the position that right living, of itself, cannot suffice; that worship, the observance of Sunday, taking part in organized religious observances contributing to the support of organized religion, study of the Bible, and the intellectual acceptance of a great number of statements with reference to the nature of God, the origin, nature and destiny of man, and a host of historical occurrences are the truly vital things, without which mere morality is wholly unavailing. Even when, as is sometimes the case, morality is given an equal place with these other things, it is set no higher, and the utmost that religion will concede is that all these things are equally important.

It could not be otherwise. If morally right living were sufficient in itself, it would not matter whether the reason for its sufficiency were that this alone would please God, or something inherent in morality itself. In either case religion would have no reason for existing. Observances and acts of worship and homage which cannot have an effect become unimportant. Whatever a man's purpose or motive, if an earnest effort to lead a morally right life will suf-

fice for his salvation, morality is all that he needs. This host of morally indifferent acts and beliefs cannot aid him, nor matter to him. These things, however, are of the very substance of religion, and if they were surrendered, or their unimportance admitted, religion would have no reason to exist.

But the maintenance of the importance of these religious matters is harmful in the highest degree to morality. To lead a morally right life is hard, however easy it may be to discuss what is necessary to that end. It requires the subduing or restraining of natural passions and tendencies, the surrender of desires, the curbing of appetites, renunciation, self-abnegation, self-sacrifice. It is needless to point out what self-subjugation and self-control demands. We are all conscious of it.

To attend public worship, however, to join a church, to repeat a creed, to pay out money for pew-rent or as a contribution, to accept dogmas, to observe Sunday to comply with any and all ordinances of religion, is easy. It requires little thought and little self-denial, and it imposes no other burden than the performance of the physical act.

When, therefore, religion offers these two ways of pleasing God. and puts them on a par if it does not set a higher value upon the morally indifferent acts, it deals a deadly blow at morality. That man should choose the more difficult of two courses equally open to him would be impossible. It would not be even rational. When he is told that to follow the more difficult course will be of no avail unless he also follows the other, there can be no question of what he will do.

It is true that, with the return to morality which has been noted above, it has also been put on a parity, generally speaking, with the dogmas and observances of religion, but this point is largely illusory. In some part of his duties a man must fail. He cannot wholly comply with the will of God. But he can easily comply with those things announced by his religion as God's will which have no moral character, and the tendency is irresistible to make formal observances atone for moral delinquencies. It is and always has been a refuge for anyone who is unwilling to comply with the moral law that he can please God by these formal matters, and to make his strictness in that respect offset his looseness in the other.

In fact, this result has followed, and it has often been a source of regret to persons interested in the churches, as well as a ground of criticism to those not so interested, that many persons who are strict in the observance of what are called, and properly called, their "religious duties," live lives which by no means show a high regard for morality, using the word in its broad sense. It has been a frequent source of criticism also by Protestants of the Catholic Church, that the lower classes in Catholic countries, while very devout, do not show a high morality (and sometimes show hardly any at all) in their lives. Accusations of hypocrisy, too, are often made against men who, while religious, are in their daily life unscruplous if not dishouest, and loose if not dissolute.

But the fact is that these criticisms and accusations are unfounded, in the sense in which they are meant, as much as the charges of "Formalism" lavished upon the Church of England in the seventeenth century. No particular church is open to criticism more than another. The evil is inherent. Once let a man think that by any performance, no matter what, of any morally indifferent act, no matter what, he can please or propitiate God, or to any degree whatever make up for moral delinquencies, and he will avail himself of the opportunity. That is the fundamental principle upon which all churches are agreed; that acts of piety or religion are pleasing to God in the same way that a morally right life is pleasing, and while they differ as to the particular acts which they consider pleasing to God, those differences are not essential. The only important thing is that some such acts are meritorious in the sight of God.

Nor are those people hypocrites whose life is not ethical, but who are strict in their religious observances. That a libertine should be honest, or that a dishonest man should be continent, shows no hypocrisy. As little does it show hypocrisy that an unscruplous man should be religious, unless it is clear that he is so only for the sake of deceiving the public. A man may be honestly pious, honestly religious, whose life is far from what a high moral sense would require. He may, and religion encourages him to do so, truly believe that by his sincere devotion he is atoning for his moral lapses. Indeed, if he accept the doctrine of justification by faith and reason logically, he could reach no other conclusion than that questions of morality were wholly unimportant, if only he accept sincerely that belief. But without proceeding in so severely logical a way, there is no reason why he should not, and in many cases he undoubtedly does, believe that his strictness in religion makes up for his lack of strictness in his moral duties.

Thus we see that religion is the foe of morality, and this hostility is inevitable and irremediable. They are at war in their principles.

Morality only seeks morally right conduct. Religion only seeks respect, reverence, and obedience to God. While religion makes a morally right life one form of obedience to God, it also defines and enforces other forms, which it makes of equal, if not greater, importance. It offers him who finds obedience in one form too difficult. a choice of other ways, far easier and equally efficient. It condemns the good man who does not believe, quite as much as the bad man who does sincerely believe and is faithful to his religious duties. Therefore it depresses the value of morality and offers a more easily earned salvation. Morality can offer nothing to offset this. Salvation is not her business, and of God she knows nothing. She only knows that one thing is right and another is wrong, that the one should be followed and the other shunned. Had she the field to herself she would, no doubt, overcome the world; but if she did. religion must perish and, while losing ground, that religion cannot vet accept.

So the contest must go on. Man wants an easier way than that of right living, and does not easily give up religion which offers it, but we must all hope for a time when he will rise above such things. Religion weakens his moral fibre, but we have made progress since the time of Louis XI, and it may be that to recognize the antagonism will be an aid in escaping from its consequences.

THE FUNCTION OF MONEY

BY T. B. STORK

T is always difficult to think clearly of the function of money in the industrial world because of its dual character. Money plays two equally important roles: first it registers the exchange value of all goods, not be it observed, the intrinsic value, with that it has nought to do. It simply fixes the rate at which each article of trade exchanges with every other article. It is the medium of exchange. For of course all transactions of sale or purchase of goods are in reality exchanges of one kind of goods for another. No one wants money for its own sake but only for its command of goods, and every transaction of sale if traced to its source will be found to be in reality an exchange of goods. With intrinsic value money does not deal, no matter what the cost of making a given goods may be. money only measures the rate of its exchange with other goods. that is, in common parlance, its value, what it is worth, that is what quantity of other goods can be had for it. Even when a seller of goods has no other goods in immediate contemplation, where he takes the money of the sale and keeps it in his purse or his bank, there is always in the back of his mind the command of other goods which the money gives him and the future possibility of completing the exchange begun by the sale and which at some time he expects to carry out when his needs require it or his judgment tells him there is advantage in so doing.

With this first use of money, however, as a simple register of exchangeable values of all goods, there is combined, inextricably entangled, for the confusion of our thinking, the second and equally important function, which is its power of purchase over all goods, its compulsory market. Money in this aspect is to all intents and purposes a commodity, as much a commodity as bread or iron, but differing from all other commodities in this very essential and vital

feature that unlike other commodities it is under no necessity of finding a purchaser for itself, i. e., of finding other goods which somebody is willing to exchange for it. Money has always a purchaser, it is the universal commodity in that it represents all commodities, and the demand for money is the aggregate demand for all goods concentrated in it as the concrete representative of all goods. It gathers to itself the entire demand of the community for goods. Representing as it does all goods its possessor is assured that unlike the possessor of ordinary commodities he need never seek a purchaser, he can always exchange his commodity for any other at his pleasure, whereas the owner of other commodities must seek some one who desires his particular commodity and until he finds such a one must go without an exchange or sale.

It is here that we come upon the difficulties of our subject. Money in one sense is a pure abstraction, an idea, a commercial barometer, an artificial invention for the convenience of commerce. a mere symbol to register the ratio of exchange of goods or services with each other. But in another sense it is something concrete. material as bread or iron themselves. It had of necessity to be given a visible tangible form in order that it could efficiently serve its purpose as a medium of the exchange of goods and services.

Men had to have something that could be passed from hand to hand, that could be handled like any other commodity. Various, indeed, have been the material representatives of money, shells, skins. tobacco and finally in the civilized world gold and silver with paper as the convenient certificate of ownership in them. And so money became a tangible thing, a commodity to all intents and purposes with, however, these great advantages just pointed out over all other commodities in that it was universally exchangeable for everything or anything at any time at the pleasure of its possessor.

At one time it is only a register of value, at another it is a commodity, not infrequently—indeed oftener than not—it is both at the same time, and so subtly are the two functions blended that it is almost impossible to separate them. It is this Jekyl and Hyde character that makes the discussion difficult and obscure. For example money—or suppose we say gold as the most generally accepted material representative of it—gold registers the exchangeable value of all goods, but observe it registers it in terms of itself, such and such a quantity of gold for such and such a quantity of goods. Thus it has itself become a commodity measured with or against goods, and as such is subject to fluctuation in price like all other commodi-

ties, that is the amount of goods it can take at a given time varies. It is often said under the circumstances that goods have risen or fallen in price, that is the value of goods has fluctuated, but it is quite as legitimate to say that gold has risen or fallen in comparison with goods; for its exchangeable value consists in the amount of goods it can be exchanged for; if this amount increases or diminishes the value of gold varies correspondingly.

It is this commodity feature of money's functions that forbids any fixed standard of exchangeable values. If we only registered values in some commercial barometer, some ideal abstract symbol, that symbol might be regarded as fixed, but the moment we are under the necessity of treating our symbol as a material thing such as a commodity we find that as such it is subject to fluctuation of other commodities

Theoretically, the measure of exchangeable values ought itself to be free of all fluctuations, it should be the unvarying vardstick by which all else was measured. Many suggestions have been made to this end, one being a unit based on the value of selected articles of commerce taken together and averaged in some way. It is not necessary to go into details, but only to remark that a little reflection would have disclosed the truth that a fixed unvarying standard expressed in a concrete commodity is an impossibility, that everything is relative, no one thing can be fixed independently of every other, even the vardstick as Einstein has shown is not an absolutely fixed standard of length. To seek an unchanging measure of value expressed in a concrete something either material or artificial is as fantastic as to seek the philosopher's stone or the elixir of life. It is to seek something which shall always have the same value in exchange with all other commodities. Now value in exchange is only another name for the demand of people for that particular article, and so we find that what we are really seeking is some one thing or combination of things that all people shall always want with the same degree of intensity, i. e., will always be willing to give the same quantity of other things for it. If it were a fixed standard of intrinsic value that was sought possibly it might be found in the wheat which although buried in the tombs of the Pharaohs for thousands of years would. I suppose, have as much intrinsic value, would support as much human life today as when first reaped and gathered.

It is a state of mind, a psychological condition that we deal with. It has no effect on intrinsic values but has all to do with exchange values. It is not what things are worth but what men think they are worth that matters. Every day the stock exchange gives us instances of this. Its values fluctuate from day to day under the stress of the hopes and fears of the dealers. Fashion, odd fancies that seize men's minds, come into play in articles perhaps less important but illustrating the psychological element in all exchange values. A craze for old furniture, Adams, Sheraton, for rare postage stamps, autographs, or as in Holland for tulip bulbs, the "tulip mania" of the seventeenth century, are instances of how articles worth intrinsically very little rise to fabulous prices in the exchange values created solely by the excited fancies of the purchasers. These are to be sure extreme cases having little economic significance save as illustrating the effect of men's minds on values in the ordinary course of dealing in the market.

Of course, this is not true of primitive societies where each man works for himself alone and the intrinsic value is all that is considered, money not being necessary and exchange values having no place. But in society as now organized exchange values are the only values of any account and they depend on the demands of each and every member of the society for goods. A great quantity of goods or of money, demand being absent, are about as valuable as the clouds in a blue sky.

Thus it appears that even goods themselves have little value of and by themselves, they are not wealth except under certain conditions. In the societies with which money deals, wealth is by no means the simple agglomeration of material things, food, clothing, the necessities and conveniences of living, it is of course these, but it is much more for these things to be real wealth must be in certain relations with each other, with the wage-earner and the consumer. Wealth might be called a certain condition or relation of things with each other and with producers and consumers. Herbert Spencer has very acutely said of the human body that co-ordination of all its organs spell health and well being, a failure of co-ordination death. The like might well be said of the body industrial, its true wealth depends not simply on the presence of various material goods capable of satisfying wants but very largely on the proper and accurate co-ordination of all these things with each other and with the wants of the individuals constituting the society, in other words the complete co-ordination of wants and satisfactions, so that each shall meet and cancel each other. Without the material things. the instruments of satisfaction, there would be no wealth, but without the wants, the demands for these things, they would not be valuable, would not be wealth but an empty useless mass of matter.

Value exists in things when each man is giving his neighbor what he wants and receiving in return what he himself requires, or stated in terms of things, when every useful thing finds for itself a user, until it does that it is not useful, has no value. The ideal co-ordination being when the moment a useful thing is made there steps forward a user for it having in his hand something acceptable to give in exchange to its maker. Such a condition of perfect co-ordination is not practically attainable, but it is the ideal toward which industrial society must ever struggle.

Consider the reverse condition, the lack of co-ordination that occurs when a great mass of useful articles is stored up in warehouses or in shops and no one wants them, or wanting them, has nothing acceptable to their owners to give for them. We have the strange spectacle of warehouses crowded with goods, factories producing quantities of desirable things and alongside of them hundreds and thousands of persons suffering for want of the very things of which a superabundance is oppressing the world. The owners of the goods behold their property ruined, the value fading away for want of effective demand. Their goods might be called potential wealth, goods capable of becoming valuable awaiting the magic touch of effectual demand, as the sleeping beauty waited for the awakening touch of the fairy prince.

Thus we are made aware that the demand for goods is the basis of all values with which we are concerned in the present discussion; for all exchangeable value of goods depends on the demand for the goods. Men buy to satisfy wants and what they want. This buying establishes all values. It seems almost superfluous to make such a statement were it not for the many important and less obvious truths that derive from it regarding money and its functions. It enables us to justly estimate the significance of the quantitative theory of money, that is we can see that whatever effect a quantity of money has on prices must be through its action on demand for goods, it enables a fuller satisfaction of the demand for goods, and so by stimulating demand tends to raise prices. In the absence of demand no increase of money would raise prices. This means an effective demand, that is a demand which furnishes other goods in exchange. Or to put it a little differently, a purchase with money ought always to signify an exchange of goods or services, any other purchase is suicidal, it would exhaust the supply of goods and leave

only the barren money. The effective demand for goods must always come from other goods, or services, the money being simply the convenient means of making the demand. The process is something like this: a man sells his goods, receives money for them, and straightway comes into the market to demand other goods for his money and this is an effective demand, it signifies an exchange of goods, but if a man is merely given the money, or steals it, or gets it by any other means than the giving of goods or labor for it, his demand signifies not an exchange of goods one for the other but an exchange of money for goods and if we suppose all purchases of goods to be of the same character, he would speedily find the total supply of goods exhausted and the barren money perfectly worthless by reason of the disappearance of all goods capable of answering its demands. An arbitrary increase of money, therefore, while it might temporarily increase the demand and so the price of goods could never have anything but a temporary and, if continued long enough, a destructive effect on all dealings in the market and would finally bankrupt the industrial society, as in fact it very nearly did in Germany where an unrestricted issue of paper money raised prices without any effective demand to justify it.

In other words our formula must be: demand makes exchangeable values, goods or services alone make effective demand and money makes demand only as it represents them, that is only when it has been received by its owner for goods or their equivalent, any other demand made by money is self-destructive.

And so we find that wherever there are the most goods there will be the highest prices for them, contrary to the familiar and occasional occurrence where a glut of goods of some particular sort outruns the demand for that particular sort and so brings lower prices or perhaps forbids a sale at any price. The demand for all goods, however, is never exceeded by the supply, the more men have the more they want.

In London or New York for example an Arab horse or an oriental rug brings more money than in Constantinople although probably there are more of each in the former cities than in the latter, and so of all other goods brought there for sale. All goods go there because they are great markets and have high prices, because some might say there is more money there than elsewhere. But this puts the cart before the horse, it is because there are more goods there. It cannot be repeated too often, goods make money, money never makes goods. It was the existence of goods and the necessity of

exchanging them that gave birth to money in the first instance, and it has been so ever since. No matter how much money there is in London or New York, purchase in their markets must always be made with goods. English money may apparently purchase goods but it must always be backed up by English goods: for it is English goods that must be exchanged for the goods purchased no matter how long or devious the road by which that exchange is accomplished. All normal purchases and sales are in reality exchanges of goods, the rug or the horse is bought with goods. No matter what transformation the purchase money may suffer if we trace it through to the ultimate completion of the transaction we shall find it to be redeemed with English goods. If this were not so English money would drain away in an endless chain of purchases of goods and would never return to England. Its return can only be effected by English goods which buy back English money by exchanging themselves for it or rather for the goods which were bought with it. an exchange of which the English money was merely the convenient medium. In other words, English goods must back up English money.

Indeed the history of mankind is a full-page picture of the gradual increase in the price of all things including wages accompanying and caused by the multiplication of goods, of articles of use and luxury added year after year, century after century, to the comfort and well being of men.

Goods have made money, raised prices, both of wages and goods, simply by their gradual increase in quantity and variety. Every member of society is in receipt of more comforts and luxuries than ever before in the history of the world, and the incidental increase of the cost in money works no hardship for it entails no greater exertion, no longer labor. The workman of today works probably shorter hours and no more strenuously than the slave of Egypt or Greece or the craftsman of the Middle Ages while his wages are far in excess of any those ancient laborers received.

A vivid idea of how the multiplication of things increases the money price, i. e., the exchangeable value of every article, and of wages also, can be had by considering for example the wages say of an ordinary workman let us say in Egypt or Greece two thousand years ago and contrasting them with those of a like workman today and in the United States. By wages here is meant the real wages, the satisfactions which each man receives for his daily task. While we do not know exactly what an Egyptian or Greek received

beyond his food, shelter and the scanty garments that were then in use, we do know, however, quite positively what he did not get. trolley rides, moving pictures, phonographs, pianos, wireless, all of which the workman of today has without a thought that they are new and unusual wages. Nor did the older workmen have coffee. sugar, tobacco, gas and electric light, hot and cold running water. all of which now go to make up the real wages of the present workman, however poor. Here is the secret of high prices for things. high prices for labor, the multitude of new things constantly appearing in the industrial world. The worker gets more wages in money because there are more things. The things crv out to him to come and take them. If he did not take them they would go untaken. unpurchased, and speedily could cease to appear for they could not otherwise be sold save in exchange for his labor or the things by his labor. A living wage in the United States is thus a very different wage from a living wage in Egypt, it includes pleasures, luxuries, conveniences, that did not exist in those early days.

Naturally, much more money is required for modern commerce to effect the exchange of all these, but this will not of itself increase the price of the articles dealt in, that increase is due to the increased demand for things, a demand created by the presence of the new things, so that each and every thing demands each and every other thing more intensively and by that demand increases prices. the first view of new inventions we are apt to concentrate our attention solely on the new thing thus introduced and the new demand for itself, we neglect or overlook the less obvious but important item, namely, the demand, new and more insistent by reason of its presence, which the new invention makes on all the other things already existing to come and be exchanged with it: for it has to be purchased, if purchased at all, by other existing things. The new invention is a bidder for every other thing already in existence. Every newly invented article cries out for its brother article already in existence to come and be exchanged for it. It quickens the demand for the existing and formerly demanded goods. A motor car for example is not sold in reality for money, it is simply exchanged for other articles. The money paid for it constitutes a fresh demand not hitherto existing on the general stock of goods of the community into some of which the recipient of the money will eventually convert it. All this lessens the value of money in goods, money buys less and less as the number of purchasable articles increase. But it is always the increase in goods that is the real and vital element, goods make money, money never makes goods. So in the great industrial countries like England and the United States, by reason of the variety and quantity of all goods, everything has a higher price in money than in Persia or China or Africa. Every new article must find another article to be exchanged with it so only can it be paid for, the money paid for it simply represents that other unascertained article which the recipient of the price will eventually lary with it. An increase of money is a barren thing, it brings no new comforts or conveniences of life into existence but simply makes a fresh demand for the already existing comforts and conveniences.

All juggling with money, substituting silver or gold, inflating the currency by issues of paper money, contrivances for giving special credits to some one class in the community, are vain and useless devices for producing prosperity or relieving commercial distress. They may serve the purpose of helping one class to the disadvantage of another, robbing Peter to pay Paul, but in the long run these short cuts to prosperity for anybody or everybody die a natural death at the hands of economic laws that do their work in spite of these devices

The only prosperity for any society lies in things: the more things that are produced the richer the society, and the only sound business lies in the rapid exchange of things. The price in money is not important, high or low prices are entirely beside the mark so long as the ratio of exchange between things and services remains unaltered. A sudden change in price of an article may work temporary hardship or confer undeserved benefits until the change becomes distributed through all the other articles of trade or until by reason of the high price of some particular article great quantities of that article come flooding into the market and so restore its former price. In one of these two ways inequalities of price are speedily adjusted. Instances of both processes are sufficiently familiar to all. Thus a few years ago the price of sugar ran up to twenty cents per pound, and at once from all parts of the world the sugar ships came rushing with their cargoes and sugar fell to its former price over night. Just now the wages of house-builders have soared to impossible figures, and at the same moment up rose the price of houses and the rents of the same so that both by their advance met the higher wages and so equalized the ratio of exchange between labor and houses. Until the process of equalization has been completed throughout the whole industrial cycle, many persons are

severely taxed for the benefit of the favored class, many persons receive undeserved gains, as where the owner of a house built under the old tariff of wages finds the value of his property automatically raised because of the new and greatly enhanced cost of building it.

But it may be laid down as incontrovertible that the only real and permanent increase of wealth or of wages must be by an increase in the production of things. A mere increase of price of anything in money cancels itself in a corresponding increase in the price of other things thus equalizing the ratio of exchange between them. High prices not caused by playing tricks with money, inflation, and the like, are an evidence of prosperity, and the highest prices of labor and of goods and of all other items of civilized life are found in the most prosperous countries such as England and the United States.

It is not easy, perhaps, to understand exactly the process by which an ever-increasing multitude of goods serves to raise wages and with them the price of things. As has been said it is a picture of civilization from the earliest times. Every year for centuries has shown an increasing of the comforts and conveniences of living, and possibly a brief consideration of these may at least give us some hints of how the process has taken place. It must be plain, for one thing, that all this increasing multitude of things must be used and enjoyed by all, or most all, of the members of the community except the very poorest, otherwise the things would not be produced. People must purchase and use them if they are to continue to be produced. Again the presence of these new things, chewing gum, soda water, trolley cars, radio sets, are a perpetual challenge to a man's wants. They stimulate demand by offering new pleasures, inventing new wants. They are the real wage fund of which so much has been written: out of them all real wages are paid, as they increase so do wages. The struggle for higher wages is therefore only the expression in money of the desire of the workman for his share of the new things which he sees about him. He is a child in a toy shop, he gazes at all the toys, the enticing novelties that present themselves on every side. He wants all that he sees, his desires are awakened and he reaches out to take all that he can of the new things. He finds that his wages do not equal the purchase of all he wants, he is short of money for them, and what more natural than that he should ask for an increased wage which is in reality asking under the guise of money for those new and hitherto unknown things. This goes on every day under our very noses, the mill worker has bought his Ford car, has put up his wireless telephone, these require money and so raise wages. What has been called the standard of living has been raised, that is these new things have been added to what the workman demands as requisite to his contentment and happiness in life, without which he is unwilling to live and labor.

Labor being the fundamental cost of all useful things a rise in wages means a rise in money price of all that labor produces. At the same time the increased demand which the workman makes for the new things tends to raise their price and so on through the whole gamut of wages and things. Thus there takes place a perfectly wholesome stimulation of the exchange of things with each other at an ever-increasing price which, however, inflicts no hardship for it leaves unaffected the ratio of exchange between goods and services which is the essential matter. No man works any harder or pays any more in the real means of payment, namely things, than when as Egyptian or Greek slave he won a scanty reward in things for what was certainly as strenuous exertion as any labor done today. His labor is more productive today by means of machinery, organized division of labor, and the like, and in this way the greater number of things produced cost no more labor than the former scantv production while at the same time it justifies and pays the increase of his wages. So in all healthy industrial societies we find the highly-paid laborer producing more things: for unless he did a mere increase of his wages in money would speedily come to nought. Looking at this matter of wages from an entirely different angle and independent of the multiplicity of things, which it is the contention is the real cause of high wages, let it be supposed that the money price of wages for the ancient workman be raised to the same amount as the modern workman's wage. What then would result supposing no increase in the things offering themselves for sale: the price in money for all the saleable things would of course rise under the increased demand made by the increase in money wages but how would the workmans' real wage in things be increased; there would be no greater variety, no greater quantity, and perforce all his increased wage could give him would be more of the same things which he already had, food, lodging, and clothes, not one bit better than before, possibly no greater in quantity. Thus, again, is seen the absolute dependence of money for its real value on the presence of things, thus again is seen that the real wage fund is things that without an increased production of things no increase of real wages can take place.

The last but by no means least of the functions of money is found in loans. If the foregoing reasoning be correct it follows that the borrowing of money is always the borrowing of things. A man buys a house and borrows money to pay for it—one of the simplest instances—in reality he borrows the house engaging to repay not the house but its representative value in money. All other and apparently more complicated transactions of borrowing, the building of a railroad by selling stocks and bonds, the Government loans, the Municipal loans, the operations of Bankers and brokers, and stock speculators can all be reduced to the same simple formula, the acquisition of things by way of borrowing money.

Whatever the purpose, money in all the borrowings is a commodity pure and simple and behaves as such, it is a mere convenient substitute for the things into which it is ultimately converted. The expression often heard in some localities "hiring money" is an accurate statement of the economic truth that the borrower really hires the use of things and the interest paid on his loans is in reality the hire of the things he uses the borrowed money to buy. The rate of hire or interest is governed by two considerations, one that governs the price of all commodities, supply and demand, and the other by the risk, the greater or less probability of the safe return of the money to the lender.

Out of the commodity character of money there emerges a further and very important use of money as such. Money being the universal commodity representing the demand for all goods is liable to less fluctuation in price than any other commodity. The price of one commodity may rise or fall suddenly and violently, and with respect to the particular commodity money may be said to rise or fall with like intensity, but it is not likely that all commodities will either rise of fall to such an extent or even if they did the average rise or fall will be much less than individual particular rise or fall. and it is with the average rise or fall that money as the universal commodity is concerned, its purchasing power or exchangeable value will therefore fluctuate much less than that of a single specific commodity. This gives to the possessor of money a great advantage so that this alone is often a sufficient inducement to a man to convert his goods into money for thus he escapes the risk of the greater fluctuations in price to which all specific goods are more or less liable. This is a third and highly artificial function of money, the furnishing a safe means of conserving property, of avoiding the risks which the owner of all specific goods must take of a sudden loss of market and depression in price.

Furthermore possessing money the least fluctuating of all commodities, and commanding all goods at his pleasure, the owner of money can take advantage of any sudden change in the price of other commodities to acquire them to the best advantage. Like Napoleon he stands on a commanding eminence surveying the constant battle of contending prices and can at a favorable moment throw his reserves of money where they will do him the best service.

These two great—and they are very great—advantages of money, freedom from violent fluctuation in price, and its compulsory market, are compensated for the owner of specific things in but one respect, the owner of money never has the chance of a great and profitable advance in the value of his property such as at times spells fortune for the owner of some specific thing. If he seeks rapid fortune in the increased price of some particular commodity he must give up his security as the owner of money, convert his money into goods, and taking the risk of loss, makes a bold play for the great gains that sometimes come from a rise in the price of goods. This is indeed the course of all dealers in goods, manufacturers, builders of railroads, houses, all the enterprising adventures in commerce who make the world of business go round.

JESUS THE GREAT TEACHER

HIS DEBT TO THE WISDOM BOOKS IN HEBREW LITERATURE

BY REVEREND ROLAND D. SAWYER

M ODERN attempts to understand Jesus have been much in error because of the fact that following the Reformation there was a discount placed upon the apocraphal books, and that after some two hundred years of quibbling they were early in the last century dropped from the Bible, by a printing firm, which having a big contract to print bibles for the heathen, boldly cut them out to save money. Thus we have attempted to understand the mind of Jesus, having cut from our thought, the literature of his people which stood nearest to Him in time, and was of great influence in the period in which He lived. Some of the books dropped were of little value, but the Wisdom writings were of great value and great influence on Jesus. Just as Socrates and other lovers of Wisdom went about Greece thinking and teaching, so Palestine after the days of Greek influence had its Wisdom teachers.

These teachers were men who observed the people, marked their follies, vices and failures, and handed down practical instructions to teach the thoughtless and ignorant to avoid the pitfalls about them. These wise men can be traced back quite far, and their own explanation of their position in society was, that they were followers of Solomon the wise king who had written 3,000 wise sayings, and drawn a lesson for human living from every kind of beast and bird. These teachers had great influence upon the land of Jesus, and their wise reflections on manners and morals placed them in public esteem alongside the ancient prophets. It is unthinkable that so serious a man as Jesus, with his mind open for every truth, should not be touched by this school of teachers. In our modern estimate of Jesus we do not take into consideration the influence of these teachers upon the thought of Jesus, nor how far He followed their example in His ministry.

Modern study of the Gospel Records shows us that Matthew and Luke at least, depended upon an earlier writing called the Logia, or Sayings, and given the technical name of the "Q" document by scholars. This Logia was a grouping of teachings of Jesus, written by Matthew the Apostle, and written very early. Flinders-Petrie, Professor Salmon, Sir William Ramsey, are among the competent scholars who hold that the Sayings were written while Jesus was yet alive, and this explains the fact they did not mention the Crucifixion and Resurrection of Jesus.

In this earliest of all documents Jesus is the Great Teacher, teaching a way of knowledge which was for humanity a Saving Wisdom. Knowledge of God as He taught it, was the salvation Jesus came to bring, in that earliest document. It is only later thought, based upon later records which included His death and Resurrection, that made Jesus the *Redeemer* rather than the *Teacher*.

Careful study of the reconstructed Sayings, shows how great was the influence of the Wisdom writings on Jesus. Take the first collection of the book of Proverbs, it is a document of some 376 wise sayings (see Proverbs x., 1 to xxii., 16)—where each saying consists of two lines, the first giving a thought, and the second line the opposite side of the idea for clearness and emphasis. Or take the last chapter of Proverbs, a careful literary effort of one Lemuel, and which is an alphabetical poem on the "Virtuous Woman."

These writings, pinning down the sage thought of wise men, as Poor Richard pinned down the practical wisdom of Franklin, could never have been unobserved by Jesus; and as we study them, and also study His words in the Sayings, we see how much Jesus drew from them. The beautiful parables of Jesus show a careful observation of the habits of birds and animals; and His beautiful maxims show a close following of the prevailing form of Wisdom literature. It is an error to call Jesus familiar with, and influenced by, the older Prophets, and not see Him influenced by the Wisdom writers.

The book of Ecclesiasticus, the book of the Twelve Patriarchs, and book of Enoch, were certainly well known to Jesus. It was the apparent fondness of Jesus for the book of Enoch which made some follower take the liberty of putting into the mouth of Jesus some of its apocalyptic matter, which is recorded in certain chapters in the Gospels, and which Jesus did not say. The book of Job, the book of the famous Son of Sirach, these influenced Jesus. The morals of Jesus, His practical wisdom, show how the Wisdom Books reached the mind of Jesus with their message. Some scholar

has shown where Paul quotes 247 times from the apocraphal or nonbiblical writings. Jude and James do the same. And so did Jesus.

The Wisdom movement grew following the return from the exile, and such a book as Ecclesiasticus shows its author a philosophical moralist of high order. The author uses the words of Plato such as "nous" and "sophia," and he says "sophia" (Wisdom) is the knowledge of things divine and human. Again he calls the fruits of Wisdom, "prudence, justice, manliness, temperance." And again the work of Philo is akin to the Greek philosophy. So if Philo and Paul, how can we expect Jesus to escape the great influence of the Wisdom writings?

Professor Briggs once pointed out that the Ethical Teaching of Jesus was given in the form of Hebrew Wisdom. That is, the measured lines and poetic form; and his book *The Ethical Teaching of Jesus* puts the teachings of Jesus which are quoted in that form.

Briggs again says: "The Logia, which were the basis of the teaching of Jesus in three Gospels, were written in Hebraic tongue, and arranged in the form of Hebraic poetry, and are patterned after the form of Hebrew Wisdom."

Take for instance such a saying as Mark ix., 43-48, and Matt. v., 29:

"If thy hand cause thee to stumble, cut it off;
It is better for thee maimed to enter into life,
Than having two hands to be cast into Gehenna.

"If thy foot cause thee to stumble, cut it off; It is better for thee to enter halting into life, Than having two feet to be cast into Gehenna.

"If thine eye cause thee to stumble, pluck it out; it is better for thee with one eye to enter into life. Than having two eyes to be cast into Gehenna."

Or again:

"Consider the lilies, how they grow: They toil not, neither spin; Yet Solomon in all his glory Was not arrayed like one of these."

Now the point is, could Jesus have been a reader and lover of the Wisdom writing followed its words and form of teaching, and yet

not be highly appreciative of its message? Such a question answers itself. Whatever Jesus in the last days of his hectic life may have felt, and whatever following his death, his followers have thought and taught, there is in the earliest document, the "Sayings," as we can construct them, chiefly a greater Wisdom teaching. There we see Jesus the Philosopher, viewing life, sifting out its values, teaching men the ways to richer living and saner habits.

The keen intellect of Thomas Jefferson detected how akin Jesus was to the great ancient moralists and he made from the Sayings of Jesus his Jefferson Bible, or a Book of the Morals of Jesus of Nazaweth

Jefferson detected the position of Jesus as a Moralist by the value of the words of Jesus as a moral code. We today can sift out from the early documents the earliest record of the ministry of Jesus, and then looking at that reconstructed record, we see Jesus the Great Teacher, the Wisdom Philosopher, giving mankind the saving Wisdom of Life.

Religious questions which divide us grow up around the later records and the thought of Jesus after He had died. Why should not the world leave those questions to the realm of religion, and the whole world unite upon the question of the morals which Jesus taught; for who would dispute the statement of Jefferson, that the Wisdom of the greatest of ancient Wisdom teachers, gives us the world's loftiest moral code. Religious faith disputes over why Jesus died and what happened after His death; but decent human sense can have no division over what He taught, as it was caught during His life time and passed down to succeeding generations, in the Logia of Matthew which we can now reconstruct.

THE ORIGIN OF SPECIES

BY SMITH W. CARPENTER

DROBABLY Nature never produced two identical things; always, if observation is sufficiently close, a distinction is found. Here is a logical basis, and perhaps the actual basis for all the variation, whether varietal, specific, or generic to be found in nature. Such individual mutation, no matter how infinitesimal, if it be cumulative, tending long in one direction, would finally result in what we may call an infinity of infinitesimals, the mathematical result of which would be unity, or a full measure of differentiation. Since all organic beings have both dominant and recessive characteristics, we may regard differences observable in individuals of the same variety as mutations of dominant characteristic. Mutations of recessive characteristic are not observable, but consist rather in potentiality. Their effect can only become apparent when the recessive bursts into dominance. Rarely, perhaps never, does mutation act cumulatively in dominant characteristic to the point of achieving specific variation. In the dominant there appears to be something akin to old-age characteristic, a crust or shell, which holds it true to type. In the recessive there appears to be something akin to plasticity or impressionableness, something that we may liken to embryonic tissue, and it is there that mutation is far more apt to act cumulatively, resulting, when the recessive leaps into dominance, in a sport. That this so seldom produces a new species is quite likely attributable to the tendency of cumulative mutations to upset the equilibrium, raising the recessive into dominance where it acquires the shell or crust, and thus cuts short the cumulative tendency.

The most difficult thing in the world would be to breed cumulative recessive characteristics, for there would be no criterion of what was being accomplished; hence we can but guess at the causes which might have operated to produce any noted result. When,

however, a filial species exhibits marked improvement over the parent type, we are at least logical in suspecting that enhanced vigor was among the contributing causes. Since the human species was so vast an improvement upon the parent type, we naturally fancy that the parent species may have accumulated a great store of bodily vigor as one of the enabling causes of the sport that resulted. Hence, if we can discover a condition present and active at the time when and the place where this birth of the human species occurred, which inevitably must have resulted in a vast enhancement of vigor—well, we have discovered something worthy of cogitation at least.

THE DAYS AND NIGHTS OF CREATION

When was man in the making and where? We will not attempt to draw fine lines. The consensus of scientific opinion falls within fifty thousand and a million years as to time, and somewhere on the continents of Europe and Asia as the place. It overtaxes credulity to believe that bountiful Nature ever entrusted so noble an experiment to any single pair. If we trust parallel observation we must predicate of the birth of our species a mighty outpouring of creative energy, manifest over a wide area and throughout a long period. The universal acceptance, for so long a time, of the biblical account of creation has biased the whole human intellect, scientific as well as religious, in favor of a narrow limitation in time and place of the cradle of the race. Logical argument could be offered upon this score, but for present purposes it is sufficient to say that it doesn't seem a bit like Nature to work out her wonders in that narrow way; so let us hold in mind a big broad human cradle or else a series of smaller ones, of cradles within cradles the latter a much more reasonable hypothesis, but into that detail we have no need to delve. Neither do we need to consider whether or no that cradle encompassed the whole world, as recent discoveries seem to make reasonable.

What else took place during that same period in that same place? Something very tremendous, the glacial period. If our religious brethren could bring themselves to admit possible inaccuracy in the list of works ascribed to the six creative days, they could find ample evidence of five and probably six nights intervening between crea-

tive days, for there were that many separate and distinct periods of glaciation. It won't do to be dogmatic as to the weather conditions of each of the days, but some of them, perhaps all, were much warmer than what now prevails. Every now and then the remains of sub-tropical vegetation are found by excavators on interglacial soil at points far north of their present habitat. Let us remember that these interglacial days were long, long periods of time, probably far exceeding the utmost stretch of the historical period, which we are justified in esteeming as belonging to the seventh day, the day that God blessed.

Now look at the map: The characteristic of that broad cradle that would likely be most outstanding to the man-in-the-moon is the east and west mountain ranges, the Alps and Himalayas with the Balkans in between. Those mountains were all there during the entire glacial period. What we know of our living sub-human cousins justifies the assumption that our parent species was at least sub-tropical, living, doubtless, south of these east and west mountains, until wooed by one of those warm days through the passes to the north. We may fancy that, as so often happens with other species when introduced to a new habitat, away from those influences which theretofore had operated as checks upon its population, the parent species flourished and waxed strong in its new habitat, and probably occupied a considerable area of the north country. However, its kind was never a rapid traveler, and it spread out only in obedience to the press of population, and the exigencies of food supply.

Then came the evening of the creative day followed by the icy night. Ever so gradually and imperceptibly the seasons changed; the summers became shorter and cooler, the winters longer and colder; perpetual snow and ice cloaked the mountains, and nearer and rearer crept the polar cap. The parent species were trapped, and tested by cold until only a few survived, and those few were crowded back through the gaps between the ranges, or around the ends, into the warm Mediterranean and Indian plains. Of all the tests of fitness to survive, the endurance of cold best searches out, fixes, and perpetuates vigor. The sturdiest growth, whether it be animal or vegetable, is ever found a little south of the most northerly limit at which its life is possible; so, whatever other changes the repariated parent species may have exhibited, we may be certain that they were vastly more vigorous than the cousins who had remained behind. Again and again they underwent that same expe-

rience, spreading to the north and occupying the country as far as the Baltic basin or still more northerly, only to be again trapped by mountain and polar ice. It is difficult to imagine a severer discipline, and we have little reason to think that nature made atonement in hair or fur for more than a very small fraction of her severeity. Before the last of the creative days had passed our folks got sufficiently rugged that probably some of them actually endured the entire icy night in regions north of the mountains.

When would stored vigor be most apt to spring into creative bloom? Would it be at the period of greatest stress, when the stress was suddenly released—by escape down the Danube or through some other southern outlet—or at some other time? If somebody will clear up that point we will know whether to look for the Garden of Eden north or south of the mountains. The period of greatest vigor was in the evenings of the creative days, before the cold began to pull down and lower the vitality. The location of the traditional garden, where the Semitic races were evolved, would nicely correspond with that idea; neither at the extreme northerly or southerly limits of their probable range, but when they were crowded back to midway.

Whatever of actual merit there may be in this cogitation would tend to eliminate America as a theater of divine discipline; since there is no comparable east and west barrier to hold us while it was being administered.

It is a poor theory from which we can not extract a grain of comfort: Probably there was less margin between the ice of the mountains and the pole in the region north of the Alps than elsewhere; so the discipline there administered, in the Nordic habitat. was severest of any, and upon that fact we might found a theory of greater profit from the severer chastisement, finding therein proof of the greater love of the Lord. Unfortunate for that view, the gap between the two glacier areas was so narrow that it is difficult to believe that any of our folks were able to live through. unaided by substantial shelter, clothing, and fire, which would postpone endurance of the more rigorous discipline until subsequent to the creative act. However, we are not to regard our evolution as a single stroke of God's favor; it was accomplished in all likelihood by a succession of waves—corresponding with creative days?—and we early learned the comfort of a sheepskin, and to control and preserve the fires occasionally set by lightning. Hence it is not impossible that we did actually survive the last one or two of the creative nights.

THE SUBLIME VIEW OF MAN'S ORIGIN AND PURPOSE

Over against the ancient teachings of the Pentateuch, that man was created out of the dust of the earth mingled with the spittle of a god—not an anthropomorphic concept of the infinite Nature-God of science, but a tribal deity, one out of an innumerable pantheon of man-gods who happened to be worshipped by the Jews—and built into an animated mud-pie; and woman made of a rib of this toy thing—over against this childish fable set Man as revealed by his own studies along a thousand related lines:

As evolution now stands, Man is the ultimate end and purpose for which this world was created. The world was not pulled out of a hat at the end of a week's juggling performance, but the slow product of an infinite period of toil, all for man and, presumably, like creatures upon other planitary bodies. From before time began Nature essayed the building of man's habitation. Throughout acons unenumerable she labored upon the mineral elements, fashioning a world capable of supporting life. Out of mineral elements she made a slime, and from it fashioned the simplest and humblest of living forms. With infinite patience and cunning she labored, building ever more complex and higher forms, whose purpose it was to lay down their remains in vast beds; so as to modify and mould the earth's surface for the still higher that were to come. Aeons upon aeons rolled into geological ages while Nature continued her patient work. To build the higher she ever used the best fabric of her past endeavors. Species, genera, and orders came and subserved their humble purposes; giant reptiles peopled the earth, birds were created, and mammals developed, splendid warm-blooded creatures with all the primary instincts of our own being, and with a measure of rudimentary intelligence.

Still working with the most worthy material of all her past production, Nature essayed the evolution of a companion, a co-worker, aye, a master. And so there welled up a mighty outburst of creative energy, and from the highest of primates were born sports differing from their parents chiefly in greater brain capacity. But to create was not alone sufficient; the product must be tested and

proven, and the less worthy of survival must be destroyed. And so she plunged the earth into a long period of climatic cycles one phase of which, recurring perhaps every hundred thousand years, by frost and ice proved them that were worthy to survive and eliminated the rest. Over and over again did selective death weed out the lush product of creative energy until the races of men known to history were evolved.

Consider man, a creature capable of all knowledge and wisdom. a creature with a conscience and an ethical nature, able to fathom and to comprehend his Maker, even capable of approximating in his own conduct the God-side of Nature. Is this man as we know him, worthy of his Maker, of all the time and trouble she has devoted to him? It can hardly be. Perhaps he is still in the making; perhaps by cold or by some other terriffic test he is again to be searched for the seed of a new crop. Perhaps the real purpose of man is not achieved upon the material plane. Perhaps there is a spiritual world in which man's nobler thoughts and aspirations are permanent, and his weaknesses transient. Perhaps his mind is but an instrument whereby Nature shall work out her own ultimate destiny in a manner unscrutable to us. Howsoever it may be as regards the future. Man is the captain general of the present, and beneficiary of the infinite past. For him or his children, or for some work that he is performing was this infinite work of creation undertaken

AND WHAT OF THE FUTURE?

I don't know. Up to the present moment I know of no evidence upon which to found a theory as to the outcome of this vast experiment of Nature's. Still there are certain analogies upon which one may found a guess, and a guess is a start at least in the direction of a working hypothesis.

Our first great problem is to fix our position in terms of geological time. We don't know whether the ice age is ended or just begun. The utmost ken of anthropological science embraces only such a period as might easily be lost between two creative nights. Accurate observation is so new that we don't know whether our seasons are becoming warmer or colder or standing still. Despite the multitude of theories adduced to account for the phenomena of the glacial age, we know absolutely nothing as to its cause, and

so are in no position to judge as to whether a recurrence of cold is to be looked for or not. If it was due to the formation of a crust over a cooling sun; then what we are pleased to call the glacial period has but just started. Each creative night is destined to become longer and colder until life shall be utterly blotted out, and our sun turned into a dark star. But it takes a long time for a star to cool; if that is what is happening the crusts start forming at something like hundred thousand year intervals. Heretofore our folks have been utterly unprepared, they endured to the limit of endurance and then they died. Next time—but I am no novelist. We should not dread such an event, for out of its stress a chastened, purified, and enobled race is likely to spring.

There might be soemthing like an argument made from dead reckoning in support of the view that another creative night will. in due course, follow the blessed day, but argument so drawn seems terrific. Let us rather see what suggestion there is in the hopes and aspirations of man. We know that everywhere in the evolutionary scale the lower has foreshadowed the higher. Between species, genera, and orders the only sharp line definitions are where intervening classes have become extinct. What does man foreshadow? What rudiments have we which a further advance along the path of our more recent evolution is likely to cause to burst into bloom? Compare man's aspirations with his performances, his ideals with his character. Consider the exalted few who actually live up to the best they know, the occasional here-and-there one whose life is intelligently self-directed. Consider our co-operative possibilities, how they gleam forth at times under dire stress—all of these god-like characteristics, are they forever to remain beyond our reach? human nature as we know it is to dominate us till the end of time. does it not seem that the procession of the ages was a sham, and Nature's work undertaken for an unworthy end? When you think in terms of race and not of individuals, another combing by the lords of selective death is the only reasonable hope of realizing our divine possibilities. Even to those individuals who shall die in great numbers, what matters it? Are we not born under a death sentence? That we should meet our doom with a goodly company is no more frightful than to meet it alone. If we would justify God's wisdom in creating us, we would willingly cast our poor bodies upon the heap of death that forms the pedestal of our high estate.

GOD, NATURE, AND THE DEVIL

In setting the names of God and Nature at the head of my pantology, I would be deferring to religious custom and precedent; the name Nature alone belongs there. Nature alone fulfils the concept of utter infinity; she alone embraces a totality capable of including both good and evil—concepts so antagonistic, so mutually exclusive that the human mind refuses to entertain at the same time, or to predicate them of the same being. Unconditioned ethical attributes can exist only in the potential, and in the potential only do we affirm them of Nature. Logically analyzed that potentiality resolves into a neutrality where the good is exactly balanced by evil. The instant that the mind focuses upon the ethical aspect of nature there occurs a polarization; neutral Nature disappears, and in her place stand God and the Devil. The natural godhead is thus a trinity. But the Devil is bogus; he correlates with negative electricity. The positive, God attributes exist; the negative, Devil attributes are only the absence of the positive. God is Nature in an ethically dynamic phase. Although that disposition of evil and the Prince of Evil is true, it is for everyday use worthless. We can no more get away from a concept of actual evil than we can do away with the negative side of the dynamo. Therefore, when we personify all good under the name of God, we are logically bound to personify the negation of good under some other appropriate name.

The natural godhead is reducible to a mathematical formula: Express the constituent trinity by their initials and we have, G+D=N. Although we may prove that D=Zero, that does not entitle us to drop the D, for both G and D are mental concepts; N alone has objective, tangible existence.

NATURE'S PATH TO PEACE

Animals vary in ferocity inversely as the distance from lair or nest, or from the locality of their young. Upon the intensity of their ferocity depends which shall go and which shall stay when two of a non-gregarious species meet. In the inheritance of that rule by primitive man we may discern the primordial speck of international law. That this timorous, murderous species should ever learn to dwell together in large numbers and in safety would have been scouted by an observer of the beginnings of human life. Everybody knows about the isles of peace that crystalized around what we may poetically call the primitive hearth-stones; and everybody—unless they are hopelessly Fundamental—is familiar with the doctrine that from these tiny, warring isles of peace came all we know of peace and civilization. So, too, does everybody know that the plan of evolution consisted in the gradual widening of these isles of peace through the recognition of more and more distant kinship. So generally accepted is this line of thought that we may properly set it up without argument or restatement.

If we become philosophical, and dig a little deeper, we will realize that underlying kinship was confidence, the active element, of which kinship was but the vehicle. At this point, we are back behind history; we are dealing rather with a psychological problem. What is so rightfully attributed to kinship, back here is seen to be the psychological process whereby the primitive social compact was attained. In brief, the process was this: before there could be any sort of co-ordination, the primitive sex groups must become acquainted; they must learn to understand one another; they must come to have a degree of sympathy for each other, and they must develop some sort of confidence in one another. It is not pretended these steps are naturally set off by distinct cleavage planes so that some other analysis might not be just as logical, but for the purpose of a tentative study acquaintance, understanding, sympathy, and confidence will suffice. It is likely that only occasionally did primitive man have what we may call a speaking acquaintance with a neighbor. It took a long time to develop language to the point that there could be a common understanding. Sympathy is a natural heart emotion that must await upon acquaintance and understanding. Confidence is the product of mingled intelligence and emotion, and can only develop toward a person for whom one feels an understanding and sympathy. In that day there was no communication of intelligence, nor any means of arriving at a subjective feeling of acquaintance and sympathy without personal contact. Kinship supplied the only environment within which the steps leading up to confidence might be taken.

For the first million years or so of humanity's existence, the isles of peace gradually widened until considerable nations arose all of one blood—theoretically, as the authorities say, but actually as I hope one day to show. Then came the breakdown of the tribal system, and for a brief period the feudal system arose in its place in all of the progressive nations of the world. During this period the idea of kinship became subordinated to that of fidelity to king and military chieftain. Then feudalism erumbled, and in its place. very generally conforming to its boundaries, arose capitalism. During all of this tremendously long time the world acquired no new sanction for peace. Higher evolution was achieved by reversing our philosophy: instead of esteeming war to be the natural status of man, and peace to be the exception for which an adequate excuse must be found, we came to hold peace to be our natural status, and war the exception for which excuse is becoming more and more difficult. Were we to seek the cause of this change we would find it to be largely due to the religion of Christ.

What became of the tribal and feudal systems when they broke down? The same that becomes of dead organic matter generally: they fell back to earth to form the soil out of which sprang the new. Capitalism is built not from the inorganic atoms of the old, but from their complex molecules. If we but analyze our concepts of peace we find a wonderful heritage of tribal lore. Many words and idioms expressive of fine relationships metaphorically involve kinship; even our highest religious concept we express as the fatherhood of God and the brotherhood of man. As Nature so often builds of repetative parts, so do we find the family repeated in the essential associations of man; governments sustain a paternal relation to their citizens, and in the Church the priest is Father, and the highest church official is Papa. Behind the map lie ancient tribal distinctions and prejudices, overtopping law and order, and baffling our peace negotiators. People repose confidence, such confidence as they have to repose, in them for whom they feel an acquaintance, whom they are able to understand, and for whom they feel synpathy. Men of today travel abroad, going among strange people. not because of confidence in them, but in the long protecting arm of their own government. As it is with us as individuals, so is it with our national aggregates. Nations acquire confidence in nations in a manner precisely the same as do their citizens.

Man's Path to Peace

The time has now arrived when men generally demand of government the actual establishment of the universally-held ideal of a world at peace. The League of Nations was the first constructive response to that universal demand. In its institution we find the first noteworthy departure from the idea that co-ordination must proceed along lines of consanguinity. We would err were we to conclude that in so doing man has repudiated Nature's plan. In the first place, man is himself a part of nature; in a very true sense whatever man does is natural, and a part of the great plan. His folly, his mistakes, even his sins have their counterpart in the great cosmic whole. We need not excuse man's first organizing of peace: we may justify his action: Nature, unaided by man, has brought forth many new things. Still we are conservatively right in pointing to the incompleteness of the co-ordination between kindred nations. With good reason might we remonstrate that before the nations should seek the peace of the whole world, each should go and be reconciled unto its sister nation. If, however, we have studied deeply into Nature's ways, we must know that she ever sprouts the new before she completes the old. A completed institution, like a completed organism, take on old-age characteristics; it becomes ossified and hard; so that it could not give birth to a new form. The breeding season is not at the end of life but in its middle.

Since Germany is in the way of entering the League, America is the only great, progressive Nation uncommitted to this new, radical, untried ideal. What course America will pursue is more than we can tell, but whatever we do, we will, to the extent of our intelligence and capacity, further the great prospect of peace which the League was designed to father. Here we are, then, confronted by this dilemma. Throughout an infinite past Nature's co-ordinative efforts have proceeded along lines of kinship; then comes Man to her aid; he interly ignores her policy, initiates an omnibus co-ordination, and at a stroke seeks to co-ordinate every discordant element in the world. Where should America apply her shoulder, to the old wheel that Nature has been turning throughout the ages, or to this new thingamajig that men have set up? If we inquire

of Nature herself, we find that we are at perfect liberty to make our own choice. Nature always starts things seemingly before their time, but she never loses interest in the old on account of the new. Since America took fright, and violently recoiled from the League idea, it would be consistent, and surely good sportsmanship, if she took over as her pertion the turning of the old wheel that everybody else has forgotten. If she does this, she will make no mistake, nor will it involve contempt for no opposition to the new plan.

An English Conference

Should America conclude to do this, her duty would be most clear. Her co-ordinative efforts must proceed along lines of kinship; she must first perfect her co-ordination with her next-of-kin, the other half of the English-speaking world. Of course, we are already far more highly co-ordinated with them than with any of the other nations; yet we have absolutely put forth no effort to that end. How should we go about it? Well—how would brothers go about it? Why brothers wouldn't do a thing; they'd just live neighbors and be friends the same as we are doing! No, hold on, there is one thing that brothers would do that we have failed to do; they'd get together now and then and talk things over. Of course, the last thing they would think of doing would be to sign a document pledging their friendship, or defining the sort of relations they propose to sustain. Men and nations are a good deal like cats, they get along better if not tied together.

At Montreal a while ago, Secretary Hughes proposed an advisory conference representative of America and the people of Canada—what's the matter with the rest of the family: Let's set a few more chairs up to the table and make it a family party. Here's the plan: An informal, semi-official conference, to be attended by a small number of the best men that each English nation can muster; men of the ex-presidential class, men whose every utterance is first-page news. We will make for them no agenda; we will charge them with no specific duty, and we will confer upon them no authority. We will but ask them to talk over and try to talk out our differences; to seek to agree upon representations severally to be made to their respective governments. You will observe that in the very nature of things the findings of such a conference must be

unanimous to be influential. That means that it will be a slow thrashing out of our difference. Questions will have to be split, and agreement reached on part at a time but co-ordinative influence will attend an honest effort to get together even when they fail. Their deliberations will be open and widely heralded. They will conduct a super-national forum, where one nation may frankly and without offence ask another nation to do or not to do any particular thing. Without that forum it is good politics to do anything that will hurt the other fellow. Not in America alone but the world over do politicians commend themselves to their constituents by citing the distress their actions have occasioned somebody else. Our outcry over British restrictions of rubber production is probably just as sweet music in British ears as are British outcries over our prohibitive tariffs in American ears. We can make no diplomatic representations lest they be received in the same spirit that we receive foreign suggestion as to our immigration policy.

The English Conference would be empowered to inquire into any and all matters, to acquire exact information, and to report findings to its constituent national legislatures. Such a body could weigh advantage against advantage, and, by making one recommendation contingent upon another, could attain objectives for which there is no present existing instrumentality. Does it seem bootless for men without authority to arrive at agreement? America has never yet sat in a conference where her conferees had power to bind, nor, under our constitution, ever will she. Our English Conference will, to quote a phrase of President Wilson's, be invested with the "authority of influence." In resident Wilson's, be invested with the mightiest power on earth. We are planning for the English Conference precisely the same constitutional authority that was possessed by the Roman Senate.

This plan will be neither pro-League nor anti-League. Insofar as we help to make this a co-ordinated world, we will help the League to make good on the job it was created for, but at the same time we'll be cheating it of the glory. On those terms the most irreconcilable should be willing to boost.

English Solidarity

By that simple little move, Peace on earth, good-will among men would take the longest stride it ever took. Just that significant gesture is all that is required to convince the chancellories of the world that never again, be the provocation what it may, will Englishman fight Englishman. When that idea shall have become well seated, its corollary will follow inevitably: neither will stand idly while the other is licked in a just cause. To deliver those right and left wallops to the world's war-makers requires no agreement. no treaty, no form of words inscribed upon paper. Let us just get together regularly in the persons of our most beloved leaders, and talk over the things that need to be talked over-that will do it. Nobody ever instigated a war that they didn't expect to win, and, with the moral assurance that ultimately they would confront the united English world, nobody will seek a quarrel with either of us. As for picking a quarrel with others, it would make them more circumspect. That end would be achieved without the assumption of the slightest liability. Neither of the great empires would be bound, any more than they are now, to go to the aid of the other. Each would know and fully realize that if it fought an avoidable war, or for a cause other than moral, it would likely fight alone.

Every dream of empire has visualized peace as the result of a military organization strong enough to overawe the world. No doubt it would work out that way if the military organization were potential rather than dynamic; so that it should not be ruthlessly used to goad men to desperation. Human nature is such that an effective military organization of such power can not be entrusted to any central control. What we are proposing would neither be an effective military organization nor a central control. nations enter into an alliance it amounts to a pooling of military effectiveness. That is all in favor of the war-makers. Not anything could so stimulate plotting and arrogance. In the suggested English Conference our war plotters would have not a single pawn added to the board: the nations would pool only confidence and good will. Only by walking straight and true could either appeal to the understanding and sympathy of the other. If the English world is as far advanced on the path of civilization as the author believes it to be, each great empire would merit and enjoy in high degree the confidence of the other, and so, for defensive purposes, not only the war-maker and politicians but the man on the street would rely upon the combined resources of the whole English world. There could be no more decentralized control than the freely co-operating Englishmen of the world. So widely are we spread; so varied are our interests that upon no narrow, selfish, or unjust project could we ever agree. Only common human interests are broad enough to intrigue us all.

A NATURALLY CRYSTALLIZED WORLD

War stress is a transcendental emotion. We all were lifted up by it; so it would be little wonder if our leaders, who were in the thick of the scrimage, were lifted so high that they saw over the horizon, and visualized as near that which is afar. Perhaps the more detached and distant view of our own statesmen had the truer perspective.

Had the League not been instituted, it is likely that there would have been a drawing together of nations according to their kind. Of course, the chances are that they would have made the mistake of entering into formal alliances; still they might have been content to give a milder expression to the "federative tendency," as President Taft characterizes what I esteem to be but the age-old practice of seeking out and admitting to the inner circle of acquaintances for whom understanding and sympathy are felt, of more and more distant kindred. Such drawing together ought not to be precipitate; it is a part of the eternal evolution that must go on and on as long as life endures. Just what might have been the wisest possible alternative to the League plan has long intrigued the author's interest; so, in chart form he presents not only the groupings which seem to have been then practicable, but other and more extensive groupings which might have ensued in the fullness of time.

A conference between nations at any time, on any subject is a hopeful sign, but when people sit down together with the feeling that safety depends upon not being second to draw, profound benefits are not likely to arise. Hence, only so much of this plan should be carried out at any one time as the nations may have laid the foundation for in acquaintance, understanding, and sympathy. No attempt

has been made to include the nations of Asia, for, saving only Japan, there are no true nations in Asia. The tribal system is still dominant there.

The League is now a fact, but oh! what a heterogeneous mess that great outer circle does circumscribe! Almost every distrust and hatred the whole world contains sits around its conference table. As a "mixer" or school of co-ordination its prospects are much more flattering than as a moulder of contemporary history. Logically the details of co-ordination should have preceded the League, but seldom do things happen logically. To make the League a success, or to achieve its purpose independently should it not be a success, the detail work of perfecting the co-ordination between kindred nations must somehow be accomplished. Should America take the lead in this, doing well the job which she alone can do—the initiative must spring from her; the amenities decree it—she will have done all that the most sanguine should expect of her.

THE FRUIT OF CONSCIENCE

BY WARREN SCHOLL

Our civilization is the product of innumerable conflicts. Obscure billions have waged bitter battles; and from the fitful hotch-potch of lost causes, ephemeral fanaticisms, and unknown infamies, has evolved the present scheme of society. The great bulk of mankind has not relished violence—what then actuated the combatants? Greed, hypocrisy, struggle for survival, and a divinely ordained predestination are among the reasons frequently advanced, but are these the true reasons?

Suppose we consider a typical past conflict. About 71 B. C. in Italy, sixty thousand slaves and peasants rallied around Spartacus, and attempted to overthrow the Roman slave system. They were cut to pieces, and Spartacus himself died fighting. What caused this carnage? One may suggest for the revolutionists: love of liberty, and struggle for survival; and for the loyalists: greed, hypocrisy, and struggle for survival; but it seems to me that these reasons are merely results of some powerful agency present in both belligerents. Both believed in the necessity of their respective principles; whence came this faith? I believe that it came from the source of all faith—conscience; the postulated faculty that distinguishes right from wrong.

For another example, take the struggle which occasioned the Apocalypse of the Christian Revelation. About 60 A. D. the Roman Empire embraced northern Africa and practically all of Europe; and the mass of Roman citizens attributed much of their success as conquerors to the potency of their own numerous gods and goddesses. They ridiculed all foreign gods, and particularly despised the Yahveh of the Jews. Gessius Florus, the procurator of Judea, taunted the Jews into insurrection, and then called for the legions of Rome. Conservative Jews who questioned the wisdom

of revolt, were promptly killed by their radical brethren, the Zealots, and it was a desperate Jewish army that strove to check the Roman campaign in Palestine. But their valor was in vain; they were ultimately annihilated. Was this predestination? It seems monstrous to charge a divine being, assumed to be merciful and just, with the fiendish plan of creating men only to pit them against each other; and if we presume an additional deity, satanic in character, we clasp a puerile polydemonism. However, both the Romans and the Jews believed in the necessity of their causes; hence, I affirm that the underlying origin of the struggle was conscience.

Consider the Crusades. These were religious wars started in 1100 by the Christians, who were enraged at the Turkish persecutions of Christian Pilgrims to Palestine. Hostilities were first directed against the Turks, but finally against all who did not profess Christianity. Hundreds of thousands of Jews in European cities were massacred. Approximately two million Christians and Mohammedans were killed. At the peak of the frenzy, more than forty thousand Christian children left France and Germany for the Holy Land. About ten thousand of them perished while crossing the mountains. A few thousand reached Marseilles, and prayed for the Mediterranean Sea to open in order that they could cross to Africa. The sea did not part, so the courageous ones of their number embarked on ships and were never heard of again. The wars of the Crusades lasted for two hundred years, and the whole gorv affair was characterized on both sides by intense fanaticism. What else is fanaticism but conscience running amuck?

What incited the recent world war, with its slogans of "Gott Mit Uns!" and "Make the World Safe for Democracy!" What aroused the Reds and Whites in the recent Russian Revolution? Today, what impels the socialists? the birth-control martyrs? the pacifists? and their hosts of conservative opponents? To the struggles of men, I can ascribe only one basic motive—conscience.

Upon the nature of conscience, I can only speculate. Our thoughts seem to be emanations coursing through a few pounds of brain matter, as electricity through a wire. Whether these emanations spring from the matter itself, or trickle from some infinite source, depends upon one's beliefs. Anyhow, Nature endows these emanations with a sense of consciousness—the emanations perceive themselves. They produce the ego, what some are pleased to call the illusion of self, and issue a dogmatic wisdom that attempts to guide the individual.

Is this wisdom generally correct? The combatants in the conflicts previously mentioned, obeyed conscience, yet at least half followed causes that contributed little to existing society. You, Reader, may object that they were insincere; but men do not martyr themselves for hypocrisy. And if you still doubt, consider a few individuals whose sincerity has convinced millions. Can one discreetly doubt the integrity of Buddha, Moses, Jesus, Paulus, Mohammed. The Bab, Swedenborg, and Mary Baker Eddy? Each believed that he or she was in touch with truth, yet it is obvious that all did not issue truth, as man defines it.

Take another instance. When the Black Plague lashed Europe, tens of thousands of Christians, known as the Flagellants, consulted their consciences and decided that the plague was the result of the wrath of God. Attempting to appease this wrath, they murdered all the Jews they could lay hands on; and then went half-naked from city to city, chanting hymns, flogging each other, and of course broadcasting the plague as they went. I think we can truthfully conclude that regardless of individual desires and supplications, the conscience may mislead into serious error.

Despite the historical examples that prove this statement, there still exists a child-like faith in conscience. For example, some of our orthodox Christians—I refer to the rabid cults—contend that the world is immersed in sin, and that this is the result of what they (the rabid cults) assume to be divine commands. While conditions today are deplorable, it seems to me that a glance at history indicates that we are today better than past generations in every way—morally, mentally and physically. But to go on, these rabid cults would save the world by legislating against science; by teaching a polydemonism, what else can one call a good- and bad-god theology; and in some instances, by terrorizing those who disagree with them.

And faith in conscience is not confined to the theosophists alone. Many of our otherwise practical business men and statesmen, knowing little or nothing about the true plans or purposes of reformers, denounce them as idiots and idealists. Ephemeral, useless causes are almost as prevalent today as they were in the past; and they are, to their followers, just as plausible and necessary as flogging was to the Flagellants.

Now, none of us would enjoy following a cause that is ultimately proven inane, so the question is—what test can one apply that will reduce this misleading of conscience to a minimum? I offer the Test of Reason, the process that recognizes only facts such as may be perceived and proven by rational men here and now, the process that gets all pertinent facts before it produces conclusions, the process that distils truth from the motley outpouring of conscience. Definitely, let us ask: what facts indicate that I am right? Are these all the pertinent facts? Are they facts acknowledged by unbiased authorities? Such introspection may seem tedious, but what other solution that has worked can one put in its place? And isn't some sort of a refining process necessary? Isn't conscience prone to whispering soft lies that uselessly mislead billions into abysses of hatred, persecution, and battle?

JOURNAL of Philosophy

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

THE CONTENTS OF RECENT NUMBERS INCLUDE:

Frances Herbert Bradley. Brand Blanshard.

"Things." GEORGE S. FULLERTON.

The Insurgence Against Reason.

Morris R. Cohen.

The Meaning of Value. JOHN DEWEY.

The Logic of Intermediate Steps.

H. L. HOLLINGWORTH.

The Material World — Snark or Boojum?

HAROLD CHAPMAN BROWN.

Edited by Professors F. J. E. Woodbridge,
W. T. Bush, and H. W. Schneider,
of Columbia University

515 WEST 116TH STREET, NEW YORK

\$4 a Year, 26 Numbers

20 Cents a Copy

HOMER AND THE PROPHETS

or

HOMER AND NOW

By Cornelia Steketee Hulst, M.A., M.Pd.

Author of St. George of Cappadocia; Balder's Death and Loke's Punishment; Indian Sketches, etc.

"Homer was altogether impious if he was not allegorizing."—Heraclitus. "Greek philosophy (Love of Wisdom) was given to God as a schoolmaster to bring the Hellenic mind to Christ."—Clement of Alexandria, in Ante-Nicene Fathers.

"Logos—This password almost made the previous culture of Greece appear to be another propadentic Old Testament to the New Gospel."—G. Stanley Hall.

Pages, 100; boards, price \$1.00

THE OPEN COURT PUBLISHING COMPANY
122 S. Michigan Avenue CHICAGO, ILLINOIS

A MODERN JOB

By Etienne Giran

Price, 75 cents

Furnished with a preface by Canon Lilley, and a portrait of its author, this work is a praiseworthy attempt to modernize the Book of Job, and to present an alternative solution of the problem of evil. Job becomes a Dutch merchant of the twentieth century. Eliphaz, Bildad, and Zophar reappear to champion different solutions of the problem. There are references to Leibnitz, Darwin, and French scientists. The upshot of the argument, which is at times closely thought out and eloquently expressed, is that the value of life consists in the contest between good and evil, and that "a perfect omnipotent God, living for all eternity in His unfathomable mystery, the Source of order, life, intelligence, beauty, and divinity," is immanent in the human will for good, and joins in a struggle where victory over evil is certain, but cannot be at once achieved."—The Oxford Magazine.

THE OPEN COURT PUBLISHING COMPANY
122 S. Michigan Avenue CHICAGO, ILLINOIS

THE MECHANICAL INVESTIGATIONS OF LEONARDO DA VINCI By IVOR B. HART

The author's primary object is to make a detailed study of the nature and value of Leonardo's contributions to the study of aeronautics. The study of flight, however, is linked up with that of mechanics, and so the whole field of his work in mechanics generally has been surveyed.

The section of Leonardo's aeronautical work is quite new and is the most complete of its kind. The translation of his manuscript, *On the Flight of Birds* is the only translation of any complete manuscript by Leonardo in English. The paragraphs on Flying Machines are especially interesting.

Illustrated edition. Pages, 240. Boards, \$4.00.

OPEN COURT PUBLISHING COMPANY

CHICAGO

LONDON

BENJAMIN PEIRCE, 1809=1880

Biographical Sketch and Bibliography by Prof. R. C. Archibald, Brown University. Reminiscences by President Emeritus, C. W. Eliot, President A. L. Lowell, Professor Emeritus W. E. Byerly, and Chancellor Arnold B. Chace.

Boards, \$1.00.

Mathematical research in American Universities began with Benjamin Peirce. His influence on students and contemporaries was extraordinary; this is borne out by the "Reminiscences." In September, 1924, President Lowell wrote also: "I have never admired the intellect of any man as much as that of Benjamin Peirce. I took every course that he gave when I was in College, and whatever I have been able to do intellectually has been due to his teaching more than to anything else."

THE OPEN COURT PUBLISHING COMPANY
122 South Michigan Avenue CHICAGO, ILLINOIS

Evolutionary Naturalism

BY

ROY WOOD SELLARS, Ph. D.

UNIVERSITY OF MICHIGAN 350 pp., Cloth, Price \$2,50

"The aim of the present investigation is to work out in a systematic fashion the possibility of an adequate naturalism. Evolutionary Naturalism does not sink man back into nature; it acknowledges all that is unique in him and vibrates as sensitively as idealism to his aspirations and passions. But the naturalist is skeptical of any central, brooding will which has planned it all. The Good is not the sun of things from which the world of things get their warmth and inspiration. The cosmos is and has its determinate nature. As man values himself and his works, he may rightly assign value to the universe which is made of stuff which has the potential power to raise itself to self-consciousness in him."

"Let man place his hope in those powers which raise him above the level of the ordinary causal nexus. It is in himself that he must trust. If his foolishness and his passions exceed his sanity and intelligence, he will make shipwreck of his opportunity."

THE OPEN COURT PUBLISHING COMPANY
122 SOUTH MICHIGAN AVENUE
CHICAGO, ILLINOIS

THE GEOMETRY OF RENE DESCARTES

Translated from the French and Latin

By David Eugene Smith and Marcia L. Latham

This epoch-making work of Descartes is the first printed treatise that ever

appeared on Analytic Geometry.

The great renaissance of mathematics in the Seventeenth Century contains stars of the first magnitude of which *La Geometrie of Descartes* and *Principia* of Newton are the most famous.

The publishers were fortunate in securing a copy of the first French edition printed in Paris in June, 1637, and a facsimile of this edition accompanies the English translation page for page.

It is an important contribution to the history of mathematics which is rapid-

ly gaining recognition as the foundation of exact science.

Fully Illustrated with Geometrical Drawings, Figures and Formulae.

Price, cloth, \$4.00

THE OPEN COURT PUBLISHING COMPANY 122 South Michigan Avenue CHICAGO, ILLINOIS

BELL'S ADVANCED MATHEMATICAL SERIES

A First Course in Nomography. By S. Brodetsky (Reader in Applied Mathematics at Leeds University). Pages, 135. 64 illustrations. Price, \$3.00.

Graphical methods of calculation are becoming ever more important in all branches of engineering. The object of this book is to explain what nomograms are, and how they can be constructed and used.

Projective Vector Algebra. By L. SILBERSTEIN (Lecturer in Mathematical Physics, University of Rome). Pp., 78. Cloth, \$1.75.

An algebra of vectors based upon the axioms of order and of connection, and independent of the axioms of congruence and of parallels, is the subtitle of this book. Some of the conclusions derivable from the subject may be helpful to readers interested in the degree of soundness of the foundations of the modern theory of relativity.

A First Course in Statistics. By D. CARADOG JONES (formerly Lecturer in Mathematics, Durham University). Pp., 268. Cloth, \$3.75.

Some acquaintance with the proper treatment of statistics has become in the highest degree necessary for investigation in any field—biological, economic or medical. The constancy of great numbers," one of the fundamental principles of the theory of statistics, makes it almost a science of prophecy.

An Elementary Treatise on Differential Equations and Their Application. By H. T. H. Piaggio, M.A., Professor of Mathematics, University College, Nottingham. Pp. 242. \$3.50.

The theory of Differential Equation is an important branch of modern mathematics. The object of this book is to give an account of the central parts of the subject in as simple a form as possible. Differential Equations arise from many problems in algebra, geometry, mechanics, physics and chemistry.

Elementary Vector Analysis with Application to Geometry and Physics. By C. E. Weatherburn, Ormond College, University of Melbourne. Pages, 184. Cloth, \$3.50.

A simple exposition of elementary analysis. Vector analysis is intended essentially for three-dimensional calculations, and its greatest service is rendered in the domains of mechanics and mathematical physics.

Weatherburn's Advanced Vector Analysis. Cloth, \$3.50.

The first four chapters of the present volume contain all the advanced vector analysis that is ordinarily required. The remaining portion of the book dealing with applications of the above theory, forms a fairly complete introduction to Mathematical Physics. An historical introduction to the subject is given in the author's Elementary Vector Analysis.

THE OPEN COURT PUBLISHING COMPANY

122 SOUTH MICHIGAN AVENUE

CHICAGO

ILLINOIS

THE CARUS MATHEMATICAL MONOGRAPHS

Published under the Auspices of the Mathematical Association of America

The expositions of mathematical subjects which these Monographs will contain are to be set forth in a manner comprehensible not only to teachers and students specializing in mathematics, but also to scientific workers in other fields, and especially to the wide circle of thoughtful readers who, having a moderate acquaintance with elementary mathematics, wish to extend this knowledge without prolonged and critical study of the mathematical journals and treatises.

The First Monograph Just off the press is entitled CALCULUS OF VARIATIONS

By GILBERT AMES BLISS, of the University of Chicago

The author of this monograph assumes that the reader has an acquaintance with the elementary principles of differential and integral Calculus, but even without such knowledge, the geometrical or mechanical statements of the problems, the introductions to the various chapters, and the italicized theorems throughout the book, should be intelligible to any reader interested in mathematics. Pages, 200; cloth, \$2.00.

THE OPEN COURT PUBLISHING COMPANY
122 S. Michigan Avenue CHICAGO, ILLINOIS

IMMANUEL KANT

1724 — 1924

Lectures delivered at Northwestern University on the Bicentenary of Kant's Birth

TABLE OF CONTENTS

Legacy of Kant	
The Need and Possibility of an Imperativistic Ethics	G. T. W. Patrick
The Cultural Environment of the Philosophy of Kant	Martin Schutze
Kant, The Seminal Thinker	Joseph A. Leighton
The Religion of Immanuel Kant	Edward Scribner Ames
Kant as a Student of Natural Science	S. G. Martin
Kant's Philosophy of Religion	J. H. Farley
Kant's Philosophy of Law	E. L. Hinman
Kant's Doctrine Concerning Perpetual Peace	J. F. Crawford
The Sources and Effects in England of Kant's Philosophy	of Beauty E. F. Carritt
Kant's Copernican Revolution	Frank Thilly

BOARDS, PRICE \$1.00

The Open Court Publishing Company

122 SOUTH MICHIGAN AVENUE CHICAGO

THE RELATION BETWEEN SCIENCE AND THEOLOGY

By C. Stuart Gager

Director of the Botanical Gardens, Brooklyn, New York Cloth, \$1.00. Pp. 100

The layman who is interested in the present important discussion between church and school will find in this small book a clear statement of the mental attitude of scientific men and their method of thought and work by which they conduct their investigations and arrive at their conclusions.

THE OPEN COURT PUBLISHING COMPANY
CHICAGO 122 S. Michigan Ave. ILLINOIS

THE BHAGAVAD GITA

or

Song of the Blessed One (India's Favorite Bible)

Edited and Interpreted by Franklin Edgerton (University of Pennsylvania)

All Hindu philosophy has a practical aim. It seeks the truth, but not the truth for its own sake. It is truth as a means of human salvation that is its object. In other words, all Hindu philosophy is religious in basis. To the Hindu Mind, "the truth shall make you free." Otherwise there is no virtue in it. This is quite as true of the later systems as of the early and less systematic speculations. To all of them knowledge is a means to an end.

Pages, 150; boards, \$1.00

THE OPEN COURT PUBLISHING COMPANY
122 S. Michigan Avenue CHICAGO, ILLINOIS

PATENTS, INVENTION AND METHOD

By H. D. POTTS

A Guide to the General Lines of Procedure in Invention and Discovery

A collection of essays by a Chartered Patent Agent who is a University man of reputation. The following three important problems are dealt with in considerable detail,

(a) THE CRITERION OF AN INVENTION.

Is it possible to fix an objective standard by which we can decide whether a given industrial improvement is an invention or not? Where does constructive skill end, and where does inventive ingenuity begin? Can we define invention in absolute terms?

(b) THE DEFINITION OF AN INVENTION.

Inventions are protected by legal documents termed specifications. How far can we speak of "Style" in such documents? What is the theory of definition of invention by means of language? What is the best method of definition in practice?

(c) THE EVOLUTION OF AN INVENTION.

Is it possible to formulate a technique of invention or discovery? Is there any method of attack which is of general value in dealing with specific industrial difficulties? Can inspiration be replaced by organized effort to any substantial extent?

For sale by all bookstores, or sent direct upon receipt of \$1.00 (paper)

THE OPEN COURT PUBLISHING COMPANY
122 S. Michigan Ave. CHICAGO

Saccheri's Euclides Vindicatus

Edited and translated by

GEORGE BRUCE HALSTED

Latin-English edition of the first non-Euclidean Geometry published in Milan, 1733.

Pages, 280

Cloth, \$2.00

A geometric endeavor in which are established the foundation principles of universal geometry, with special reference to Euclid's Parallel Postulate.

THE OPEN COURT PUBLISHING COMPANY

122 SOUTH MICHIGAN AVENUE

CHICAGO

ILLINOIS

Cornell Studies in Philosophy

Published Under the Editorial Supervision of the Professors in the Sage School of Philosophy in Cornell University, Ithaca, New York

RECENT NUMBERS

Schopenhauer's Criticism of Kant's Theory of Expe-
rience. By Radoslav A. Tsanoff, A.B., Ph.D.—pp.
xiii, 77\$0.75 net
The Principle of Individuality in the Philosophy of
Thomas Hill Green. By Harvey Gates Townsend,
A.B., Ph.D.—pp. vi, 91
John Dewey's Logical Theory. By Delton Thomas
Howard, A.M., Ph.D.—pp. vi, 135 1.00 net
Some Modern Conceptions of Natural Law. By Marie
T. Collins, A.M., Ph.D.—pp. vi, 103 1.00 net
The Ethical and Economic Theories of Adam Smith.
By Glenn R. Morrow, M.A., Ph.D.—pp. vi, 92 1.00 net
The Philosophical Bases of Asceticism in the Platonic
Writings and in Pre-Platonic Tradition. By Irl
Goldwin Whitchurch, A.M., Ph.D.—pp. 108 1.00 net
The Logic of Contemporary English Realism. By
Raymond P. Hawes, A.B., Ph.D.—pp. 147 1.25 net
The Philosophy of Emile Boutroux as Representa-
tive of French Idealism in the Nineteenth Century.
By Lucy Shephard Crawford, Ph.D.—pp. viii, 154. 1.50 net

LONGMANS, GREEN & CO.

55 FIFTH AVENUE

NEW YORK

Publishes: WILLIAMS & NORGATE, London—WILLIAMS & WILKINS CO., Baltimore — FELIX ALCAN, Paris — NICOLA ZANICHELLI, Bologna — RUIZ HERMANOS, Madrid — RENASCENCA PORTUGUESA, Porto - THE MARUZEN COMPANY, Tokyo.

CIENTI

INTERNATIONAL REVIEW OF SCIENTIFIC SYNTHESIS Published every month (each number containing 100 to 120 pages)
Editor: EUGENIO RIGNANO

IS THE ONLY REVIEW the contributors to which are really international.
 IS THE ONLY REVIEW that has a really world-wide circulation.
 IS THE ONLY REVIEW of scientific synthesis and unification that deals with the fundamental questions of all sciences: the history of the sciences, mathematics, astronomy, geology, physics, chemistry, biology, psychology and sociology.
 IS THE ONLY REVIEW of general science that by its articles on statistics, demognitude.

raphy, ethnography, economics, law, history of religions and sociology in generalall of a general, summary and synthetical character—makes itself a necessity to all thorough students of the social sciences.

IS THE ONLY REVIEW that among its contributors can boast of the most illustri-ous men of science in the whole world. A list of more than 350 of these is given

in each number.

The articles are published in the language of their authors, and every number has a supplement containing the French translation of all the articles that are not French. The review is thus completely accessible to those who know only French. (Write for a gratis specimen number to the General Secretary of "Scientia." Milan, sending 1 sh. in stamps of your country, merely to cover postal expenses).

SUBSCRIPTION: \$10.00, Post free Office: Via A. Bertani, 14-Milan (26

General Secretary: Dr. PAOLO BONETTI.

SCIENCE PROGRESS

A QUARTERLY REVIEW OF SCIENTIFIC THOUGHT, WORK, AND AFFAIRS

Edited by Lieut.-Co1. Sir RONALD ROSS K.C.B., K.C.M.G., F.R.S., N.L., D.Sc., LL.D., M.D., F.R.C.S.

Published at the beginning of JANUARY, APRIL, JULY, OCTOBER

Each number consists of about 192 pages, contributed by authorities in their respective subjects. Illustrated. 6s. net. Annual Subscription, including postage, 25s. 6d.

SCIENCE PROGRESS owes its origin to an endeavor to found a scientific journal containing original papers and summaries of the present state of knowledge in all branches of science. The necessity for such a journal is to be found in the fact that, with the specialization which necessarily accompanies the modern development of scientific thought and work, it is increasingly difficult for even the professional man of science to keep in touch with the trend of thought and the progress achieved in subjects other than those in which his immediate interests lie. This difficulty is felt by teachers and students in colleges and schools, and by the general educated public interested in scientific questions. SCIENCE PROGRESS claims to have filled this want.

JOHN MURRAY

Albemarle Street

London, W. 1