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



A CHRISTIAN GOOD SHEPHERD. From a fresco of Cyrene. (See pages 716-718.)

The Open Court Publishing Company

CHICAGO

Per copy, to cents (sixpence). Yearly, \$1.00 (in the U.P.U., 5s. 6d.).



The Open Court

A MONTHLY MAGAZINE

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

Founded by EDWARD C. HEGELER



A CHRISTIAN GOOD SHEPHERD.
From a fresco of Cyrene. (See pages 716-718.)

The Open Court Publishing Company

CHICAGO

Per copy, 10 cents (sixpence). Yearly, \$1.00 (in the U.P.U., 5s. 6d.).

CONTENTS:

Frontispiece. Head of Christ. LEONARDO DA VINCI.	PAGE
The Portrayal of Christ (Illustrated). PAUL CARUS	705
The Evolution of Taoist Doctrines. Léon Wieger	724
Poems of Confucius. Translated in verse by PAUL CARUS	733
The Bible as a Law Book. Charles S. Lobingier	738
The Smallest Republic in the World. PAUL CARUS	743
The Fourth Dimension. Hyland Clair Kirk	747
The Names of Nations in Chinese. PAUL CARUS	761
Currents of Thought in the Orient. B. K. Roy	765
Rook Remierors and Notes	767

THE CHINESE LANGUAGE AND HOW TO LEARN IT

A Manual for Beginners

By SIR WALTER HILLIER, K. C. M.

G.-C. B. Pages, 263. Cloth 8vo.

Price, \$3,75 net.

A valuable book of instruction for those who wish to fit themselves for American diplomatic service in China.

Sir Walter Caine Hillier is Professor of Chinese in King's College, London. For several years he has been officially connected with the British diplomatic service in China. His book is officially prescribed by the British authorities for the preparation of candidates for office in their colonies in China.

The author says, "The present work is intended to meet the wants of those who think they would like to learn Chinese, but are discouraged by the sight of the formidable text books with which the aspiring student is confronted."

"I think Hillier's book a great improvement on all that has been published in this direction, and I propose to recommend it to my own students as well as to outsiders who every now and then apply to me for advice in their studies."—Frederick Hirth, Columbia University, New York.

THE OPEN COURT PUBLISHING COMPANY carries a special line of books on China, its Philosophy, Religion, Language, Literature, Life and Customs. Send for complete illustrated catalogue.

THE OPEN COURT PUBLISHING CO.

CHICAGO

Send for complete illustrated catalogue.





HEAD OF CHRIST. By Leonardo da Vinci.

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. XXVII (No. 12)

DECEMBER, 1913

NO. 691

Copyright by The Open Court Publishing Company, 1913.

THE PORTRAYAL OF CHRIST.

BY THE EDITOR.

THE early Christians were full of faith and enthusiasm and believed that everything Christian was absolutely new and that the new truth they had received was spiritual, not born of sense; that it was quite contrary to nature, to the human in man, and different from everything that existed or had existed in the pagan world; that it was supernatural and so formed a contrast to science and to art. Under these circumstances the conception of Christ was in their opinion beyond representation, and it was even deemed sinful to attempt a portrayal of him who was the incarnation of the mystery of truth. With the progress of history this overexultant view was gradually modified. The original iconoclasm hostile to art sobered down and in the course of its growth Christianity developed a Christ type that satisfied the religious conception of the Christ ideal. The height of the development of Christian art was reached in the time of the Renaissance, but the period of determining the Christ type, the struggle of art for the permission to determine it, will prove both interesting and instructive; it will allow us an insight into the nature of man's religious needs in art, and an epitome of this chapter in the history of Christian art will throw light on the function of the ideal in human life.

Every religion, every age, every world-conception has ideals, and in its early period Christianity was not believed to stand in need of having its own ideal worked out in an artistic form, for such a conception was deemed to be pagan and idolatrous. We of a later generation understand how narrow was this view, and that

among nations imbued with a natural artistic instinct it could not be maintained forever, but it took centuries to overcome the prejudice against graven or painted images, and to develop in art the Christ type, a portrayal of the God-man, the ideal of Christianity.

* * *

By a great majority of the early Christians Christ was thought to be ungainly, because Isaiah (liii. 2) says of him: "He hath no form nor comeliness; and when we shall see him, there is no beauty that we should desire him." This same chapter is most significant because it describes the expected Messiah as "a man of sorrows" and contains among other verses the following passage: "Surely he hath borne our griefs and carried our sorrows: yet we did esteem him stricken, smitten of God, and afflicted. But he was wounded for our transgressions, he was bruised for our iniquities; the chastisement of our peace was upon him; and with his stripes we are healed."

It will be difficult to explain what the prophet meant when writing these lines. In the Polychrome Bible the explanation is offered that the prophet here personifies the ideal of the people of Israel, and declares that while Israel in its downtrodden condition appears ungainly in the eyes of the world, it has yet a great mission to perform. But the passage seems too personal to allow such a personification of the genius of the people, and it is more probable that here reference is made to a definite personality, who though not possessing striking qualities is promised to be a man helpful to the cause of Israel. The sufferings and humiliations to which he is exposed are accounted for on the ground that in standing up for Israel, he suffers for Israel's sake. The man referred to by the prophet did not attain sufficient prominence in the history of the nation to be remembered by name. Hence he is forgotten while the passage itself is preserved on account of its literary beauty as well as the depth of sentiment which it contains.

The early Christians insisted on obliterating the personal appearance of Christ because Paul (2 Cor. v. 16) expressly declares, "Yea, though we have known Christ after the flesh, yet now henceforth we know him no more." This view is further elaborated by Clement of Alexandria who says that Christ scorned beautiful appearance lest any of his hearers would be disturbed thereby in the admiration of the beauty of his words. And according to Origen Jesus had no definite form but appeared different to different people. Here we have a strange parallel to Buddhist views for it is stated in the Book of the Great Decease that "when the Buddha entered

into an assembly he always before he seated himself became in color like unto the color of his audience and in speech like unto their speech."

The idea that Christ was ungainly could not in the long run influence the development of Christian art. This anti-artistic notion defeated itself and produced no monuments that were preserved. The conception of Christ as the "man of sorrows" which was predominant among the early Christians, had a more lasting effect, but the Christians of a later age, especially after Constantine's conversion, saw the brighter side in the personality of Christ, and so they remembered the passage in Ps. xlv. 2: "Thou art fairer than the children of men; grace is poured into thy lips, therefore God hath blessed thee forever," and under the influence of this thought, Christ was regarded as an ideal man, beautiful and majestic in appearance. This view gained more and more influence and finally determined the type of the Christ picture which was to become acceptable to Christendom. When the type was approximately agreed upon, it found expression in a description of the personality of Christ which in former centuries was assumed to be genuine but is now almost unanimously regarded as spurious. This document is a letter purporting to come from a certain Lentulus, a predecessor of Pontius Pilate, who calls himself "President of the people of Jerusalem" and addresses his epistles "To the Roman Senate and People." The letter was probably composed in the twelfth century and reads as follows:

"There has appeared in our times, and still lives, a man of great virtue named Christ Jesus, who is called by the Gentiles a prophet of truth and whom his disciples call the Son of God, raising the dead and healing diseases. He is a man of lofty stature, handsome, having a venerable countenance which the beholders can both love and fear. His hair has the color of a ripe hazel-nut, almost smooth down to the ears, and below that somewhat curling and falling down upon the shoulders in waves. It is of an Oriental color and is parted in the middle of the head after the manner of the Nazarenes. His forehead is smooth and very serene, and his face without any wrinkle or spot, and beautiful with a slight flush. His nose and mouth are without fault; his beard is abundant and auburn like the hair of his head, not long but forked. His eyes are gray, clear and sparkling. He is terrible in rebuke, calm and loving in admonition, cheerful but preserving gravity, has never been seen to laugh but often to weep. Also in stature of body he is tall; and his hands and limbs

¹ Cf. the author's Gospel of Buddha, Chap. 61.

are beautiful to look upon. In speech he is grave, reserved, and modest; and he is fair among the children of men."

Another description of the personality of Jesus, probably earlier in its real date but much later than the pretensions of the former report, is preserved in a letter from John of Damascus to the Emperor Theophilus, an author of the eighth century who claims to rely on older authorities. His description differs slightly from that attributed to Lentulus mainly by speaking of the hair of Jesus as curling and of a glossy black, his complexion as of a yellowish color like that of wheat (in which particular it is said he resembled his mother), and further it is stated that his eyebrows touched one another.

The difference between the two descriptions is mostly verbal and indicates that they are expressions of the same prevalent views. While the Christ type noticeably converges toward the same ideal it is peculiar that in the latter account his complexion is described as "of a yellowish color like that of wheat." A comparison to wheat indicates a symbolism, and in this connection it is remarkable that in the night when the Buddha passed away he was dressed in a cloth of burnished gold, and that on this occasion the skin of the Blessed One became so exceedingly bright that the burnished cloth of gold appeared dull in comparison with it. The same transfiguration took place also in the night the Buddha attained enlightenment, and it seems that this idea of a radiance brighter than gold in a transfigured saviour is based on an ancient tradition. Further we must bear in mind that the grain of wheat is considered in pagan as well as in Pauline thought (1 Cor. xv. 35-42) as a symbol of immortality, promising a resurrection from the grave. Ears of wheat figure in the Eleusinian mysteries.

* * *

While Eusebius and St. Augustine still vigorously objected to the custom of making or keeping portraits of Christ which they deemed sheer idolatry, the need of having their Saviour visible before their eyes was felt more and more among the Christian people. It was a human want and had to be satisfied, and the old prejudice inherited from the Jews who would brook no likeness of the Deity of any kind was gradually overcome by portraits which were claimed to have originated in a miraculous way as not made with human hands. The Abgar picture of Jesus, called the Edessenum (the same idea being imitated later on in the Veronica legend) prepared Christianity to tolerate portraits of Christ. Such was the first phase in the development of Christ portraits, but a

definite conception of the Christ face worked its way out almost simultaneously and independently of Edessenums and even previous to the Veronicas.

Considering the prejudice which obtained in the circles of early Christians against art, and especially against portraits, it is not surprising that the first representatives of Christ were found not among Christians but among pagans, and next to the pagans among the heretics. Alexander Severus (c. 205-235 A. D.) is reported to have kept in the chapel of his palace among the busts of the sages and religious leaders of the world, portraits of Orpheus, Abraham, Apollonius, and Christ, but the latitude and the philosophical spirit of the broad-minded pagan emperor did not meet with the approval of the early Christians who regarded as un-Christian the very respect with which busts of great men were treated, and saw in the very fact of the emperor having a portrait that claimed to represent Jesus an evidence that he did not understand the spirit of the new faith.

The next mention of portraits of Christ gives us the information that they were found among the gnostic sect of Carpocratians, who claimed that they had been copied from a portrait painted at the command of Pontius Pilate. We read in Irenæus of a certain woman "Marcellina who came to Rome under [the episcopate of] Anicetus and led many people astray. They style themselves gnostics. They also possess images, some of them painted, and others formed from different kinds of material; while they maintain that a likeness of Christ was made by Pilate at that time when Jesus lived among men. They crown these images, and set them up along with the images of the philosophers of the world; that is to say, with the images of Pythagoras, and Plato, and Aristotle, and the rest. They have also other modes of honoring these images, after the same manner as the Gentiles."

We need not enter here into a discussion of the nature of the statue which stood at Cæsarea Philippi,² for we deem it most probable that it was a representation of Hadrian erected as an expression of gratitude toward that popular and so-called provincial emperor, but we ought to mention that this monument is sometimes also explained as a representation of Æsculapius (Asklepios) on account of the inscription which according to Eusebius was "To the Saviour" or "To the True Physician," but we must know

² See The Open Court, for December, 1908, pp. 721-722.

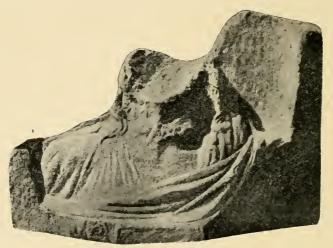
 $^{^3}$ $\tau \tilde{\omega}$ $\sigma \omega \tau \tilde{\eta} \rho \iota$.

^{*} τῷ αληθινῷ ἰατρῷ.

that while Æsculapius was called the true physician, Emperor Augustus had acquired the title "Saviour" several years before the Christian era when the expectation of a saviour was quite common and the title "true physician" was often used in connection with this designation.

* * *

In the cemetery of St. Sebastian at Rome, the torso of a marble bust was discovered by excavators in the year 1887, which Orazio Marucchi has rather rashly declared to belong to a head of Christ. It is a pity, however, that the face itself is broken off and only the neck with some curls of hair falling upon the shoulders is preserved, which makes it very difficult to form a definite opinion. The main



AN ALLEGED BUST OF CHRIST.
After Marucchi.

justification in support of Marucchi's view appears to be the style of the locks which are very similar to those we are accustomed to see in many Christ pictures of an early date. According to the style and treatment of the marble, this bust has been assigned to the fourth century or may even be of an earlier date, and if it was indeed meant for a Christ head it would be a relic of greatest interest as the oldest representation of Christ in existence.

The mutilation of the head makes us pause. Is it not possible and even probable that this Christ bust (if such it is) must have been of pagan or gnostic origin? If that be so, the broken condition in which it was found would be accounted for. Pagans have never destroyed or injured statues of the gods of other peoples. When

the Romans waged wars on other nations, they were most careful not to offend foreign deities and even attempted to conciliate their wrath, while Christians considered it a meritorious deed to smash idols.

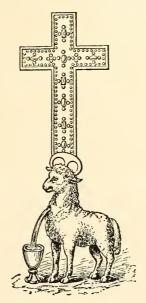


SYMBOLS OF CHRIST ON THE GRAVE OF AEMILIA CYRIACE.





CHRIST AS THE FISH ON THE ROOD.



CHRIST AS A LAMB.

In a similar spirit the ancient Persians destroyed temples for religious motives, believing it wrong to incarcerate gods within walls. If Marucchi's bust was really made with the intention to represent Christ, we feel inclined to assume that being of heretical origin it fell into the hands of a mob of iconoclastic Christians who regarded the very making of images as idolatry; and in this case we may have before us the torso of a Christ such as existed in the homes of men like Severus or of some wealthy Carpocratian.

Since it was originally idolatrous to make or to tolerate any Christ picture at all, the early Christians represented the Saviour



CHRIST AS ORPHEUS IN THE CATACOMBS.

by symbols, either under the form of the monogram of Christ, or as a lamb, or as a fish; or as Orpheus because the Orpheus cult in classical antiquity taught the immortality of the soul.

It is strange that a pagan god could have been selected as a type under which to symbolize Christ, but the situation is easily explained if we consider that Orpheus was one of the later gods. He was the magic singer who, as inaugurator of the Orphean mysteries, had descended into hell and (like Odysseus) had come out of it alive; he was an outsider of the old orthodox Pantheon of paganism; no altars were erected to him, nor was he represented in the form of statues to be worshiped in temples. His name was



ORPHEUS, EURYDICE AND HERMES.

whispered into the ears of neophytes in the Orphean mysteries, and his figure was chiseled on the tombs of the dead in company with his beloved wife Eurydice and with Hermes, the leader of souls.

There he appears, not as a powerful god but as a divine man, as a prophet, a poet and musician. Orpheus attempted to lead his wife Eurydice back to life, but he was not successful because he failed to fulfil the condition that he should not look back. In his anxiety to behold his wife he turned and saw her disappear; yet after all he had the confidence that she was not dead but alive, and that the time would come when they would again be united. This human feature in the story of Orpheus made his figure dear to all. In fact the Orphean and other mysteries helped to prepare the way for Christianity, and so even the Christians felt in sympathy with the meaning of the legend.

Hermes (in Latin Mercury) is mentioned in connection with the Orpheus legend, and we will state incidentally that he too escaped the general odium heaped upon the gods of the orthodox Pantheon in the days of early Christianity. He, psychopompos, leader of souls,



HERMES RAISING THE DEAD.

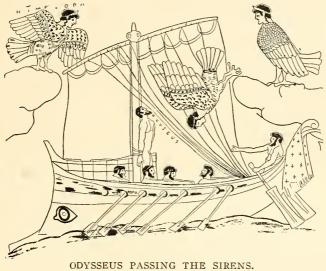
A gem.

played an important part in the time of transition as representing the idea of resurrection. His name was identified with a spiritual interpretation of the old views. He represented the new thought at the close of classical antiquity. He was called the thrice great, *Trismegistos*, and the shepherd of men, *Poimander*.

There is scarcely any antipathy to this pagan conception of immortality, and it was but natural that the Christians saw their own Saviour, Jesus Christ, in the figures of Orpheus, Odysseus and even in Hermes. The portrayal of Orpheus on tombstones did not remind them of idols. Orpheus was not worshiped with incense and sacrifices as the other gods before whose statues altars were erected. He was not considered as a demon but as one who in his own experience exemplified the bereavement which will come to all people sooner or later. He was a prototype of the Saviour who would bring the boon of life eternal to suffering mankind.

Odysseus was another symbolical personality of the same type

who was remembered by the Christians. They did not represent his descent into Hades, however, presumably because the details smacked too much of the old pagan notions, but they pictured him as he passed by the sirens, a form of harpies or death demons. He



From painting on a Greek hydra.

could hear their voices and yet would not fall a prey to their allurements.

It is interesting to notice that the Christian Odysseus pictures are imitations of pagan art, as the same *motif* exists in a painting on a hydra discovered in Vulci. The latter shows Odysseus passing by the Sirens, and their despair is so great that one of them throws



ODYSSEUS PASSING THE SIRENS. From a Christian sarcophagus in St. Callistus.

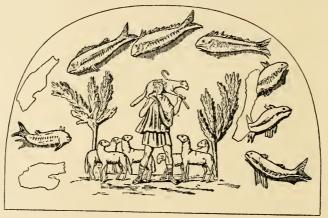
herself down into the floods, just as the sphinx of Œdipus precipitates herself into the abyss when he solves her riddle. The idea of Odysseus as a victor over the demons of death is not made prominent in the ancient representations, although it is not entirely absent, but in the Christian pictures of the same subject there is no

other interest in the scene than this idea of symbolizing the attainment of immortality. It is remarkable, however, that in this pagan representation the prow of the ship of Odysseus is covered with a cloth bearing crosses, suggesting the idea that the cross as a sign of salvation was used as a powerful magic charm before the appearance of Christianity.

The Christian representation of Christ as Odysseus is found on the sarcophagus of Tyranius, whose monogram appears in an empty field in front. The sculpture is well done, and we may assume that the person at the left of the monogram represents Tyranius himself.

* * *

With the fading respect for ancient pagan mysteries, comparisons of Christ with pagan heroes and demigods were gradually

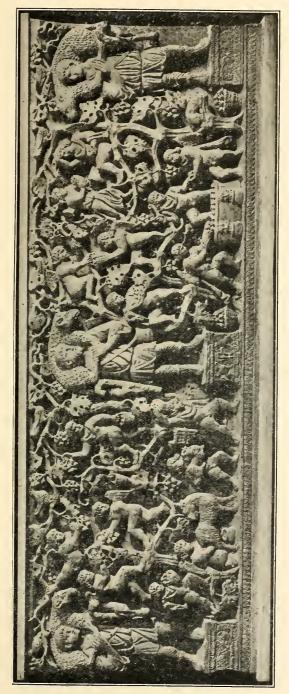


A CHRISTIAN GOOD SHEPHERD. From a fresco of Cyrene.

abandoned, while another type, that of Christ as herdsman, became more and more popular. Though this simile was also inherited from paganism, it was more justified than Orpheus in Christianity because of the parable in the New Testament in which Christ is compared to a good shepherd.

The figure of Christ as the good shepherd appears on communion cups at the end of the second century, although the custom was still vigorously denounced by Tertullian. Yet in spite of all opposition it spread more and more, and in the catacombs representations of Christ as the good shepherd were found in great numbers.

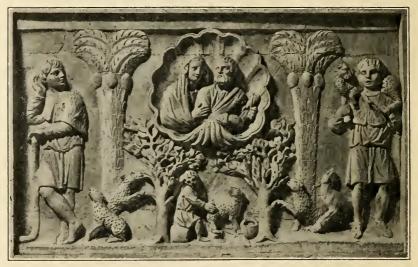
We here reproduce a Christian good shepherd from a fresco of the Cyrene catacombs which is somewhat different from the cor-



Sarcophagus of the fourth (possibly fifth) century. In the Lateran Museum. THREE LAMB-BEARING SHEPHERDS (PROBABLY PAGAN).

responding pictures in the Roman catacombs, because we have here a Greek representation which differs a little from the Roman type. The good shepherd wears the paenula over his tunic and is surrounded by seven big fishes which float about him in the air. Furthermore he wears on his head a wreath of leaves. There is obviously a symbolic meaning in the number of the fishes and lambs, both being seven.

There are numerous sarcophagi which show the figure of a youth carrying a lamb, and considering the fact that we have to deal here with a type that was a favorite *motif* in pagan days, we must not claim every one of them as Christian. There is in the



FRAGMENT OF SARCOPHAGUS.
In the Lateran.

Lateran, for instance, a sarcophagus which is thoroughly pagan in taste and exhibits not one but three shepherds carrying lambs. It is remarkable that the one in the center is bearded while those on either side are youths. The rest of the surface is filled with little cupids gathering grapes, pressing wine, and one of them milking a ewe. The crooks in their hands mark the three lamb-bearers as shepherds, the workmanship of the high relief is excellent and archeologists attribute the sarcophagus to the fourth century.

Another sarcophagus in the Lateran of unknown date, scarcely later than 400 A. D., shows in the center a medallion which might be regarded as a Christ portrait holding in his left hand a scroll, and yet there is otherwise no Christian emblem but on the contrary



PAGAN RELIEFS IN THE LATERAN. OF UNKNOWN DATE.

we see before us only unquestionably pagan scenes, such as incense offerings made by cupids, and on the ground lies a rooster sacrificed as a gift to Æsculapius after death in gratitude for having been cured of the malady of life in the flesh. There are two genii with torches, one of them lowering his torch over a prostrate woman. May not the portrait with the scroll represent the deceased person,



APOLLONIUS OF TYANA.

possibly an author, a lawyer, or an orator? Or may we not have here a pagan teacher like Apollonius who was portrayed in a similar way? Who can tell!

On top of this obviously pagan sarcophagus there stands another marble relief of the same character. Two flying cupids hold up a wreath encircling a portrait and on either side appears the group of Cupid and Psyche.



SARCOPHAGUS ATTRIBUTED TO THE THIRTEENTH CENTURY.

In the Lateran.

The Lateran contains also sarcophagi which bear a more or less decidedly Christian character. There is one which exhibits in a medallionlike shell the portraits of the couple for whom the sarcophagus was made. On either side is a shepherd boy, one leaning on an inverted crook and the other bearing a lamb, while a dog is looking up affectionately. If it is Christian, we have no definite proof, and being a mere fragment we are unable to deter-

mine the date. The fact that there are two shepherds my be adduced in favor of the theory that we have before us a rustic scene introduced as a mere ornament or to indicate the delight which the owner took in pastoral life.

Another sarcophagus of a much later date (for it is commonly assumed to belong to the end of the thirteenth century) shows the good shepherd without a crook standing in the center and the two deceased persons, husband and wife, appear in family groups on either side. On the left the man is reading from a scroll and discussing the contents with two friends, while his wife in the position



THE GOOD SHEPHERD OF THE LATERAN.

of an *orante* is standing with two women who seem to bid her goodbye.

It is thought that gold-bottomed glasses (fondi d'oro) were not manufactured later than in the 4th century, and many can be dated in the third. They represent subjects alluded to in passages of contemporaneous ecclesiastical literature, and since large numbers of them have been discovered in the catacombs which were not used after the year 401, we are justified in assigning them mainly to the fourth century. One interesting specimen bears the inscription pie zeses, "Oh pious man, thou shalt live." It shows Jesus as the beardless good shepherd standing on a mound, on his right hand Paul and

on his left Peter with the cross. Underneath, the Christ idea is represented by a lamb standing on a hill from which four rivers are flowing. The apostles are represented as six sheep, and the locality is indicated by the inscription to be in the neighborhood of Jerusalem. The same conception of Christ as the good shepherd appears in reliefs on lamps and on sarcophagi, and also in the



A GOOD SHEPHERD OF THE FOURTH CENTURY.

In the Vatican Library.

shape of statues. The most beautiful among these is the so-called statuette of the good shepherd now preserved in the Lateran.

The pagan origin of this symbol cannot be doubted. Hermes, one of the pagan forerunners of the Christ ideal, as we have mentioned above, is called *Poimander*, "shepherd of men," and the picture of a shepherd presumably without any reference to religion occurs several times simply as an idyllic picture, a *motif* of country life. In a fresco originally in the Naso catacombs of pre-Christian Rome,

there is a series of pastoral scenes representing the four seasons. Spring is illustrated as a girl carrying a basket of flowers while a shepherd with his staff in one hand holds with the other a goat lying across his shoulders. His attitude is very similar to that typical of the good shepherd, but he is nude, whereas Christian pictures show the good shepherd always clad in a tunic.⁵

Visitors to Rome will find a lamb-bearing youth represented in a fresco painted on the wall of the *triclinium*, or dining-room, of Livia, the wife of Augustus. The scene pictures a sacrifice and in the background stands a youth in a white tunic carrying a lamb to be offered on the altar.

In this connection we will remind the reader of the interesting fact that the figure of the good shepherd appears on the Buddhist sculptures at Gandhara where it serves a purely ornamental purpose. The type had been carried thither by the Greek artists imported during the middle of the second century B. C. by the Yavana Kings, the Greek conquerors of the Punjab who, walking in the footprints of Alexander the Great, built up a Greco-Indian empire. The Buddhist good shepherd is dressed like his Christian parallel and holds the lamb in the same way; yet the former is without any doubt the older by two centuries.

Here is a straw in the wind that proves how much humanity all over the world is indebted to ancient Greece; for consider that the same artists who carried the ideal of a good shepherd eastward to Gandhara produced also the prototype of the Buddha who was modeled in his original form after the Greek conception of Apollo.⁶

[TO BE CONTINUED.]

The writer regrets that he has not been able to find any illustration of this goatherd of the catacombs of the gens Naso. He would be grateful to any one who would point out to him where such a reproduction can be found. These catacombs lie on the Via Appia, but some of their most remarkable antiquities have been removed. One sarcophagus has been taken to the Vatican Museum, and the custodian of these catacombs, while showing the walls of the family chapel where the frescoes had been, informed the author that they too had been transferred to some part of the Vatican collections; but no trace of them could be found there.

⁶ An illustration of the Buddha of Gandhara will be found in *The Open Court* of October, 1913, page 611. In the same number (page 614) there is also an illustration of the Buddhist lamb-bearer on a piece of Gandhara sculpture representing the Buddhist nativity.

THE EVOLUTION OF TAOIST DOCTRINES.1

BY LÉON WIEGER.

THE early fathers of Taoism, Lao-tze, Lieh-tze, and Chwang-tze, who lived from the fifth to the fourth century B. C., were philosophers and controversialists. Without denying the existence of a Lord on High as ancient as China,² without opposing the paltry notions of the "Grand Plan",³ they looked farther and higher for the origin of all things. Their researches tend practically toward a naturalistic pantheism obviously inspired by contemporary Indian systems.⁴

A unique First Principle, at first concentrated and inactive, begins to emanate, to produce. In its passive aspect, it is called Tao; in its active aspect, Teh.⁵ By its emanation the Principle created heaven, the earth and the air between them, a trinity from which all beings are brought forth; or rather a duality, heaven and earth acting and reacting as a pair, the air between serving as mate-

- ¹ [Translated from the preface of the first volume (*Le Canon taoiste*) of the author's work, *Taoisme* (1911) by Lydia G. Robinson. For a review of this work see p. 767.]
- ³ The ancient Chinese books say that he governs the world but they do not say that he created it. Hence the question of origin remained open.
- * A document of 1122 B .C. See my Textes philosophiques, p. 25. [Cf. Carus, Chinese Philosophy, pp. 21-24.]
- ⁴ Such as the Upanishads. See my Bouddhisme Chinois, Vol. I, Introduction, pp. 40-58. Complete identity with India and an evident innovation in China. Modern Chinese critics are unanimous in stating that Taoism did not originate in ancient Chinese philosophy but was elaborated by the chroniclers who were the custodians of national and foreign documents. The assertion is dated far back. It is written in all characters in the bibliographical Index of the first Han dynasty. This text dates from the first century before the Christian era.
- ⁶ I have often been asked if the two Chinese terms Tao and Teh, whose meaning in the Taoist sense is not natural but acquired, might not have been originally the transliteration of the Sanskrit words Tat and Tyad, primary being and secondary beings, being and what remains. I would see in Lao-tze more than a Sanskritism.

rial.⁶ The Principle dwells and operates in all. It does not think but is thought. It does not ordain but it is law. From it emanates with its being the destiny of every being. In nature which has originated from the Principle, there are certain special features like the poles of its power of emanation. From heaven emanates the fecundating (male) quality, from earth the productive (female) quality. Special effluvia proceed from the stars, the celestial anodes, and from the mountains, the terrestrial cathodes. These forces are beneficent when they are normal, that is, when they are developed in the direction impressed on the cosmos by the Principle. They are harmful when they are abnormal, misdirected, deflected.⁷

In every being, whether mineral, vegetable, animal or man, there is a soul which partakes of the universal Principle as the principle of its particular nature and special properties. As it grows older each soul rises higher, its virtue increases to a higher degree. The soul of an old object acquires a certain reason; the soul of an old tree acts in a certain direction; the soul of an old animal thinks almost like a man; the soul of an old man fathoms space and time. These steps of progress are accomplished by acquired experience, by stored-up knowledge. Souls that have learned nothing return at death into the great unknowing All; those that have learned something transmigrate in accordance with their acquired knowledge. Human souls that have attained great wisdom can exist for a time in a garment of ethereal substance before their reincarnation. Those that have learned the great secret that all is one, tat-tvam, are spared metempsychosis and return into the conscious Principle.

Since everything is one there is no specific distinction between good and evil. This identity of contraries is taught by the Taoist fathers with an insistence bordering on fanaticism. Hence they do not teach to do good and to avoid evil, for they recognize neither good nor evil. In their eyes man has but one great duty, and that is to unite himself to the primordial Principle of which he is a temporary end, to desire what the Principle desires and to do what the Principle does.

⁶I regret to say that certain extremists see a revelation of the trinity in the text of Lao-tze, "one begets two, two begets three, three begets all things," the meaning of which is that the Principle, at first motionless (one), next by alternations of movement and rest (two), produced heaven and earth, and air-substance (three), from which all beings have been derived.

⁷ Electricity, currents, waves, vibrations, ions, radio-activity; mesmerism, hypnotism, effects at a distance, telepathy, almost all the lucubrations of occultists and spiritists—all these things appear perfectly natural to the Taoists; to them the world is full of emanating virtues.

From this doctrine follow three practical consequences:

- 1. Since the Principle made him a thinking creature, man ought to think as much as possible—to meditate, to investigate; not in order to acquire manifold and varied knowledge but in order to appropriate in the most intense degree the unique cosmic knowledge that he is one with the Principle, that he is the Principle, that everything is the Principle, that it is therefore sufficient to concentrate his attention upon this center, ignoring points in the periphery—individuals and details.
- 2. Since the Principle has invested him with a corporeal matrix and has determined a fixed number of years for his life, man ought so to act that his body will live to the end of this number of years, that death will not come before its time because of premature waste of the body. Otherwise his abortive soul will descend in the ladder, will become a monster or will even return into the unthinking All. Hence arises the Taoists' hygienic cult, their practical interest in questions relating to habits and diet, their interest in medicine and pharmacy. Hence also arises the Taoist ethics which is the hygiene of the soul: the suppression of the passions because they consume; continence and abstinence because luxury and gormandizing are destructive;8 especially prohibition of ambition and of attempts at success because nothing is more corrosive. With this understanding, in the faith of his identity with the Principle, with the consciousness that he has neither wearied his soul nor worn out his body and that therefore he has nothing with which to reproach himself, the Taoist awaits the end of his years and dies in an unprecedented peace without changing expression, as the texts say. For him there is no fear of death nor any terror in the hereafter. To die is to change his worn-out garment for a new one which will be better.
- 3. Since the Principle determines the course of all beings it is man's duty not to interfere with anything; not to put his finger into the machinery, into the gearing; to attend to his own business and not to require anything of any one; to let the universe go its way, this fly-wheel which the Principle keeps in motion.⁹ The Taoist
- ⁸ A circumstance which at first sight seems most singular is that many celebrated Taoists though very moderate eaters were heavy drinkers. This is because in their opinion alcohol stimulates the vital energy, and drunkenness is no disadvantage. Therefore to drink conforms to their theory, and they put it in practice whenever they can.

⁹ The formula for this non-interference with the decrees of the Principle is wu-wei which is badly translated by "not-doing." The meaning is to do nothing contrary to what is foreordained. Many Taoist terms ought to be translated in the Taoist sense to avoid misinterpretation; thus wu is not the denial of being, but the denial of (bodily) form, the absence of definite (concrete) form, etc.

looks upon its rotation with impassive eye. For him nothing can happen wrong. The point of the rim which now is at the bottom will soon be on top. Necessary alternations, controlled by the Principle and governed by the yin yang numbers and phases, must succeed each other. They must be given free course since this instability is according to law. So much the worse for inventors of systems, moralists, politicians, idealists and Utopists of every kind. Country, government, progress, ideals, plans, projects, formulas,—the Taoist smiles at all these things. Let matters go then as they can. It is the number, it is the period, it is the Principle which makes them go on in this way. Mad indeed would be the man who would struggle to make them go in the opposite direction. His failure is foreordained. The worst interference with the normal march of the universe is war, for it puts an end to lives before the appointed time and against the will of the Principle.

The Taoist fathers were never aggressive, because impassioned controversy would have used up their soul and body. For their ordinary contemporaries they had a compassionate disdain which is often amusing. Confucius however was singled out to be treated by them with irony and scorn because they saw in him a man of artificial ritual and conventional virtue, the destroyer of what is natural and an opponent of the Principle. Lao-tze refuted the teachings of the Master, without calling him by name. Lieh-tze undertook to do so more fundamentally, but Chwang-tze made the poor sage, who had then been dead for about one hundred and fifty years, his favorite target. The pages in which he turns him round and round, rolls him over, converts him, makes him abjure his past errors and teach Taoism, count among the most spirited which Chinese literature has produced.¹⁰ What is more, they are very important because they show what were the positions of the school of Confucius and the opposing schools a century after his death, the strength and weakness of both sides.

These philosophers had successors, pantheists like themselves, and a few followers; but not many, for only intellectual minds arrive at the heights of such abstruse theories. Then Taoism commenced to develop in a more practical sense from the time of the fathers themselves to the fourth century A. D. This evolution was rapid during the third century. About the second century before the Christian era it resulted in a sort of theism, 11 the principal features

¹⁰ See Taoisme, Vol. II, "Les Pères du système taoiste."

¹¹ Since Lao-tze, Lieh-tze and Chwang-tze never denied the existence of the Lord on High, were they not also theists? I do not think so. They pre-

of which are as follows: The emanations (shan) of nature were personified and heaven and earth became peopled with non-human transcendent beings varying in degrees of intelligence and power.¹²



THE GENIUS OF THE YELLOW RIVER.

Illustration on the cover of Dr. Wieger's Taoisme, Vol. I.

tended so strongly to have nothing to do with him, to pass him by in silence, that I strongly suspect their faith in his existence. It is true they never denied him, but they never invoked anything but the Principle. Practically they were pantheists.

¹⁸ A text of the year 211 B. C. relates that a slight emanation shan of a

The *chan*, men who rose into the air in full daylight before the eyes of large numbers of spectators with their bodies entirely etherealized in life, moved at will in space and inhabited the heavenly bodies, especially those forming the square of the Great Bear and the constellations around the poles. Here they formed the court of the Lord on High who since the year 113 was called the Supreme One. The Taoist books do not contain biographies of these beings. Mention is made of their apotheosis as if it were not to be contradicted. Their life would last, like that of the Indian *deva*, for a long time, for a cosmic period and even more, but not for always. Only the Supreme One survives every cataclysm and exists always unchanged.¹³

The sages (shang) form a small special group among the chan. They were scholars when on earth and are now the chiefs of the polar Elysium. The many Taoist ascetics retired into the fine locations of the mountains to live there in peace; they were exalted men (hsien), or men of the mountain, the equivalent of the Indian forest-dwellers¹⁴ who did not carry asceticism to the extreme of complete etherealization but developed in themselves the supernatural child, the new man. These saints depart this life by the division of the body; that is to say, one day the child escapes leaving an empty skin like the shell of cicada or the cocoon of a chrysalis. Then it strolls on the high mountains or dwells in happy isles—delivered from the grosser needs of nature, yet eating, drinking and even becoming intoxicated on occasion, continuing to exist during long centuries, but not forever, and less long a time than the chan.¹⁵

mountain or river has knowledge only to the end of the year, but more important emanations are conscious for a longer time, each according to its degree.

¹⁸ According to the Taoist definition the Supreme One is the *shan* of heaven, emanated from the *ch'i* of heaven in its totality. Fundamentally therefore it is of the same nature as the other *shan*, and I am told that I should call Taoism a polytheism and not a theism. I answer that whatever is the substance which constitutes his being, the Taoists ascribe to the Supreme One attributes which belong only to him and distinguish him from all the other *shan* sufficiently to make him the supreme God of a theism. He alone lives eternally while others perish in the destruction of the cosmos. He alone is ruler of the universe and of men. Theoretically he is beneath the Tao, the universal predetermination and cosmic fate; but practically this subordination is ignored, in fact does not exist; and the Supreme One in the opinion of believers is the chief of the universe, omnipotent and omniscient.

¹⁴ See my Bouddhisme chinois, Vol. I, p. 53.

of these exclusively Taoist beings, I am obliged to my great regret to retain the Chinese terms. The word "spirit" does not primarily fit any of these categories. Their most ethereal members still bear some sheath of rarified matter. Neither primitive Taoism, nor Buddhism, nor Confucianism had any notion of spiritual substance, of pure spirit apart from matter.

An army of *Lei-Kung*, genii of thunder, returning to the class of the *shan*, is accused of concealing incorrigibly wicked men in the name of the Supreme One. Comparison of the texts leaves no doubt of the Indian origin of these avengers, modeled after the Maruts, the sons of Rudra. This is the first form of penal sanction. There is not yet any trace of a hell or of punishment after death. It is not until later from contact with Yogism and Buddhism, that the "long night" appears, the "infernal city" with its tribunals, ¹⁶ etc.

To reach the two degrees of transcendental existence accessible to man, those of chan and hsien—the complete etherealization or the endogenesis of the child which is to survive—it is necessary to practise the Taoist moral and physical dietetics. The effects of this diet are strengthened by the absorption of the essence of vin and vang. From these ideas first arise very complicated systems of nourishment, theories of cold and heat, theories and systems whose popularization has made the Chinese, even those who are not Taoists, a nation of hypochondriacs. From the same ideas originate the practices of kinesitherapy, mechanotherapy and massage, intended to make the vital spirit circulate in the body, to loosen its knots (sic!) to free from obstructions and to expel injurious fluids from the organism. From the desire to assimilate the cosmic essence arises the cure by means of light, phototherapy, the exposure of the nude body to the solar light, the quintessence of the yang, and to the lunar light, the quintessence of the yin.

From the same desire also arises the Taoist ærotherapy,¹⁷ the theory of which is as follows: When the air, which is the substratum of every formation, is assimilated by the organism by being introduced under pressure and retained by force, it repairs the bodily waste, and its excess united with the sperm forms the child by condensation. From this theory arose daily exercises analogous to those of the June bug, which in preparing to take its flight stores up air in its trachea with a pumplike motion. The devotees continue these exercises for hours with conviction. They are very wearisome, especially the prolonged holding of the breath after the manner of ocean divers.

From the same desire arises what has been called Taoist alchemy, which consists in assimilating the quintessence of the *yin* and the *yang*. The light of the moon is one form of the quintessence of the *yin* and the dew is another. Not being acquainted with the laws which regulate evaporation and condensation, the ancient Chi-

¹⁰ See my Bouddhisme chinois, Vol. I, pp. 76, 84, 93.

¹⁷ See my Bouddhisme chinois, Vol. I, pp. 77 ff.

nese thought that dew is distilled by the moon. The Taoists gathered this excretion of the orb of night on a metal platter as an easy means of assimilating the quintessence of the *yin*. This harvest was a part of every Taoist ceremony. Other substances also are of the quintessence of the concrete *yin*, for instance, silver, jade, pearls, coral and yellow amber. The Taoists had a cult for these substances also, but as they were not within the range of all purses, they were never eaten in their pulverized form except by the privileged few.

The light of the sun is one form of the quintessence of the yang; the problem was to find an eatable form of this quintessence. Of the two common compounds sulphur and gold, the Chinese look upon sulphur as a violent poison, while gold in its metallic form can not be assimilated. Taoist alchemy grew from the desire to make sulphur and gold edible. Now cinnabar (sulphuret of mercury) is very abundant in China. When decomposed by heat it is seen to consist of sulphur and mercury. The mercury is yin, but the compound, as is testified by its red color, is yang and is not poisonous. In default of native sulphur therefore cinnabar was taken as an elixir of life. That cinnabar which had decomposed and recomposed many times was considered the most yang of all, the transcendent cinnabar, the virtue of fire having still further enhanced its properties. Hence arose the mystical series of the nine rotations, the nine times nine days of heating, etc.

When lead containing silver and arsenic produced orpiment upon manipulation, they thought they had found an edible form of gold. But when those who ate it died, few others were willing to risk this cure, whereas there were many who partook of cinnabar for many centuries. Taoist alchemy deliberately proceeded no farther than this. A few individuals were led by curiosity into chemical, mineral, vegetable and even animal researches, thus bringing upon themselves the reproaches of their colleagues and ill usage from government officials. There is no need to dwell upon other drugs dear to candidates for immortality: seeds from evergreen cypress, which lived an indefinite period; pachyma cocos, a giant fungus clinging to the roots of the cypress and regarded as extracting its quintessence; a branching parasitic mushroom, a cryptogamous plant of spontaneous growth (its spores were unknown

¹⁸ Little or no sulphur was to be found in ancient China, but a great deal of poisonous orpiment. The confusion of these two substances would have given rise to this mistaken belief.

to the Taoist sages) and consequently thought to be a cosmic compound.

Finally, since the Taoists thought that rotations of nature were the basis of all things, they appropriated and developed in a quasiscientific fashion the ancient Chinese systems of divining these revolutions as means of foretelling the future. They monopolized everything—the figures of Huang-Ti and of Yü, the basis of numbers; ¹⁹ the diagrams of Fuh Hi and the Book of Changes in which they were developed; the speculations of Tseu-yen on the rotation of the five elements. These proceedings could be carried on by the common people since no special skill was required of the operator.

Upon the superior man, the Taoist overman, his superiority conferred an extraordinary power of intellectual vision. Placed above the rest, he could see farther into the unknown, into space, into the future. Biographies of celebrated Taoists are full of predictions, historically gathered, often verified, and sometimes very interesting. This far-seeing vision requires a profound concentration, a sort of hypnosis or ecstacy, often described in Taoist books. The use of a mirror sometimes helped it. A very curious treatise explains how a mirror, gazed at fixedly for a long time with the intense will to see in it what one is looking for, will end by giving in its reflection the desired solution. The mirror serves also to disclose the emanations of places, things, and persons invisible to the naked eye. Other means of divination were used by the Taoists, such as the movements of the smoke rising from incense, the flight or song of birds, and the changing aspect of the clouds. All these were considered to be the manifestations of the cosmos, of the Principle, without any intervention of supernatural beings.

^{19 [}See Carus, Chinese Philosophy, pp. 4-5.]

POEMS OF CONFUCIUS.

TRANSLATED IN VERSE BY PAUL CARUS.

CONFUCIUS from time to time gave expression to his sentiments in song, and there are three poems recorded in the stone-engraved inscriptions of the temple of Confucius at Kü Fu all of which set forth his disappointment in life. After he became minister of justice in his native state Lu, he found out that the duke did not possess the seriousness necessary for the responsibilities of his position, and so Confucius resigned. Some time afterwards the duke was expelled by a usurper and had to flee to the neighboring state of Wei. Confucius followed his exiled sovereign, and when the usurper Ji Kong Ts' invited him to return he did not, because the sage would accept no favors from a man who had seized the government by unjust means. But later on when the usurper had died, Confucius returned to Lu.

We quote the following verses from inscriptions engraved on stone as they have been published and edited by the next to the last representative of the Confucian family; our own explanatory comments are inserted as footnotes or in brackets.

THE SONG ON TAI SAN.1

After Confucius had moved to Wei, Ji Kong Ts' sent his compliments [and invited him] to come back to Lu. Confucius refused the offer. Being convinced that if he accepted the high charge it would only end in disappointment, he composed the "Song of the Mountain":

"Would rise to the lofty peak Where cliffs and ravines debar. So truth² though ever near

¹ Tai San is the name of a peak in Lu. It means literally "the huge mountain" and is situated between Lu and Wei.

² The original reads "Tao."

Is to the seeker far. How wearisome³ to me Those tangling⁴ mazes are.

"I sigh and look around,
The summit in full view;
With woodlands it is crowned
And sandy patches too,
And there stretch all around
The highlands of Lian Fu.
Thickets of thorns prevent
Any ascent.
No axe is here
A path to clear;
The higher we are going
The worse the briars are growing.
I chant and cry,
And while I sigh
My tears⁵ are freely flowing."

THE ORCHID IN THE GRASS.

[Comparing the sage to the orchid as a flower of rare beauty, Confucius thinks that men of a superior character should live in the company of kings and not be thrown among the vulgar people like the orchids that grow by the wayside.]

Confucius on his way back to Lu from Wei stopped in a valley and saw orchids growing by the wayside, and said "Orchids should be royalty's fragrance, but here they are mixed up with common herbs." Then he stopped the car, took his lute, played on it and composed the song of the orchid.

"So gently blow the valley breezes
With drizzling mist and rain,
And homeward bound a stranger tarries
With friends in a desert domain.
Blue heaven above! for all his worth
Is there no place for him on earth?

³ That is to say, "An attempt to climb the height would be a failure and leave me wearied and footsore."

⁴ The original reads "without return," which means "mazes which allow no exit"

⁵ The original here is too drastic for English taste in poetry; it reads "the tears are flowing and the nose is running."

"Through all the countries did he roam Yet found he no enduring home.
Worldlings are stupid and low,
They naught of sages know.
So swiftly years and days pass by,
And soon old age is drawing nigh."

Then Confucius went back to Lu.

THE CRAZY MAN'S JINGLE.

Jay Yü, the crazy man of Ts'u, passed by Confucius singing:

"Oh Phoenix, oh Phoenix, thy virtue is pinched! The bygone is ended and cannot be mended:
But truly the future can still be clinched.
Cease, ah! continue not!
For statesmen to-day are a dangerous lot."

Confucius dismounted anxious to talk with him; but he [Jay Yü] hurried away and escaped, so Confucius could not talk with him.

[This strange piece of tradition seems to characterize pretty faithfully the situation in which Confucius found himself in his advanced age. A man ensouled with a great ideal, he was possessed of the idea that in order to realize his aspirations he ought to be a minister of state and introduce personally his proposed reform. But in this he lamentably failed. He went from court to court and was nowhere acceptable. It is natural that sovereigns would not want a councilor who was constantly preaching morality; and even if some sovereign would have liked to engage him, then the ministers or other advisers would be opposed to the appointment; so he found himself in the undignified position of offering virtue only to find out that there was no demand for it. A well-intentioned man on the throne was certainly a rare thing, and yet the fault does not lie entirely with Chinese royalty at the time of Confucius, for even good honest rulers would hesitate to engage such a moralizer as he. A man with good intentions has a conscience of his own and need not engage a man to supply him with rules of conduct. It is true that once in his life Confucius held the position of minister of justice in the state of Lu, and it is reported that his administration was very successful; nevertheless he held this office only for a short time and did not affect any lasting reform, and that was perhaps best for

his ideals. We must bear in mind that if Confucius had really had the chance to give his reform a fair trial, he would probably have found out by experience that no reform can be introduced through the government by enforcing rules of propriety. For the short span of his official activity we possess only the glowing description of his disciples; the other side, how he came to lose his position as a minister of state in the service of the duke of Lu, has not been recorded. At any rate while for Confucius himself his fate was tragic, we can understand that it could scarcely be otherwise. A fair trial would probably have proved a failure and might have spoiled all the credit of Confucianism among the coming generation. Nevertheless, in spite of his disappointments his life was not in vain, for the ideal he represented was of vital significance.

Ideals are superhuman factors, and superhuman factors can not be represented by limited individuals; they must assume shape in mythological persons, in a God or a God-man, a hero, or some other supernatural figure, in idealized persons of the distant past who have shaken off their mortal coil with all their human failings. Thus it came to pass, thanks to the enthusiasm which the master had instilled into his disciples, that the Confucian ideal had a great future. After his death Confucius came into his own. When the personal element was removed his aspirations found recognition.]

THE SWAN SONG.

When Confucius fell sick, Ts' Kong visited him. Confucius dragging himself along on his staff walked back and forth at the gate, and he sang these words:

"Huge mountains wear away
Alas!
The strongest beams decay.
Alas!
And the sage like grass
Withers. Alas!"

Tz' Kong heard this song and said:

"If the huge mountain crumbles, say
Where with mine eyne I'll wend?
If the strong beams will rot away
On what shall I depend?
And if the sage withers like grass
From whom shall I then learn? Alas!"

Having entered the house, Confucius said: "Ts' Kong, why come you so late? The house of Hia [2205-1818 B. C.] placed the coffin on the east stairs. The house of Yin [= Shang, 1766-1122, since 1401 called Yin] near the two pillars. I belong to the house of Yin and last night I dreamed that I sat between the two pillars. At present there is no bright ruler in the world who would employ me. I probably will die soon."

Confucius died after seven days.

THE BIBLE AS A LAW BOOK.1

BY CHARLES S. LOBINGIER.

THINK I may safely trust my friends of the clerical profession to do full justice, upon such an occasion as this, to the Bible as a source of religious instruction. For a layman like myself it would seem far more appropriate to dwell upon such uses of the great book as are not strictly religious. And these are many.

It has been well said that the Bible contains the truest history, the profoundest philosophy, and the sublimest poetry. Viewed as mere literature it would be hard to find its equal among the world's output of written song. As a whole it has scarcely a rival save in Greek literature which is in all things exceptional. Our own majestic stream of English verse finds one of its chief sources in that other priceless possession of the race—the English Bible. From Chaucer to Tennyson its influence has been dominant and two of the foremost English essayists of the nineteenth century—Carlyle and Ruskin—were profuse in acknowledgment of their literary indebtedness to the Bible. Of the last named an admirer has said:

"Chapter by chapter, verse by verse, the little boy (Ruskin), like Carlyle before him, read the Bible over and over before his strict and devoted mother. Always reverent and docile in temperament, he seems to have followed with entire obedience, if sometimes with weariness, her minutely rigid method. Many long passages were learned by rote if not by heart, till his whole nature became steeped in the language and spirit of that mighty book which has for centuries nurtured the noblest English souls. 'And truly,' he says, 'though I have picked up the elements of a little further knowledge in mathematics, meteorology, and the like, in

¹ Address of the Hon. C. S. Lobingier, Judge of the Court of First Instance of the Philippines, on the occasion of the formal opening of the new "Bible House" of the British and Foreign Bible Society at Manila, P. I., Jan. 9. 1913.

after life, and owe not a little to the teaching of other people, this maternal installation of my mind in that property of chapters I count very confidently the most precious, and, on the whole, the one essential part of all my education."²

But it is not alone to the Bible as literature that I would here draw attention. That also can be better treated by others. The jurist who studies well this work in time comes to see in it a great law book. Such it was primarily and fundamentally to the ancient Hebrews. They, including the Great Teacher himself, referred to their scriptures as "The Law and the Prophets." The legal idea came first and predominated over the literary. The Old Testament, indeed, and especially the Pentateuch, was a rich repository of national jurisprudence. It was "the law of the Lord" which was "perfect, converting the soul." "Blessed was the man whose delight was in the law of the Lord and in that law did he meditate day and night."

It is true that the Hebrews in the course of their evolution produced other law books than the Torah—the Talmud, the Mishna and Gemara, and the Zohar. But the Old Testament, "the Law and the Prophets," was the law book of their golden age. It reflects and preserves for us Jewish legal institutions in their chrysalis and is consequently one of the rare sources for the study of comparative law. These tales of the patriarchs that so charmed our childish minds, like Jacob's seven years of service for Rachel, are typical of a universal customary law and find their counterparts in customs that prevail right before our eyes among the native inhabitants of these fair islands.⁵ And this is one of the values of the Old Testament which deepens with age. No higher criticism has ever lessened its importance as a source of juridical history. Translation of other "Sacred Books of the East" has but made it appear the worthier and more valuable by way of comparison.

In the New Testament we behold law not only in a later stage but of another system. Israel had meanwhile come under the mighty ægis of Rome and its noble jurisprudence had taken root in Palestine. The Beatitudes refer to the Praetor⁶ and the procedure before him which influenced so profoundly the progress of the Roman

² Scudder, Introduction to the Writings of Ruskin, 3.

⁸ Psalm xix. 7.

⁴ Psalm i.

⁵ See the author's "Primitive Malay Marriage Law" in American Anthropologist, XII, 252.

⁶ Matt. v. 25.

law; and both the Gospels⁷ and the Epistles⁸ of St. Paul apply the Roman rule of evidence that "in the mouth of two or three witnesses every word may be established."

Indeed the great apostle to the Gentiles appears to have been fairly well versed in Roman law as was not unnatural for one of his nativity and education. He knew his rights as a citizen of the great empire and when one of its officials was about to inflict summary punishment upon him St. Paul stayed it by the simple but effective inquiry, "Is it lawful for you to scourge a man that is a Roman and uncondemned?"9 Even more sublime was his (perhaps) unconscious tribute to the majesty of the Roman law, when in answer to the unauthorized query of the Roman governor Festus as to whether he would submit himself to an irregular tribunal at Jerusalem, St. Paul said: "I stand at Cæsar's judgment seat where I ought to be judged: to the Jews have I done no wrong, as thou very well knowest. For if I be an offender or have committed anything worthy of death, I refuse not to die, but if there be none of these things whereof these accuse me, no man may deliver me unto them. I appeal to Cæsar."10

We all know the momentous consequences of that appeal. The record of this prosecution of St. Paul as contained in these few chapters of the book of Acts¹¹ is one of the most extensive descriptions that has come down to us of the actual administration of the Roman law in the provinces. In teaching Roman law I find them most helpful and instructive to my classes, for unconsciously the writer of Acts has here preserved for us the almost complete record of a Roman criminal cause.

Then where is there a statement of the doctrine of "due process of law" which equals this answer of Festus to the native ruler Agrippa as recorded in the same book?¹² "It is not the manner of the Romans to deliver any man to die, before that he which is accused have the accusers face to face, and have license to answer for himself concerning the crime laid against him." The doctrine itself is much older, appearing, indeed, in the Twelve Tables,¹³ but I do not know of an expression of it, so clear at once and forceful, in all the rich legal literature of Rome or indeed of any other nation.

But the uses of the Bible as a law book have not been wholly academic. Aside from its legal authority in ancient Israel it has repeatedly been given the force of law by Christian peoples. When

⁷ Matt. xviii. 19.

^{8 2} Cor. xiii. 1; 1 Tim. v. 19.

⁹ Acts xxii. 25.

¹⁰ Acts xxv. 10, 11.

¹¹ xxii-xxvi.

¹² Acts xxv. 16.

¹³ Table IX, 6.

in the seventh century of our era, the Visigoths laid the foundation of the modern Spanish law by promulgating their great law book, the *Forum Judicum*,¹⁴ they drew very considerably from the Mosaic legislation. The same source was largely utilized by John Calvin, nine centuries later when he came to devise laws for that interesting theocracy which he established at Geneva.¹⁵ In New England the followers of Calvin almost reenacted the Mosaic code. John Eliot, the Indian apostle, appealed to it as the model for his "Christian Commonwealth,"¹⁶ and Nathaniel Ward of Ipswich borrowed from it, if indeed he did not make it the basis of his code of 1641 which he called the "Body of Liberties." Even in the middle of the nineteenth century Strang, the Mormon leader, caused the Hebrew legislation to be reenacted for his island community in Lake Michigan.

We are met to-night to dedicate a building to the work of distributing this Book of Books among the Filipino people. Wholly aside from its religious aspects, do we not find ample justification for such an enterprise in the historic fact that so many peoples, in the same or similar ethnic stages, have found in this work a satisfying basis for their legislation, a charter of liberties and a source of legal institutions? Indeed, it places the Bible itself in a new light to learn of these added uses to which it has been devoted since the traditional close of the canon, for it shows that the epochs of scriptural growth and development did not end then. From the lawgiver of Sinai to the seer of Patmos is truly a far cry and represents a long period of religious evolution, but even this interval does not include the entire history of this great literary production. We have seen how that history has been prolonged since the time of Paul, and there is reason to believe that it began long before Moses. Speaking of the code which the Babylonian stele of 2200 B. C. (discovered somewhat more than a decade ago) represents the Sun-God as handing to King Hammurabi, a recent authority¹⁷ says:

"Between this code and the different codes mentioned in the Old Testament, such as the Covenant (9th century), Deuteronomy (7th century) and the Priestly Code (5th century), there are, be-

¹⁴ See Scott's edition ("The Visigothic Code") VI (IV), 5; Bk. III (IV), 9; Bk. XII (II), 12.

¹⁵ Dyer, Life of Calvin, 150. Cf. Osgood, "The Political Ideas of the Puritans," Political Science Quarterly, III, 9; Laveleye, in his Introduction to Strauss, Origin of Republican Form of Government in the United States, xix.

¹⁶ London, 1659.

¹⁷ Montet (Vice Rector of the University of Geneva) "Israel and Babylonian Civilization," *The Open Court*, XXIII, 628.

sides noticeable differences, resemblances so striking and characteristic that it must at least be admitted that the legislators of the two countries, Babylon and Israel, were inspired beforehand by the same common law. Here and there, however, the resemblances are so close that it is very difficult to escape from the conclusion that the Hebrew legislator had under his eye the code of the King of Babylon."

"Slowly the Bible of the race is writ,
And not on fading leaves or slabs of stone;
Each age, each people adds a verse to it—
Texts of despair or hope, of joy or moan.
While swirls the sea, while shifts the mountain shroud,
While thunderous surges beat on cliffs of cloud,
Still at the prophets' feet the nations sit."

THE SMALLEST REPUBLIC IN THE WORLD.

BY THE EDITOR.

THE visit of the Prince of Monaco to American shores recalls to our minds the tiny principality of which this studious and efficient scientist is the ruler. There are a few other independent governments in Europe of very small dimensions, and not the least interesting of these is the republic of Moresnet which this year celebrates its centennial anniversary.

Some time ago a Swiss author by the name of Hoch wrote a little book on this forgotten territory in central Europe, which is scarcely known to the world, except to specialists, and whose existence is due to the jealousy between Belgium and Prussia.

When the great powers divided Europe among themselves after Napoleon's defeat, there was a strip of territory smaller than any other country in the world, being only 330 acres in extent and inhabited at the time by only a couple of thousand people, which was claimed by two of the powers, and they were not anxious to go to war about it. This was the little township Kelmis, also called Altenburg, and since 1793 known as Moresnet, to be pronounced Moraynay. The significance of the place was due at the time to calamin mines, which were then found in a mountain called Bleyberg in the immediate vicinity of Kelmis.

The tiny republic of Moresnet lies between the three cities, the Belgian Louvain, the Prussian Aix-la-Chapelle and the Prussian town Eupen. It is reached by the Belgian state railroad between Aix-la-Chapelle and Vezier. Moresnet, the capital of the country, possesses a post-office, but they issue no postal stamps of their own. Stamps of either Prussian or Belgian denomination are accepted.

This small strip of ground belonged to Austria until 1793. It

¹ Published in Bern, Switzerland, 1881, under the title Un territoire oublié au centre de l'Europe. See also F. Schroeder, Das grenzstreitige Gebiet von Moresnet. Aix-la-Chapelle, 1902.

was then taken by France during the revolution, and continued a French possession until the defeat of Napoleon at Leipsic. When the map of Europe was reconstructed at the convention of Vienna, Moresnet might have fallen either to Belgium or to Prussia, had not the calamin mines been of interest to both countries. Neither of the contending powers cared very much for the possession of these few acres, but both wanted to have free access to the mines which at that time furnished mainly zinc ores. The result was that both Prussia and Belgium allowed the inhabitants to have their own government on condition that the ores should have free importation into both states.

The constitution of Moresnet was newly drafted in the forties, and the rival governments allowed the people entire freedom on condition that the commercial interests should be equally divided between the two powers. They allowed the people to elect their own mayor who administers the little country with the aid of a council of ten. The four thousand inhabitants are about one-third Belgians and two-thirds Germans. The mines have given out and so the only interest either country would have to possess Moresnet has been lost, but the independence of the little republic has been preserved.

All young men born in Moresnet are free from military duty, while the German and Belgian settlers have to serve in their own country. This little republic of Moresnet is blessed above all other republics in the world by not having any import duty. They have no custom houses on their Belgian and Prussian frontiers, and, what is better still, they have no courts. The few quarrels that arise among the inhabitants can be settled at will either before Belgian or German courts, while they are relieved of all responsibility in international affairs; for in spite of being a European republic they have never been asked to any of the European conferences, and have had no part in making or waging any of the European wars, so the mayor can attend to his home politics, unmindful of what may happen in the rest of the world.

In connection with this smallest of the nations we may mention also those other and better known countries which are not so much greater, but likewise owe their independence either to rivalry between two great powers or to the forgetfulness of the world which is excusable on account of their small size. There is a country called Andorra, which is situated between France and Spain in the eastern portion of the Pyrenees, and is bounded on the west by Spanish Catalonia and on the east by the French department Ariège.

It enjoys free trade with France, to which it is affiliated as a kind of dependency. Originally the country was governed by the bishop of Urgel and the count of Foix. How small and insignificant it is may be seen from the fact that the income which the bishop draws from Andorra is 460 francs, which is less than \$90, a year, while the income of the government consists of a tribute to the amount of 960 francs paid at present to the successor of the old count of Foix, the French republic. The bishop divides his authority with the pope and has the right to install priests four months in a year, while the pope installs them during the other eight months. When the counts of Foix died out they left the principality to a Count Albert, and when the country fell to France its international government was interfered with as little as possible, and the inhabitants were not prevented from drawing a goodly revenue by smuggling.

At present the country is governed by a council of twenty-four and a president who is elected for life. Juridical affairs are in the hands of two judges called in French *viguiers*, and in Catalonian *vegueros*, who have the high-sounding title *Illustres*. Military service is compulsory. Every adult man is obliged to serve and must equip himself with arms as he deems best, and, as may be expected, most of them are good shots.

We may add a few comments on the two smallest principalities of Europe of which the best known is Monaco, on the Ligurian coast of the Mediterranean, surrounded by French territory. Though much larger than Moresnet, it has only eight square miles of area and may possess about sixteen or seventeen thousand inhabitants, but it is frequented by many fashionable and wealthy travelers who are attracted by the mild climate and also by the gambling resorts of Monte Carlo. Down to a recent date the country was an absolute monarchy, but of late the scholarly prince has granted a kind of constitution. This country too is defended by an army which consists of 125 men, seventy-five soldiers and fifty policemen.

Considerably larger, yet still very small, is the principality of Liechtenstein, which is situated on the upper Rhine between Switzerland and Austria, having about 10,000 inhabitants who live in a territory of seventy square miles. Like Moresnet the country of Liechtenstein has at times been forgotten, and this happened at an important moment of its history. When peace was declared after Prussia had conquered the allied states in the war of 1866, the principality of Liechtenstein was left entirely out of account. As a result of this obliviousness on the part of the contracting governments, Prussia must still be considered as in a state of war with

Liechtenstein. But this fact has been generally forgotten, and many travelers from the Prussian provinces enjoy the beautiful scenery of Liechtenstein in the most peaceful spirit. The prince of Liechtenstein has granted a constitution to his country, which provides for a parliament of fifteen members, three of whom are appointed by the prince and twelve elected, not to mention four additional members who are called in if any of the active members are disabled from service. There is no independent Liechtenstein post-office, and in general the country is closely attached to Austria.

THE FOURTH DIMENSION.

BY HYLAND CLAIR KIRK.

I.

F course it is best to have characters in telling a story; though many are told as lacking apparently in this respect as would be the tale of a meteor or a pin-head. And in instances there may be an element of safety in such a course; for if a story were told about either of these objects, the work done illustratively and with a psychological turn, it might be said: "Ah, it is aimed at some lofty personage, as So-and-So," or "at some insignificant person, as So-and-So"; and the danger of aiming at any one has been often pointed out in criminal cases.

Accordingly let it be noted at the very outset of this narrative, that, although there have been a considerable number of profound thinkers who have presented their views to the public on the subject of the fourth dimension, the principal character herein described, Professor Purcellini, the meteoric inventor of the scenograph and other startling novelties, was none of these; a statement very easily substantiated by the fact that he had a contempt for writing on any subject which he thought might be elucidated in a practical way—an idea which he seems to have held of this very theme, usually regarded as so extremely baffling and recondite.

It was Purcellini in pursuit of this same subject, who won the wager on being able to make clear and comprehensible to others, five degrees of ideal representation—that is, five conceivable stages in mental imagery, each one more remote from the real object than the preceding, and yet so as to preserve the idea of the real thing. The object selected was a hunch-back member of the club, who consented to act; and the conditions were that it must be made clear how Tommy Jones could be conceived of by the six of seven members who happened to be present, five degrees remote from his actual personality and yet so as to be recognizable.

The first degree, as presented by Purcellini, was the thought of Tommy when absent; which would necessarily apply to the other stages. The second was a series of moving-photos representing Tommy walking about. The third consisted of the photos of the reflections in a mirror of Tommy in action. The fourth was made up of the moving-photos of a shadow of Tommy reflected in a mirror. As to the fifth, Purcellini said:

"Now, gentlemen, all you have to do to realize the fifth degree is, to dream about this moving shadow of Tommy and then recall your dream the next morning, and you have: first, your immediate concept of the dream-shadow; second, the dream-shadow of Tommy's photo reflected in the mirror; third, the photo of the shadow reflected in the mirror; fourth, the shadow reflected; and fifth, the shadow of Tommy.

Despite the contention that a shadow was not an adequate representation, it was decided that it would be in the case of Tommy Jones, and the wager was accordingly awarded to Purcellini.

Yes, it is best to have characters in a story that may be neither offensively realistic, nor yet so indefinite as to be mistaken for meteors or pin-heads; and that is why Hans Steinmann is also introduced to the reader. Hans was a sort of natural phenomenon to be sure, but resembling neither of these insensate objects. He was a blue-eyed blond of medium size, an honest-faced, compactly-built German mechanic, self-educated in the use of English, and with a vocabulary that would make a column of Esperanto look like the opening pages of a primer!

Hans was quite an ordinary workman before he met Purcellini, and poor—well, the proverbial rodent of cloistered proclivities might have furnished him a meal on more than one occasion. He owed the making of what fortune he possessed—involved wholly in his Florida workshop and ranch—to that lucky meeting; and no doubt Purcellini owed considerable of his much larger fortune to the same circumstance, as their peculiarities were such that one could never have accomplished very much without the other. Hans, though knowing little of letters and still less of formulated science and philosophy, was patient, practical, deft in handling tools and could readily see how to construct any conceivable mechanism; while Purcellini in manner was apt to be irascible, was in fact learned and scientific, though disclaiming all interest in the metaphysical. And this will appear to the reader as it did to some of his friends as a curious anomaly. While he would discourse learnedly on the views of philosophers and upon abstruse philosophical questions, he always gave the problems involved a substantial interpretation and insisted upon calling himself a materialist. Another deceptive element in his make-up was, that though he appeared at times so gruff as to be repellent, this was largely due to preoccupation and his absorption in processes of working out mechanical problems of one sort or another. For beneath this grumpy exterior there beat the warmest sort of a heart, most sympathetic perhaps for those who could throw light on his own pursuits; yet some of his friends believed such preference if it existed to be due more to another influence than his own inclinations which were broadly and deeply human, and little else.

Purcellini was large, dark, full-bearded, with the blackest of eyes and hair; and it must be mentioned here that his consort, Madam Purcellini, was his feminine counterpart to a considerable extent in disposition and appearance, except that she was tall and possessed of more than ordinary grace of form and feature. She was really the other influence or extra force in his life. Though not as learned as her erudite partner, Madam Purcellini possessed an inordinate ambition which under favoring circumstances might have given her a name with the queens of the earth. As it was, the only escape for her peculiar energy was through keeping her husband up to his work.

"Women," she had been known to remark, "accomplish much in this world for which they get no credit; yet merit is more than reputation or reward."

Thus it came about that only two persons could manage Purcellini: his wife who dominated him, and Hans whom he dominated—the former in general and the latter in all questions involving the details of mechanical construction. Thus Purcellini came to be a model of exactness, somewhat in opposition to his natural bent, because of these personal influences, and his own tendency to reduce scientific truth to a working formula. In walking, which he often indulged in, he always took a most direct course because it was established in his own mind that there is the greatest conservation of bodily energy by following the line of least resistance, and that the shortest distance between two points is neither crooked nor curved. Hans in his gait followed no rule, and the professor in his walk and movements was always a wonder to him. In fact up to about this time Hans actually entertained such a feeling of respect and even awe for Professor Purcellini's abilities, that he never would admit to an outsider that that gentleman was wrong or had ever been wrong in anything!

For about six months Hans had been at work under the written instructions of the Professor upon a new device, the most startling and wonderful—according to the Professor's own account—of anything he had ever conceived. The original instructions received by Hans were as follows:

"First

"You will construct an apparatus to be attached to the car of a dirigible balloon; an improved camera obscura, of lenses and mirrors, which will focus the surface of the earth below, so that an observer in the car may be able to see the whole surface reduced in the picture.

"Second

"This picture is to be made susceptible of being enlarged or reduced at the will of the operator, and also of being run when photographed in kinetoscope films, suitable levers for enlarging and reducing being attached for the observer's convenience.

"Third

"Space is to be left beneath the eye-piece for the attachment of a circular transparency, one foot in diameter, of peculiar properties, now being specially manufactured in Germany. A surprising feature of this transparent plate is, that when elevated even a slight distance above the earth, it seems to extend the visible horizon every way; and the power of penetration it affords the vision is no less wonderful."

These instructions were quite separate from the letter which, after referring to such minor matters as salary and expenses, concluded as follows:

"I believe, my dear Hans, that this new 'Space-Annihilator & Time-Accelerator,' will prove the most wonderful invention of the age! It was the conclusion of that eminent philosopher, Immanuel Kant, that space and time are not actualities, but merely structural elements of the human mind. Accordingly as the mind depends entirely on sensation, certain higher philosophers, basing their view on occult phenomena, believe that a fourth dimension exists, not included in length, breadth, or thickness. By taking advantage of this fact, my invention will enable one to increase or decrease space or time at will by simply adjusting the mechanism. It is not every one who can grasp the idea, and you may not readily take it in yourself. But as soon as you are ready with the apparatus which I

have described, I will be there with the magic transparency to show you what a wonderful thing it is.

As ever yours,
P. Purcellini."

Up to this point—the receipt of this letter—as already noted, Hans, the obedient executor of his employer's designs, had never—except in the little details of construction and workmanship—questioned that employer's word or thought. Nor would he have done so now, little as he understood what Purcellini was aiming at, had it not been for Hetty Smith, another character who, although presenting her sweetest smile and prettiest bow to the reader for the first time, has really been in the game ever since she left Madam Purcellini's employ on the last visit of that remarkable lady to Florida, and since Hetty became a teacher of the youthful Crackers in that vicinity.

Yes, this tale without Hetty, a hazel-eyed, denure product of Vassar, Wellesley, or some other feminine intellect factory, would be not unlike Shakespeare's famous tragedy with Hamlet off his job. She was so undemonstrative and quiet naturally, that few if any would suspect the fact that she had a tremendous dynamo behind the pigeon-holes of her brain with all necessary machinery attached; so that when grappling with any subject the action kept right up, until the said theme was duly ground out, classified, labeled and put away. After which it was dangerous for any one to disagree with Hetty on that particular topic.

Hans was undoubtedly afraid of Hetty; he knew she knew his utter lack of knowledge. No other woman caused him such embarrassment as she did when he attempted to converse with her. Still Hetty encouraged him by often complimenting his skilful workmanship; and Hans sometimes ventured to confide in her, as he did in this instance, by showing her his instructions in Purcellini's letter.

Hetty took a whole week to ponder over that missive, during which time she consulted all the books she possessed or could find in the vicinity affording information as to the meaning of the fourth dimension. Not content with this she wrote to one of her old teachers about it who sent her several works on the subject, including Hinton's clever romances, Abbot's *Flatland*, Professor Manning's collection of prize essays on the subject, and Henri Bergson's *Time and Free Will*.

Several months passed before she reached a definite conclusion after receiving these books, and one quite remarkable dream she

attributed to their influence. At first she was puzzled by such questions as that of Professor Manning in the Introduction to his work: "Why may there not be a geometry with four mutually perpendicular lines, in which the position of a point is determined by measuring in four perpendicular directions?"

But after pondering over this, she asked herself: "Well, if Professor Manning conceives such perpendiculars, as straight lines are easy to draw, why does he not make a diagram of his concept?" And then the absurdity of the proposition becoming apparent to her, since it is impossible to have more than three perpendiculars meet at a common point, she decided that this is a question which has no proper place in geometry of any sort, not even in the non-Euclidean. As Professor Manning says: "The non-Euclidean geometries do not themselves assume that space is curved, nor do the non-Euclidean geometries of two and three dimensions make any assumption in regard to a fourth dimension."

She concluded that the fourth dimension, mathematically considered, is purely algebraic and not geometrical in any realizable sense; and of course algebraically, we may have as many dimensions as we choose to make symbols to represent them; yet they will be "dimensions" in name only.

The notion of geometries of *n* dimensions introduced into mathematical investigations by Caley, Grassmann, Riemann, Clifford, Newcomb, Stringham, Veronese and others, she decided to be purely speculative, and to be more appropriately termed algebraic; because geometrically such dimensions can neither be illustrated nor conceived. Equally inconceivable appeared to her the statement of another mathematician, that "to a reasonable mind unfamiliar with our universe, space of four dimensions would appear to be *a priori* quite as probable as space of three"; since no one can imagine "a reasonable mind unfamiliar with our universe," any more than he can a space of four dimensions.

Hetty became aroused to the fact that the term "fourth dimension" has been seized upon by various classes as a new form of incantation to explain phenomena, with the result simply of mystifying themselves as well as others. Thus, that one could cause writings of the dead to be reproduced on a slate as Professors Zoellner and Fechner thought the medium Slade to have done, she could not see as having any relation to a fourth dimension, as those philosophers supposed; especially as Slade was subsequently caught writing the messages on the slate with his toes!

Also such ideas as that "a sphere may be turned inside out in

space of four dimensions without tearing," "that an object may be passed out of a closed box or room without penetrating the walls, that a knot in a cord may be untied without moving the ends of the cord, and that the links of a chain may be separated unbroken"—claims made by the Fourth Dimensionists—she decided to be all nonsense so far as involving a fourth dimension; for if such things could or should occur, they would happen through the interpenetration of matter in a three-dimensional space, and a fourth dimension would have nothing to do with it.

Another thing, backing up to gain momentum, and conceiving that there may be beings in space of one dimension—beings of which we know nothing, and then of two dimensions—of which we also know nothing and can conceive nothing, and then passing over the beings in three-dimensional space which we do measurably understand, and assuming therefore that there is a fourth-dimensional space and beings in it—of which we neither know the space nor the beings, she regarded as wholly illogical; since, as Edward H. Cutler says, "these suppositions involve a fatal confusion of mathematical with physical conceptions," a one-dimension space being impossible except as a mathematical abstraction, and furnishing no basis of thought for a fourth dimension.

It was about at this point in her researches that Hetty's dream came in, in which she seemed at first to be awake and working with a microscope, when as a surprise it came to her that bacteria—some of them appearing as mere mathematical points—were creatures of one-dimensional space. This so astonished her that she became partly awakened, when she was suddenly seized with the apprehension that there might be beings of two-dimensional space in her vicinity. She was sleeping in an ancient mansion and in an ancient bed, and the previous day she had been reading of a glass bee-hive "with its floor and roof of horizontal glass plates brought so close together that there is barely room for the bees to move about between them,"—an illustration of a world of two dimensions with the bees as two-dimensional beings.

Yet a bee is not merely long and broad, most bees can demonstrate their thickness with stinging emphasis; and less emphatically though quite as disagreeably Hetty suddenly became aroused to the idea that there were two-dimensional beings with scarcely any thickness flitting or swiftly creeping about under the cover of her bed. In fact she even detected such beings and impressed upon them a two-dimensional flatness which they did not possess before!

Still, while thus forcibly reminded of the existence of creatures

closely approximating to two dimensions, the very next day she found something in Bergson's *Time and Free Will*, which seemed to shut out all four-dimensional creatures and settle that question by showing that the fourth dimension of space is not something imaginary but a phase of the existence we know and already recognize.

So much time had now elapsed since she began her investigations following Hans's receipt of Purcellini's letter, his work on the new device being nearly completed, that Hans had quite lost sight of the fact that Hetty had any interest in this subject, and one day casually handed her another letter from Purcellini in which occurred the following: "That there is a fourth dimension in space there is no doubt; since it accords with the fact that both time and space originate from the human mind! And hence the certainty that our invention will revolutionize the world!"

"Pursy's gone crazy!" said Hetty reflectively.

Hans ventured to remonstrate: "Do you it tink? I do not see how dot could efer be. De great Brofessor haf notings in his mind mit him like de crazinesses. You haf not already yet seen his dransparencies, a vonderful ting made in Germany."

"Now Hans," was the reply, "I'm from Missouri" (and perhaps she was, though she came from New York with the Purcellinis), "and nobody can prove to me that nonsense is sense! Why talk about time and space coming out of, that is starting, originating in our minds. Can't you see that we originate in time and space?"

"Yaw, O yes," said Hans in a little less assertive spirit.

"Can't you see that naturally we have a correct idea of the dimensions of space, because we develop from and are as it were permeated by space whether we have minds or not?—and some people haven't much!"

Hans merely grinned.

"Now, Hansy, I'm not personal. You have mind enough, only you haven't any confidence in yourself. You have been hoodooed by Pursy, who has himself been so hoodooed by his ambitious wife that he is getting to be as crazy as a loon!"

"Do you it really tink?" said Hans earnestly. "I haf somedings to said about dot, I vait dill I see his crazinesses pefore his eyes!"

"Now listen," said Hetty smiling. "Of course you are getting your pay for your work, and that is right enough. But suppose that we were at the center of the earth!"

Hans grinned again. "Vell, anyting to accommodates!"

"If you and I were at the center of the earth, would not every direction be toward the surface?"

"Yaw, O yes."

"But the Fourth Dimensionist says there is some other direction, not toward the surface, but toward some strange, mystical region—the land of the inconceivable—and that is why I say that poor Pursy, driven to it probably by the ambition of that terrible wife of his, his 'Goddess of the Occult' as he calls her, in an effort to make practical and attain the unattainable, has actually gone crazy!"

Hans unconvinced, was yet disposed to learn more of the facts as he inquired: "Iss de fourd dimensions somedings pefore de bread, lengths, and tickness?"

"Before or behind, just as you prefer. It is supposed to be another direction in space, not length, not breadth, not thickness."

"Vell, suppose ve haf a cube, or a globe, den de mofements of dat boddy mit itself, if it mofe altogedder, mighd pe a fourd dimensions—vas'nt it, Fräulein?"

"Yes, you are right; the figure or direction of such a movement might be called a fourth dimension, and that suggests something, Hansy, the real nature of the only thing in nature which is entitled to be called and may properly be called the fourth dimension."

"Vell, vat ist?"

"Suppose, that one cube or globe, you speak of, was the whole of space—filled all space; then moving it forward—pulling it out—its extension would be a fourth dimension, wouldn't it?"

"Yaw, I tink so; but how could de space be pulled oud?"

"Extended? Why, as we think of it, isn't it being extended—pulled out constantly, not unlike the idea of the fourth dimension a cube or a globe produces in moving forward. In other words, isn't time itself the fourth dimension of space?"

"Aha, dot may pe it," said Hans reflectively.

"That is its most appropriate application," continued Hetty, "a continuous memory of space relations, instead of another realm which the mystics, doping themselves with mere words, strive to connect with everything that's unseen, and unknown; as if it solved the mystery of existence."

"Ah ha!" said Hans, "Iss dot de Brofessor's idea he haf wit himself?"

"Yes and it is really too bad, he has such a brilliant intellect."

"Das ist drue," remarked Hans energetically. "But de Brofessor say de great Germans Kant, he hold dis mit himself too already." "Kant, yes, that mighty thinker never thought of a fourth dimension, and would have spurned the idea as commonly conceived; yet he is to blame for it all; for if the dimensions of space proceed merely from the mind, one can have as many dimensions as a Turk has wives!"

Hans's eyes dilated, and his mouth opened in wonderment at her logic.

"Suppose," she went on, "Kant did hold that space and time are the outcome from our minds instead of our being mere incidents in space and time—so that length, breadth and thickness are purely ideal—suppose he did entertain such an inconsistent view, do we have to believe it?"

Hans grinned in reply.

"Besides your great German philosopher was only theorizing. The danger lies in trying to make such a thing practical. Hansy, never indulge in a doctrine that requires you to give up your life to test its correctness."

"No, I vill not!"

"And that is what this is likely to result in, don't you see? It means mystifying, fooling oneself about an inner, unseen, wholly imaginary state, which the doped ones are immediately desirous of getting into, even at the expense of their lives—do you understand?"

"I think so, yaw, O yes, but-"

"And don't you see that Pursy is way off in his calculations?"
"Vell, I vait till he come mit his dransparencies from Germany!"

II.

Quite in accord with the press reports, it was a beautiful spring morning, and seated in a comfortable chair on the lawn of his Florida estate, Professor Pedro Purcellini, the wizard inventor of the scenograph and other startling panoramic devices, was contemplating with some degree of complacency the practical outcome of his most recent thought.

After years of earnest study and research he had struck upon the startling concept, that if he could arrange a mechanism so as fully and completely to impress the senses and thus affect the whole mind with the idea that space was to a large extent annihilated, it would in that degree actually be annihilated; and, if at the same time a spur could be applied to the mind's action, time would be accelerated accordingly, and in exact degree corresponding to the gradations given the accelerative force.

To diverge slightly from the somewhat hastily prepared press

notices, there was a peculiar anxiety in the Professor's expression which could not be attributed entirely to his ruminations over the future prospects of this new child of his thought. To tell the whole truth, his mind oscillated between two goals, ever and anon extending out and taking in a mechanism more difficult to comprehend even than his latest invention, a mechanism named Angelina, with a feminine face not devoid of beauty, and yet dominated when in repose with force and decision to the point of harshness. That face, the face of his wife, seemed to mark a final step, to which his wonderful invention was a mere leader.

Yes, as soon as he should prove the correctness of view in the work of this latest device, nothing should be permitted to stand in the way of his publishing to the world how much he owed to her—and that was the acme of his thought and hope.

For months previously he had worked late and early arranging his plans, while his apparatus was being perfected. Everything had been put in order the night before, and now the mechanism of his wonderful "Space-Annihilator & Time-Accelerator" was complete. His assistants had brought it forth, and it was being adjusted in the car of the dirigible which, at an altitude anywhere from three hundred to five thousand feet, at any point which might be selected above the earth, would afford the necessary scope and range for its successful operation.

As he gazed upon it the gratified expression which gradually crept over the Professor's face indicated the satisfaction he was beginning to experience within.

"It must be so," he reflected. "The mighty Kant, before whose genius not only German philosophy but the whole world bends the knee, must be right. Time and space, as the fundamental forms of perception under which we become conscious of the outside world and of ourselves, originate from within. We impose those forms upon all that we see and hear, taste and feel, and being fully conscious of their purely formal character, there is nothing in the way of success!"

He felt especially exultant that everything was now in readiness to make the demonstration in such a clear and forcible manner as not merely to enable the truth to be plainly seen and understood, but as he believed to sweep away all doubts from the minds of the sceptical; and what a revolution in the world it would make!

The dirigible was oscillating slightly in the breeze as the Professor stepped into the car. His assistant Hans Steinmann, mechanical engineer and aeronaut, shut off the flow of gas; the men below

disengaged the tackle holding car and float to the earth, and the "Triumph" rose like a bird.

It required but a few moments as it appeared to gain the necessary altitude, when Purcellini taking the magic transparency from its case placed it in position beneath the eye-piece and touched the button controlling the space lever. Instantly there occurred an almost indefinable action, as a rapid movement toward a center affecting every object and point of view below—and lo! one-half of the earth's entire surface—that of the hemisphere toward him—lay open to his vision. Not merely the land and water, forests and mountains, cities and plantations toward which his attraction was directed, but the dwellings and their inmates, down to the smallest child, were visible when details were closely scrutinized. He had only to direct his vision to any point desired and persist in his search when the minutest object came into view.

Strangely elated he set the time-lever and moved it one notch from normal, when the grove of verdant-leaved maples in one of our northern states on which his eye chanced to rest, seemed to lose their verdancy, yet curiously enough the leaves did not fall but changed into buds and then shrank away into bare branches, while the earth beneath seemed covered with frost and snow, and near-by ponds glistened with ice.

Ah, he had turned the lever the wrong way!

It required but a moment to rectify this by shifting the button and pushing the lever up two notches, when presto! the buds on those same maples reappeared, ice and snow vanished, the groves were enveloped again in green to speedily change into the yellow and red of autumn, and soon the trees were bare as winter could make them, quite stripped of their foliage again!

What an astounding thing!

He turned his attention to a vast herd of cattle on the western plains and could scarce believe his eyes; for the calves grew into steers and the steers into oxen and the oxen were hustled into trains for the eastern markets with the celerity of a passing procession.

To get a still more pronounced effect he pushed the lever up another notch and with astonished gaze watched the shifting forms and scenes below. The rapidity of changing skies, sunshine and storm appearing to chase each other like mythological Titans, much more rapidly of course than alterations in the landscape—than the lessening of forests, the development of railroads and growth of towns and cities—yet all were equally bewildering to the observer. And now came the climax to his work, he would view the effects

upon human beings; and quite naturally turned his attention to the great city in which he had left his Angelina, the hope of his fondest thought.

With kaleidoscopic rapidity he saw babes develop into boys and girls, and they into the more symmetrical shapes of young manhood and womanhood—a general survey appearing much like the bubbling and flashing of a chemical mixture. And the inmates of his own household—his Angelina. Ah, was that she? Her stately, Venuslike form was shriveling; her raven tresses were growing white, crow's-feet were appearing about the eyes; the imperious beauty of that face which had held him so long in its thrall, became a fixed grimace—and then, ah God, a grinning skull!

How much he actually saw and how much was due to the anticipation of his glowing, fevered intellect, may be imagined.

Purcellini turned aside his gaze. It rested upon a bordering mirror of the transparency, when he emitted a shriek of horror! Was that withered, tremulous face reflected there his own?

"Hans, Hans!" he yelled.

"Vell, vat ist?"

"Look, look! See if you can see Angelina!"

Hans gazed calmly through the transparency upon the scenes below.

"Yaw, I see von girl. But I tink it pe not Anglina, it pe Hetty Smitzs!"

"Pshaw, Hans, you are not enlightened. You do not see beyond your immediate vicinity, do not realize the vast importance of that hidden phase of being, actual and permanent, on which this shifting state—this outward, visible phenomenon, rests. Ah—"

A surprising change was taking place in the appearance of Purcellini himself; his face flushed and eyes dilated, as if he were suddenly subject to a spectral challenge.

"I cannot bear the suspense!" he yelled in his loudest tones. "I must get into it—the fourth dimension!" And before Hans could interfere to prevent, he had leaped to his destruction out of the car!

It was three weeks later, and Hans had returned from the funeral of his benefactor and also his benefactor's wife; for the death of the latter occurred, as the deliberate act of her own hand in the effort to join her consort in that mystic realm, almost simultaneously with the reception of the telegram announcing his tragic leap.

"Hetty," Hans was saying, "I tink vat de fourd dimensions mean, I know mineself already!"

"You certainly ought to by this time, Hensy," said Hetty, "after all these terrible experiences. Now tell me what it means."

"Vel, you said all de space is all de while pulled oud, vich is de time?"

"Yes."

"Von is vat de Brofessor call de complemend of de odder?"

"Yes."

"Vat a man tink aboud—too much it may pe—is de complemend of hiss thoughd, hiss fourd dimensions?"

"Yes."

"Vel," said Hans very impressively and with eyes fixed on the young woman: "Angelina, she tink too much aboud de Brofessor and him to get a name great mit hisself, vich vas her fourd dimensions. De Brofessor tink too much of Angelina and to vork oud all she vants him to find oud mit hisself, vich vas his fourd dimensions. But ven I looks in de dransparencies, ven de poor Brofessor call—vat do I saw? Not vat he see as de fourd dimensions. All I can saw is you—you iss my fourd dimensions!"

"I always did admire your practical judgment," said Hetty as she took his hand.

THE NAMES OF NATIONS IN CHINESE.

BY THE EDITOR.

It is generally known that Chinese script is idiographic, and since it is limited to a definite set of traditional characters, the Chinese have been confronted in comparatively recent times with the problem of finding suitable terms for the names of foreign countries. This is not the first time in their history that they have encountered a difficulty of this kind. More than a thousand years ago they faced a greater problem still when they undertook the transcription of religious terms imported from India, and the result was that Buddhist and religio-philosophical terms constitute a terminology of their own, which like words belonging to another language are not commonly known among all the inhabitants of the Celestial Empire. It takes a scholar to be posted in this specialty, and the rules of transcription are sometimes very complicated.

In modern times the effort is made to denote nations by words sounding approximately like their original names. In every case these designations are quite flattering to the nations for which they stand. Take for instance the word for "English," which in America among the Indians is supposed to have produced the word "Yankee." In Chinese *Ying*¹ means "excellent," "prominent," "brave."

The original meaning of ying is a flower whose fruit is not yet matured, and thus it denotes flourishing, luxuriant, beautiful, and is used in the sense of the flower of knighthood, with the implied meaning of excellent, eminent, talented, noble, virtuous or courageous. The English themselves could not have chosen a word better fitted to place them in a respected position, implying as it does that they are the highest efflorescence of mankind. The character is composed of two strokes at the top crossed by a dash, denoting "plants," and another character the meaning of which is "fresh looking."

Next to the English we might mention the Germans as being highly complimented by the transcription of their name. In an attempt to reproduce the word deutsch the Chinese pronunciation teh was chosen and received the transcription teh,² "virtue," well known even to the general reader who is not much acquainted with the Chinese language, for the word occurs in the classical title Tao Teh King, the "Canon of Reason and Virtue." The character is composed of three elements: The first one, three strokes on the left-hand side, being a man walking, means "to go"; the upper part of the right-hand character is an abbreviation of the character "straight," and the lower part means "heart." The idea of virtue in Chinese is a heart that in the walk of life is straight. The word means virtue in the sense of "goodness," emphasizing mainly the religious tendency to benefit others. In this sense it occurs in Lao-tze's famous saying, "Requite hatred with kindness."

報怨以德

Nor has America any right to complain of its name. Since all Chinese words are monosyllables, linguists select that part of a name which is most prominent, and so America has been called Mei^3 in Chinese, which means "beautiful," "excellent." The word is of very ancient origin, and dates back to the time when the Chinese were still a shepherd people and their symbol of beauty was a well-grown sheep. The character consists of two pieces; the upper part is the outline of a sheep, showing on top the head with horns and ears, and below the four feet stretching out on both sides. The lower part of the character mei is the Chinese term for "great," and owing to the primitive condition of Chinese shepherds, it has come about that the symbol of a great sheep has come to denote beauty. Additional meanings are "to esteem," "to commend," "to be happy," and together with the character "girl" we might translate it by "belle."

The r in "America" has been dropped for the simple reason that the Chinese have a very vague notion of the r, and are in the habit of mixing it up with l. Accordingly it is quite natural that in the word "France" the r is dropped as well as the ending nce. Thus France is called Fa, and a character pronounced fa, meaning "law," "order" and also "doctrine," has been adopted to denote the French people. The Chinese character fa is derived from the radical "water," and the verb "reduce," or "put away,"

and the symbolism of the word is that it shall denote what reduces to a level. It may have reference to the "equality and fraternity" in the motto of the French republic. Before the law, all people should be on the same level, and treated equally without giving preference to any. It is not impossible that the similarity of the sound *Dharma* has influenced the meaning of the word, for the word fa denotes especially the Dharma of the Buddhists, the good law of religion, and in arithmetical nomenclature it has acquired the meaning of a working element in a sum, in the sense of the rule for working an example.

The Russians were formerly called by the word \hat{e} or ao, which means "to contend," or as a noun "outward feature." The word has now been abandoned for another word⁶ called \hat{e} which means "sudden." The Japanese tried to pronounce the word "Russia" ru, but having no such word, they substituted Lu^7 for it, which is the name of the native province of Confucius, the most sacred spot for Chinamen. Unfortunately the word has also the meaning "stupid," and probably for this reason the Russians repudiated the name and demanded a substitution which was supplied by another word Lu⁸ which means "dew." The formation of this character, strangely enough, has nothing to do with its meaning, for the upper part denotes a fish sauce, and the lower part "white," both being contracted. What connection the symbols have with the meaning it is difficult to say. The character might originally have been the designation for a rustic dish. As a verb, lu means "to bedew" and is frequently used in the figurative sense "to bless." The character is composed of "rain" and "road." A Chinese proverb says, "Riches and honors are like the dew of flowers," which means that with the progress of the day they disappear as if they had not been.. If we use the word as a verb, the idea of Russianizing a country would in a Chinese pun be tantamount to blessing it with the dew of heaven.

Names of other countries are of less interest, but we will mention some of them briefly as follows:

Italy is called in Chinese I,9 which means "mind" or "thought." Spain is called Hsi,10 i. e., west, and the same word may incidentally be used in the sense of western country or America.

Sweden and Switerland are both called *Shui*¹¹ or "auspicious." The character is composed of the symbol denoting a gem, and it means originally a flat stone about a foot long given to princes as a token of their authority like a scepter. Then it means "author-

ity," "rank" or "happiness." It is further used in the sense of a keepsake or favor and acquires the meaning of a good omen and as an adjective means "august," or "lucky."

In order to distinguish Sweden from Switzerland the latter is differentiated by the word *hsi* meaning "west," which is prefixed to *shui*, thus denoting Switzerland as "western Shui." Sometimes "Sweden" is expressed by two characters, by "Tien" which means "rule" or "regulation" joined to the word *Shui*.

The word Norway¹² is either expressed by the sound *No* which means consent, or by *Wei,*¹⁴ meaning "majesty," "awe," "power." Both are frequently combined into one, thus approaching more nearly the proper pronunciation of the country.

We might add as a general rule that all these names are designated as names of countries by having the word *Kuo*, 15 "country," added to them.

"典 "諾 "威 "國

MISCELLANEOUS.

CURRENTS OF THOUGHT IN THE ORIENT.

BY B. K. ROY.

Count Okuma Attacks Socialism.

Writing on "Japan's Struggle with Finance" in the Japan Magazine (Tokyo) for November, Count Okuma takes occasion in this succinct paper to attack the socialistic theory of state ownership of industries and public utilities. The master statesman of Japan argues thus:

"Our authorities at present are giving too much attention to protecting a few industries at the expense of other and smaller enterprises; and the government itself monopolizes some of the more important and necessary national undertakings. Private management of industries, in my opinion, always does more to excite national activity and competition than government management; it induces the people to cultivate an enterprising and independent spirit, which is very necessary to national development and general progress. Popular industry is even more beneficial and effective in promoting national efficiency than official industry, however well manipulated and managed. Whatever the people take in hand they can do, and do with more lasting and universal benefit to the nation than what the government does: and if the people once undertake to reduce our great national debt, it will be done. Then the government will be more free to devote its attention to education and other important subjects of national welfare, which are now only too much neglected. It is more important that the people shall prosper than that the government should have ample revenue; for the government can never really be wealthier than the people; and it is only as the people are permitted to cultivate and promote all forms of legitimate industry that they can be able to support the government and enable it to meet its obligations."

Whether Count Okuma is right or wrong or both as regards his championship of the rights of the people against governmental encroachment, we leave for the experts and the critics to decide. But the following sentence of the Count admits of no controversy: "Certainly a government that prospers at the expense of the people is doomed."

The Returned Students and the Chinese Revolution.

The part the students of different American and European countries have played in bringing about revolutions or radical reforms is too well known to warrant any comment here. Like the students of Russia and Italy, America

and Turkey, the students, especially the foreign-educated students, of China and Japan have played a noble part in the making of these two great countries.

Mr. Y. S. Tsao, writing in the *Journal of Race Development* for July, gives an outline of the work accomplished by these "semi-foreigners." He says:

"When the students returned from America in the early eighties, they were despised, suspected and watched by the officers of the Manchu government. For the first few years they were given a thorough drilling in Chinese literature so as to win them over to the conservative attitude of looking at things, and when sufficiently purged of their revolutionary ideas, they were left to shift for themselves, for the government had no use for such 'semiforeigners.' But beginning with the reformation after the China-Japan war, a number of reformers from the old school went to court as advisors and not a few returned students from America were given appointments by high officials. However, it was not until after the Boxer uprising that a number of them through the recommendation of Yuan Shih Kai were given responsible positions in the government."

On the intellectual activities of the returned students Mr. Tsao says:

"While the handful of returned students from Europe and America were busy occupying themselves with official life, teaching and engineering, a few of them translated the works of John Stuart Mill, Huxley, Spencer, Darwin, Henry George and other modern writers. 'The doctrine of the survival of the fittest has been on the lips of every thinking Chinese, and its grim significance is not lost on a nation that seems to be the center of struggle in the East.' However, the greater part of the modern ideas came from Japan through the students there who after a few months of training could transcribe Japanese translations of western books into Chinese. The rapid multiplication of patriotic newspapers and magazines helped immensely to disseminate modern political ideas along with scientific knowledge throughout the length and breadth of the nation. The biographies of such statesmen as Washington, Bismarck, Metternich and Gladstone, such leaders as Napoleon, · Cromwell and Lincoln, such patriots as Mazzini and Garibaldi were literally devoured. The doctrines of Rousseau, Montesquieux and Voltaire were expounded, and a weekly known as 'The People,' based on the principle of 'Young Italy,' was started. It had a circulation of 150,000 before it was finally suppressed by the Japanese government upon the request of the Manchu government."

Students' Work in India's Social Revolution.

While the other Oriental countries, helped by their young students, are marching on in the path of progress, democracy and self-realization, the young students of India are not at rest. They too, beside other things, are taking a prominent part in bringing about a social revolution in enslaved and casteridden India. The following quotation from London *India*, of October 10, will tell its own story:

"While young Anglo-India is behaving so badly, the middle-aged variety of the type is beginning to discover that the Bengal youth is not the villain which the Yellow Press has painted him. An 'Onlooker,' who is evidently an Anglo-Indian employer of labor, writes to the Englishman (Calcutta) to warn the European community in India, and particularly in Bengal, that it has not

been paying sufficient attention to the new spirit of enterprise and adventure that is now evident amongst the student class in Bengal. He writes:

"'I have had an opportunity of personally witnessing the daring, selfsacrifice, and disregard for comfort shown by not one but many parties of Bengali students from Calcutta who have visited the flooded districts [devastated in the recent Damudar floods] with relief in the way of provisions and medical comforts. Before I saw these boys, I entertained the common idea that Bengali students were for the most part short-sighted youths without physique and spiritless, entertaining a tremendous opinion of themselves, full of perverse hatred of the British Raj, and very contemptuous of their illiterate countrymen. These preconceived opinions of mine have now received a rude shock. Inquiries I made showed that the majority of the students were not only of a respectable class, but of the most respectable class, sons of Zamindars, of well-known professional men, and of government officials, just the boys who could have most easily stayed away. I think that this phenomenon, if I may use the word, deserves attention for it means that the youth of Bengal is growing very fast in physical and moral directions, and that we will in a few years be faced by a community which in character and spirit will be equal to the best that Europe can produce. In this flood relief business, the thought of caste seems to have dropped entirely. [Most of the victims of the flood were poor pariahs.] That alone is an indication of a coming break-up of vast dimensions.... Obviously the European must be greatly affected by the coming changes. He is here not because he is superior to the Indian in brain, but because he has grit and character. If the new generation of Indians also displays grit and character, what excuse will there be for bringing out Europeans to govern the country and control industrial enterprise? However, I do not wish to harbor what may seem a very selfish view. If the Bengals turn out better men than we are, so much the worse for us.""

We are exceedingly sorry for our panic-stricken Anglo-Indian friends. But judging from the reports that we receive from Indian papers and magazines it seems easy to foresee that a great many more surprises and "rude shocks" are in waiting for the British in India.

BOOK REVIEWS AND NOTES.

TAOISME: TOME I, LE CANON TAOISTE; TOME II, LES PÈRES DU SYSTÈME TAOISTE.

Par Dr. Léon Wieger, S. J. Tientsin, Chung-te-tang (Agents), 1911,
1913. Pp. 336, 521.

Dr. Wieger is a Jesuit missionary of Tientsin, China, where he has improved his opportunities to make a careful study of Chinese language, literature and thought. Besides text-books in the Chinese language and a large volume on Chinese folk-lore, he has written a summary of Chinese history from the beginning to 1905, a volume of 2173 pages including the Chinese text. He has also done valuable work of high scholarship in preparing a series of philosophical texts which he intends to comprise a summary of Chinese philosophical ideas from the beginning of their literature until the present. He has completed the study of Confucianism in an illustrated volume of 550 pages. His work on Chinese Buddhism and Taoism is not yet complete though two large volumes of each of these are finished. The introductory volume on Chinese Buddhism treats of monasticism and the second, which

comes from the press almost simultaneously with this number of *The Open Court*, treats of the Chinese lives of the Buddha.

The volumes of Dr. Wieger's in which we are most interested are those on Taoism. The first of these, entitled Le Canon taoiste, is a very complete bibliography of Taoist literature consisting first of an index of the Taoist Tripitaka, the collection of sacred literature made by the monks in the sixteenth century, the "patrology," as Dr. Wieger prefers to call it, rather than the more usual but less exact "canon"; then follows an index of the official or private lists of Taoist writings prepared by the laity at various times from the first to the seventeenth centuries. These two indexes exhaust Taoist bibliography. Before entering upon these bibliographical details, Dr. Wieger thinks it well to sum up concisely the principal features of the evolution of Taoist doctrine and history in order especially to explain the connection between the apparently disparate elements of Taoist patrology, its arrangement, its divisions, its terminology, etc. A translation of the doctrinal portion of this introduction is given on another page of this issue, accompanied by a reproduction of the cover illustration of the book. Dr. Wieger's second volume (1913) contains text and French translation of the extant works of the three Taoist fathers. Lao-tze, Lieh-tze and Chwang-tze. All have the same message to proclaim, the two latter simply developing the teachings of Lao-tze to which they undertook to convert Emperor Huang-ti, the founder of the Chinese empire. The book contains a subject index and an index of names.

Der Text des neuen Testaments in seiner ältesten erreichbaren Textgestalt. Göttingen: Vandenhoeck & Ruprecht.

This work on the text of the New Testament in its oldest attainable form has recently been finished after a labor of sixteen years conducted by Dr. H. von Soden, of Berlin University, supported by forty-four collaborators. It was made possible through the liberality of an interested patroness, Miss Elise Königs. About 165 manuscript codices containing the gospels and apostolos, .i e., the rest of the New Testament writings, 1240 gospel codices, 244 apostolos codices, besides 170 gospel- 40 apostolos-, and 40 apocalyse-commentary codices with text were collated and examined. The last volume (the preceding volumes giving the investigation, prolegomena, etc.) of this work contains the text of the New Testament on the upper half of each page, while on the lower half the various reading are classed in three groups, the first taking in the textual problems not yet definitely solved, the second, defending substantially Von Soden's text-form, the third giving the variants occasioned accidentally by transcription. This volume makes it possible to get as near as can be to the first text of the New Testament writers, and also to check the oldest text on the principles laid down by Von Soden, so that it is no longer necessary to go through thick and thin with the Vaticanus, Sinaiticus and Alexandrinus, the infallible authorities thus far. This brief résumé is based on a comprehensive review in the Protestantenblatt (Berlin) of September 24, which fails to give the price, the total number of volumes, or whether the last volume can A. KAMPMEIER. be obtained separately.

THE OPEN COURT

A MONTHLY MAGAZINE

VOLUME XXVII

CHICAGO
THE OPEN COURT PUBLISHING COMPANY
1913

COPYRIGHT BY
THE OPEN COURT PUBLISHING CO.
1913

INDEX TO VOLUME XXVII.

ARTICLES AND AUTHORS.

Abbott, David P. The Spirit Portrait Mystery	221
Abbott, David P., the Solver of Mystery. Paul Carus	
Accident that Led to a Notable Discovery. Philip E. B. Jourdain	
Albania. Paul Carus	
Alviella, Count Goblet D'. Religion of Biology	
Amerika-Institut at Berlin, The	
Amulets, Prehellenic. Paul Carus	511
Apollos, the Disciples at Ephesus and Dr. W. B. Smith's Theory. A. Kampmeier	683
Ararat, To the Summit of Mount. Edgar J. Banks	398
Artistic Observation, Evolution of. Paul Carus	
Aryan Movement, A Great. Bhai Parmanand	41
Bacon, The Left-Handed. Nathan Haskell Dole	
Balaam Among the Historicists, A. William Benjamin Smith	383
Banks, Edgar J. To the Summit of Mount Ararat	
Bebel, August, The Life of	
Bergmann, Ernst. The Significance of La Mettrie and Pertinent Materials	
Bible as a Law Book. Charles S. Lobingier	
Biology, Religion of. Count Goblet D'Alviella	257
Boring, C. O. Massaquoi and the Republic of Liberia	162
Boscawen, W. St. Chad. The Egyptian Element in the Birth Stories of	
the Gospels	120
Bourne, Randolph S. Stoicism	364
Buddhism, The Docetic Heresy in. Paul Carus	
Buddhism, The Nichiren Sect of. T. J. Kinvabara	
Butler, Samuel, Some Aspects of. M. Jourdain	599
Carus, Paul	022
Abbott, David P., The Solver of Mystery	254
Albania	
Allegorical Mysteries in Primitive Christianity	
Amerika-Institut at Berlin	
Ass-Headed Deity :	
Christ, The Portrayal of	
Cicada an Emblem of Immortality in China	
Civic Clubs in France	
Confucius, Poems of	

I and a second s	PAGE
Carus, Paul (Con.)	
Deussen's Recollections of Nietzsche	616
Docetic Heresy in Buddhism	382
Evolution in Artistic Observation	17
Greek Art in India	610
International Complications	548
International Institute of China	562
Joseph and Asenath; A Novel of the Early Christian Centuries	509
Kwan Yon Pictures and Their Artists	202
Lao-Tze by Chou Fang	124
Moresnet, the Smallest Republic in the World	743
Mother Goddess, The	041
Names of Nations in Chinese	701
Omar Khayyam and the Transiency of Life	680
Orient and Occident	030
Panama Canal Question	442
Pope of Taoism	5/3
Prehellenic Amulets	511
Preying Mantis (Poem)	01
Schiller's Skull :	444
Shakespeare Documents	150
Sphinx, The	216
Spirituality of the Occident Truth vs. Illusion	320
Venus of Milo, The	330
Chamberlain, Alexander F. Some Interesting Phases of the Contact of	313
Races Individually and en masse	25
Chang T'ien She. An Exposition of Taoism	
Chatley, Herbert. Possession and the Stability of Personality	138
China, The Dragon of. Churchill Ripley	461
China, The International Institute of. Paul Carus	562
Chinese Battle of the Fishes, The. Berthold Laufer	378
Chinese Folklore, The Praying Mantis in. Berthold Laufer	57
Chinese, Names of Nations in. Paul Carus	761
Christ, Portrayal of: Paul Carus	705
Christ, Tammuz and Pan. Further Notes on a Typical Case of Myth-	
Transference. Wilfred R. Schoff	449
Christianity, Allegorical Mysteries in Primitive. Paul Carus	575
Christianity and the Nichiren Sect of Buddhism. Ernest W. Clement	317
Christianity, Omar Khayyam and. Walter C. Green	656
Church, The Call of Science to the. H. E. Jordan	274
Cicada an Emblem of Immortality, The. Paul Carus	91
Citizen in a Free Country, On the Arduousness of Being a. Ezra B. Crooks	215
Civic Clubs in France	509
Clement, Ernest W. Christianity and the Nichiren Sect of Buddhism	317
Cobb, Stanwood. The Spirituality of the East and the West	302
Confucius, Poems of (Translations in verse). Paul Carus	733
Contact of Races Individually and en masse, Some Interesting Phases of	
the. Alexander F. Chamberlain	25
Criminology. Arthur MacDonald	383

INDEX.

PAGE

Crooks, Ezra B. On the Arduousness of Being a Citizen in a Free Coun-	
try	215
Currents of Thought in the Orient. B. K. Roy 638, 702,	765
Darwin, Sir George: A Biographical Sketch. Philip E. B. Jourdain	193
Darwin, Sir George, Note on. Philip E. B. Jourdain	572
Deity, An Ass-Headed. Paul Carus	574
Delphi, The Chasm at. A. Kampmeier	61
Deussen's Recollections of Nietzsche. Paul Carus	
Dole, Nathan Haskell. The Left-Handed Bacon	152
Dragon of China, The. Churchill Ripley	
Egyptian Element in the Birth Stories of the Gospels, The. W. St. Chad Boscawen	·
Egyptian Ushabtiu; The Quaint Solution of an Old Problem. George	-
H. Richardson	
Evolution of Artistic Observation. Paul Carus	
Faust, Herder as. Günther Jacoby	-
Fourth Dimension, The. Hyland Clair Kirk	
Fritsch, H. Samuel. True Prayer (Poem)	
Goddess, The Mother. Paul Carus	
Gospel of Illusion—Beyond Truth. F. W. Orde Ward	
Greek Art in India. Paul Carus	
Green, Walter C. Omar Khayyam and Christianity	656
Hayward, Percival. The Parable of the Rich Man and the Man who Had	
Only Riches	
Herder as Faust. Günther Jacoby	98
Historicists, A Balaam Among the. William Benjamin Smith	
Historicists, Ignatius vs. the. William Benjamin Smith	
Illusion, Gospel of,—Beyond Truth. F. W. Orde Ward	321
Illusion, Truth. vs. Paul Carus	330
Immortality in China, The Cicada an Emblem of. Paul Carus	91
India, Greek Art in. Paul Carus	610
International Complications. Paul Carus	548
International Institute of China. Paul Carus	562
Jacoby, Günther. Herder as Faust	98
Japan, Songs of. Tr. by Arthur Lloyd 120, 121,	177
John the Baptist, Did he Exist? A. Kampmeier	433
Jones, H. Bedford. A Breath from Nirvana (Poem)	
Jordan, H. E. The Call of Science to the Church	
Joseph and Asenath. Bernhard Pick	
Joseph and Asenath; A Novel of the Early Christian Centuries	500
Jourdain, M. Some Aspects of Samuel Butler	
Jourdain, Philip E. B. An Accident that Led to a Notable Discovery, 39;	399
Note on Sir George Darwin, 572; Sir George Darwin: A Biographical	
Sketch, 193; Tales with Philosophical Morals, 310.	
Kampmeier, A. Apollos, the Disciples at Ephesus and Dr. W. B. Smith's	
Theory, 683; The Chasm at Delphi, 61; The Cheating of the Devil	
According to Paul and the Docetists, 568; Did John the Baptist Exist?	
433; The Pre-Christian Nasareans, 84.	
Kinvabara, T. J. The Nichiren Sect of Buddhism, 289; Nichiren Tradi-	
	2 - 91
non in a letures, 334.	Toff a

	PAGE
Kirk, Hyland Clair. The Fourth Diemnsion	747
Kwan Yon Pictures and Their Artists. Paul Carus	
La Mettrie, The Significance of, and Pertinent Materials. Ernst Berg-	
mann	411
Lao-Tze by Chou Fang	
Larkin, Edgar Lucien. Visit of Mr. Selbit at the Lowe Observatory	
Laufer, Berthold. The Chinese Battle of the Fishes, 378; The Praying	
Mantis in Chinese Folklore, 57.	
Law Book, The Bible as a. Charles S. Lobingier	738
Liberia, Massaquoi and the Republic of. C. O. Boring	162
Life, Omar Khayyam and the Transiency of. Paul Carus	680
Lloyd, Arthur (Tr.). Songs of Japan: Miscellaneous Verses, 120; Poems	
by Soma Gyofu, 121; Poems of Madame Saisho Absuko, 177.	
Lobingier, Charles S. The Bible as a Law Book	738
Loofs, Professor, on "What is the Truth About Jesus?" William Ben-	
jamin Smith	
Lowe Observatory, Visit of Mr. Selbit at the. Edgar Lucien Larkin	
MacDonald, Arthur. Criminology	
Mach, Ernst. Memory, Reproduction and Association	
Mantis in Chinese Folklore, The Praying. Berthold Laufer	
Mantis, The Preying (Poem). Paul Carus	бі
Massaquoi and the Republic of Liberia. C. O. Boring	162
Memory, Reproduction and Association. Ernst Mach	1
Moral Concord, The. Henri Poincaré	606
Moresnet, the Smallest Republic in the World. Paul Carus	
Names of Nations in Chinese. Paul Carus	
Nasareans, the Pre-Christian . A. Kampmeier	
Nazarenes, The Pre-Christian. William Benjamin Smith	559
Nichiren Sect of Buddhism, The. T. J. Kinvabara	
Nichiren Sect of Buddhism, Christianity and the. Ernest W. Clement	
Nichiren Tradition in Pictures. T. J. Kinvabara	
Nietzsche, Deussen's Recollections of. Paul Carus	
Nirvana, A Breath from (Poem). H. Bedford Jones	
Occident, Orient and. Paul Carus	_
Occident, The Spirituality of the. Paul Carus	
Omar Khayyam and Christianity. Walter C. Green	
Omar Khayyam and the Transiency of Life. Paul Carus	
Orient and Occident. Paul Carus	
Orient and World Peace, The. Basanta Koomar Roy	
Orient, Currents of Thought in the. B. K. Roy	705
Pan and Christ, Tammuz. Further Notes on a Typical Case of Myth-	
Transference, Wilfred H. Schoff	
Panama Canal Question, The. Paul Carus	442
	510
Hayward	
Parmanand, Bhai. A Great Aryan Movement	
Kampmeier	
Personality, Possession and the Stability of. Herbert Chatley	128
Philosophical Morals, Tales with. Philip E. B. Jourdain	
I mosephical motats, rates with Timp in D. Jourdam	220

INDEX.		

vii

Pick, Bernhard. Joseph and Asenath	PAGE
Poincaré, Henri. The Moral Concord	606
Prayer, True (Poem). H. Samuel Fritsch	508
Primitive Ways of Thinking with Special Reference to Negation and Clas-	
sification. Josiah Royce	577
Races Individually and en masse, Some Interesting Phases of the Contact	
of. Alexander F. Chamberlain	
Raspail, Julien. The Mystery Surrounding the Death of Rousseau	
Religion of Biology. Count Goblet D'Alviella	257
Richardson, George H. Egyptian Ushabtiu; The Quaint Solution of an Old	
Problem	497
Ripley, Churchill. The Dragon of China	
Rousseau, The Mystery Surrounding the Death of. Julien Raspail	140
Roy, Basanta Koomar. Currents of Thought in the Orient, 638, 702, 765;	
The Orient and World Peace, 620; Rabindranath Tagore, India's	
Greatest Living Poet, 385.	
Royce, Josiah. Primitive Ways of Thinking with Special Reference to	
Negation and Classification	577
Schiller's Skull. Paul Carus	444
Schoff, Wilfred R. Tammuz, Pan and Christ. Further Notes on a Typical Core of Math Transformer	
ical Case of Myth-Transference	449
Science to the Church, The Call of. H. E. Jordan	
Shakespeare Documents. Paul Carus	150
Smallest Republic in the World (Moresnet). Paul Carus	743
Christian Nazarenes, 559; Professor Loofs on "What is the Truth	
About Jesus?" 689; Saint Ignatius vs. The Historicists, 351.	
Sphinx, The. Paul Carus	-6-
Spirit Portrait Mystery, The. David P. Abbott	109
Spirituality of the East and the West. Stanwood Cobb	221
Spirituality of the Occident, The. Paul Carus	302
Stoicism. Randolph S. Bourne	264
Tagore, Rabindranath, India's Greatest Living Poet. B. K. Roy	285
Tammuz, Pan and Christ. Further Notes on a Typical Case of Myth-	305
Transference. Wilfred R. Schoff	440
Taoism, An Exposition of. Chang Tien She	545
Taoism, The Pope of	573
Taoist Doctrines, The Evolution of. Léon Wieger	724
Truth vs. Illusion. Paul Carus	330
Truth-Speaking: The Fact Versus the Impression. Cora Lenore Williams	372
Venus of Milo, The. Paul Carus	513
Ward, F. W. Orde. The Gospel of Illusion—Beyond Truth	321
Wieger, Léon. The Evolution of Taoist Doctrines	724
Williams, Cora Lenore. Truth-Speaking: The Fact Versus the Impression	372
BOOK REVIEWS AND NOTES.	
Bebel, August. My Life	446
Buchanan, George D. Biyonde Cifrun	310
De Bary, Richard. A New Rome	62

THE OPEN COURT.

	PAGE
Deshumbert, Marius. Morale fondée sur les lois de la nature	448
Emerson, C. H. Ellu, The Oracle of the Other Self	256
Hocking, William Ernest. The Meaning of God in Human Experience	511
Jones, Samuel I. Mathematical Wrinkles	192
King, F. H. Farmers of Forty Centuries, or Permanent Agriculture in	
China, Korea and Japan	128
Larkin, Edgar Lucien. Within the Mind Maze	63
Mach, Ernst. Erinnerungen einer Erzieherin	125
Müller, Wilhelm. Das religiöse Leben in Amerika	64
Sarkar, Benoy Kumar. The Science of History and the Hope of Mankind	192
Sarton, George, in Ciel et terre	320
Soden, H. von et al. Der Text des neuen Testaments in seiner ältesten	
erreichbaren Textgestalt	768
Sprague, Homer B. The Book of Job	512
Strode, Muriel. My Little Book of Life	127
Wakemann, Thaddeus Burr, Addresses of	640
Washington, Wm. de Hertburn. Progress and Prosperity	576
Wieger, Léon. Taoisme	767
Willy, John. The Story of Asenath, Daughter of Potipherah, High Priest	
of On	640

THE

Mechanistic Principle

AND THE

Non-Mechanical

An Inquiry Into Fundamentals With Extracts From Representatives of Either Side

By PAUL CARUS

Pp. 128

CLOTH \$1.00

What the Book Contains:

Mechanicalism and Teleology—A Contrast
Motion and Movement
The Will
The Non-Mechanical
Time and Space
Causality
The Significance of Form
The Universal and the
Particular
Mark Twain's Philosophy

Machine
Spiritual Decision
All Credit Belongs to God

The Mind an Independent

La Mettrie's View of Man as a Machine

La Place Believes in Absolute Determinism

Cause and Effect "Do Not Even Touch Hands"

The Spirit in the Wheels

The Mechanism of the Universe as Seen by a Theist

The Machinery of Life

In the New View there is no Room for "God"

The Melancholy Teaching of Today

Open Court Publishing Co.

CHICAGO

What Is Man

_•-

. . .

LONDON

THE

Principle of Relativity

in the Light of the

Philosophy of Science

By PAUL CARUS

Pp. 109

CLOTH \$1.00

What the Book Contains:

On the Absolute
Tricks of Cognition
Comstock on Relativity
The A Priori
On Absolute Motion
Absolute Space
Ernst Mach
Objectivity
Primary Concepts

Some Physical Problems of Relativity

The Principle of Relativity as a Phase in the Development of Science.

Appendix: The Rev. James Bradley on the Motion of Fixed Stars.

Dr. Carus here gives the history of the growth of this theory, his belief in its transitory character, its significance in present day physics, and the views of its most prominent representatives. The appendix contains a letter addressed to the astronomer Dr. Edmond Halley in 1727 by Prof. James Bradley of Oxford, the forerunner of the relativity physicists of today.

For a compendium of Dr. Carus's philosophical views read his

Philosophy as a Science (sent free on application)

which may be had also in German and French translations.

Open Court Publishing Co.

122 South Michigan Avenue CHICAGO JUST PUBLISHED—New and Enlarged Edition of Prof. Ewald Hering's Classical Essay:

On Memory, and the Specific Energies of the Nervous System

Fourth Edition, containing additional chapters on the

Theory of Nerve Activity

CLOTH \$1.00

The investigations of Ewald Hering, Professor of Psychology at the University of Leipzig, have been largely accepted by his colleagues, and his Essay on Memory has become classical.

THE ENCYCLOPEDIA BRITANNICA, Vol. XIX, page 22, says:

"If the ingenious speculations of Hering should finally pass into demonstrated truth, we should be brought face to face with the fact that the mere act of building up or the mere act of breaking down affects the condition of protoplasm in other ways than the one which has hitherto been considered. If Hering's conception be a true one (and the arguments in favor of it, if not wholly conclusive, are at least serious), it is probable that future inquiry may lay the foundation of a new molecular physiology."—Professor Michael Foster, Cambridge University.

Books on Memory and Related Subjects:

Double Consciousness, by Alfred Binet. Cloth 50c., paper 20c.

Psychology of the Nervous System, by Paul Carus. Boards 30c

The Soul of Man. An investigation of the facts of Physiological and Experimental Psychology, by Paul Carus. Illustrated. Cloth \$1.50.

Contributions to the Analysis of the Sensations, by Ernst Mach. Cloth \$1.25.

A Mechanico-Physiological Theory of Organic Evolution, by Carl Von Naegeli. Boards 50c.

Diseases of Memory, by Theo. Ribot. Cloth \$1.50.

Diseases of Personality, by Theo. Ribot. Cloth 75c., paper 30c.

First Book in Organic Evolution, by D. K. Shute. Written especially for the use of students. Illustrated. Cloth \$1.25, paper 60c.

Examination of Weismannism, by George J. Romanes. Cloth \$1.00, paper 40c.

Open Court Publishing Co.

CHICAGO and LONDON

Freethought Publications

BOOKS AND PAMPHLETS

Liberty and Necessity.

An argument against Free Will and in favor of Moral Causation. By David Hume. 32 pages, price 10 cents.

The Mortality of the Soul.

By David Hume. With an introduction by G. W. Foote. 16 pages, price 10 cents.

From Christian Pulpit to Secular Platform.

By J. T. Lloyd. A History of his Mental Development. 60 pages, price 10 cents.

The Wisdom of the Ancients.

By Lord Bacon. A beautiful and suggestive composition. 86 pages, price 15 cents.

A Refutation of Deism.

By Percy Bysshe Shelley. With an introduction by G. W. Foote. 32 pages, price 10 cents.

Life, Death and Immortality.

By Percy Bysshe Shelley. 16 pages, price 10 cents.

Footsteps of the Past.

Essays on Human Evolution. By J. M. Wheeler. A Very Valuable Work. 192 pages, price 75 cents.

Utilitarianism.

By Jeremy Bentham. An Important Work. 32 pages, price 10 cents.

The Code of Nature.

By Denis Diderot. Powerful and eloquent. 16 pages, price 10 cents.

A Philosophical Inquiry Concerning Human Liberty.

By Anthony Collins. With Preface and Annotations by G. W. Foote and Biographical Introduction by J. M. Wheeler. One of the strongest defences of Determinism ever written. 75 pages, price 50 cents in cloth; paper 25 cents.

Letters of a Chinaman on the Mischief of Missionaries. 16 pages, price 10 cents.

Open Court Publishing Co. : CHICAGO

THE CABALA and THE TALMUD

in relation to

Judaism and Christianity

Two interesting small books by BERNHARD PICK, Ph. D., D. D.

The Cabala: Its Influence on Judaism and Christianity—Cloth, \$0.75.

"The origin of the Zohar or Book of Splendor in the 13th century forms the climax of the history of the Cabala, a book of Jewish mysticism. It played an important part in the theological literature of both Jews and Christians during the Middle Ages."

Jesus in the Talmud: His Personality, His Disciples and His Sayings—Cloth, \$0.75.

The attitude of Judaism toward Christianity at the time when the Talmud was in a state of formation was extremely hostile; but it must be remembered that the hostility was mutual. Many passages, offensive to Christians, have been removed from late editions of the Talmud. These passages have been collected and are here offered as a matter of historical interest.

Other Books by the same Author

Paralipomena; Remains of Gospels and Sayings of Christ—Boards, \$0.75.

"A little book of extraordinary interest, containing more of the extra canonical 'sayings' than have ever before been brought together in English."

—London Spectator.

"Students of the beginnings of Christianity will be grateful for this collection of materials from other sources than the New Testament."

—Unity, Chicago.

The Apocryphal Acts of Peter, Paul, John, Andrew, and Thomas—Cloth, \$1.25.

"A picture of Christianity towards the end of the second century; the book is carefully prepared, convenient and provided with abundant bibliographical references."

—Historical Review, Vol. 90; 1912.

"We grant that Mr. Pick has acquitted himself well in his task, and

performed it according to the best scientific methods."

—Catholic University, France.

The Devotional Songs of Novalis-Cloth, \$1.00.

"Christian hymns of great merit, equal in rank to Schleiermacher's 'Discourses on Religion' in regard to spiritual feeling and enduring worth."

Carlyle says in his famous Essay on Novalis in 1829:

"As a poet, Novalis is no less idealistic than as a philosopher; his pure religious temper and his heartfelt love of Nature—bring him into true poetic relation both with the spiritual and the material world."

OPEN COURT PUBLISHING CO.

CHICAGO

NIETZSCHE

Complete works of Friedrich Nietzsche in 18 volumes, octavo. Edited by Dr. Oscar Levy, the only complete authorized edition published in English.

TITLES PRICES
The Birth of Tragedy \$1.25
Early Greek Philosophy
Thoughts Out of Season, 2 vols.—\$1.00 each 2.00
Human, All Too Human, 2 vols.—\$1.75 each 3.50
Essay on Wagner 1.30
Dawn of Day
Joyful Wisdom
Thus Spake Zarathustra
Beyond Good and Evil
Genealogy of Morals
Will to Power, 2 vols.—\$1.60 each
Twilight of IdolsAnti ChristEternal Recurrence 1.75
Educational Institutions, their future
Ecce Homo, containing Autobiography and Poems 2.00
Index and Supplementary Essays
18 Vols. sent postpaid for\$27.50

The Open Court Publishing Co.
Chicago



Friedrich Nietzsche

Books on Nietzsche

Nietzsche and other Exponents of Individualism.

By Paul Carus. \$1.25. (Just published.) Illustrated with portraits of Nietzsche. Cloth, \$1.25.

A well-balanced presentation of Nietzsche's philosophy. Principal Contents: Anti-Scientific Tendencies: Extreme Nominalism; Ego Sovereignty; Philosophy of Originality; and the Principle of Valuation, including a review of Nietzsche's predecessors and disciples, "A reliable introducion to a study of the philosophy of Individualism."

Nietzsche: Dionysian Spirit of the Age.

Some account of his life and writings, by A. R. Orage, Fcap. 8vo, quarter buckram, with portrait, net 75c.

Nietzsche in Outline and Aphorism.

By A. R. Orage, editor of The New Age. Fcap. 8vo, 176 pages, \$1.25. Third edition.

"Mr. Orage's selection from Nietzschean aphorisms and his statement of Nietzsche's position are just what is needed."—Fabian News.

Who Is to Be Master of the World?

An introduction to the Philosophy of Friedrich Nietzsche by Anthony M. Ludovici. Preface by Dr. O. Levy, author of "The Revival of Aristocracy," etc. Cr. 8vo, 200 pages, \$1.25.

The Gospel of Superman.

A study of the complete philosophy of Nietzsche, by Prof. Henri Lichtenberger. Translated by J. M. Kennedy. Extra crown 8vo, 232 pp., \$2.50.

The Open Court Publishing Co., Chicago



MAN A MACHINE

BY

JULIEN OFFRAY DE LA METTRIE

French-English Edition- Cloth, \$2.00.

PRESS OPINIONS

"This handsome and elaborate volume by one of the greatest of the French materialists, is a credit to editor and publisher."

—Princeton Theological Review.

"The volume is distinctly entertaining."

-New York Times.

"La Mettrie lived at a time when many of our modern scientific ideas were taking shape and Descartes and Locke were the authority to be reckoned with. The rendering is spirited; the notes are full; the index ample."

—Boston Transcript.

-Boston Transcript.

"The service which the Open Court Publishing Company is rendering makes accessible, in good English, many of the important works of early modern philosophy."

—University of Chicago Press.

"A useful addition to the philosophical library issued by the Open Court Publishing Company. La Mettrie for his relation to English Deism and French Materialism has considerable historical interest."

—The Nation, New York.

"In science, as in literature, there are many indications that the thought and style of the eighteenth century, too far disparaged, is coming to be appreciated at a higher value than has been normally placed upon them in the last 50 years, as seen in the publication of this little classic book."

—Bookfellow, Australia.

"La Mettrie, most daring of the earlier French 'Philosophes' of the eighteenth century, curiously anticipated some of the teachings of Haeckel."

—The Churchman, New York.

"This famous French philosophical classic is issued in a worthy form by the one American publishing house not afraid of embarking on the hazardous venture of publishing low-priced books of philosophy."

—The Continent, Chicago.

PRESS OPINIONS, Continued

"The book is a specimen of scholarly work in translation and notes."

—Daily News, Chicago.

"It is well to familiarize ourselves with the clearest statements of materialism; its best refutation is its bald statement."

-Biblioteca Sacra.

"The Open Court Company has supplied for ready use an excellent edition of La Mettrie's Man a Machine, which provides one with material for studying this brilliant and interesting example of the materialism of the eighteenth century."

-Hartford Seminary Record.

"La Mettrie's speculations as to the mechanism of instinctive actions has been borne out by recent experiments made by Dr. Loeb. In other places he comes into curious contact with Dr. Alexis Carrel's late demonstration of the independent life of organs. The book has a strangely modern air."

-Evening Sun, Baltimore.

"La Mettrie's work is a landmark in the development of materialistic thought."

—New York Call.

"Among the books that are regarded as standard references in the discussion of the soul as an elemental and eternal 'vitality' is Man a Machine, by La Mettrie."

—The Examiner, Chicago.

"Most men love wealth; some love power, some few love wisdom, and, though least in number, the thinkers come to dominate the world. All who really think try to give an interpretation to life and things in general, and these fall naturally into two classes—materialists and idealists; they offer a mechanical theory or an ideal; a material or a spiritual. Thought as a mode of action has fascinated every materialistic thinker from Heraclitus' day to ours."

-Baltimore News.

"I am very glad to see this famous and representative piece of eighteenth century mechanistic materialism and sensationalism made available not only in a convenient form, but with much serviceable supplementary material. In the series of text-books of this sort which your house has published you have done a substantial service in facilitating the first-hand study of the history of philosophy in our American universities."

—Arthur Lovejoy, Department of Philosophy, Johns Hopkins University, Baltimore, Md.

Sent postpaid on receipt of price

OPEN COURT PUBLISHING CO.

122 South Michigan Avenue, Chicago

ISIS

REVUE CONSACRÉE À L'HISTOIRE DE LA SCIENCE

BUT.—Etudier la genèse et le développement des théories scientifiques, en tenant compte de tous les échanges d'idées et de toutes les influences que le progrès de la civilisation met constamment en jeu. Réunir tous les matériaux nécessaires pour cette étude et perfectionner ses méthodes et ses instruments de travail.—Il est à peine besoin de faire remarquer que cette œuvre de synthèse n'intéresse pas seulement les historiens de la science, auxquels elle est plus spécialement destinée, mais aussi les historiens proprement dits, les savants, les philosophes, les sociologues, en un mot, tous ceux qui désirent mieux comprendre l'évolution intellectuelle de l'humanité.

PLAN.—Chaque fascicule de la revue contiendra: 10 une chronique; 20 un éditorial consacré à la critique des méthodes, ou à la philosophie de l'histoire, ou à la coordination des résultats acquis; 30 des contributions originales à l'histoire de la science; 40 des revues générales sur différentes parties de l'histoire de la science, et sur les disciplines connexes que l'histoire de la science doit connaître au moins superficiellement: histoire de la philosophie, histoire des religions, histoire de la technologie, histoire des beaux-arts...; 50 des notes archéologiques et iconographiques; 60 des analyses critiques des travaux récents les plus importants; 70 des notes bibliographiques rétrospectives sur les ouvrages anciens fondamentaux, et des articles de haute vulgarisation consacrés à l'examen des sources et des instruments de travail indispensables à l'étude d'une question ou d'une époque déterminée; 80 la bibliographie complète de tous les travaux récents relatifs à l'histoire de la science.

ORGANISATION.—Isis sera publiée en français, en anglais, en allemand et en italien, et paraîtra chaque trimestre, en fascicule de 10 à 13 feuilles in-80 environ. Quatre fascicules formeront un tome de 640 à 800 pages, avec figures et planches hors texte, s'il y a lieu. Le prix de souscription, par tome et par année, est de 30 francs, payables après la publication du premier fascicule.

ADRESSES.—Tout ce qui concerne la rédaction et l'administration d'Isis doit être adressé à M. George Sarton, à Wondelgem-lez-Gand, Belgique.

Envoi franco sur demande du programme MO.

THE GOLDEN BOUGH

A Study in Magic and Religion

By Professor J. G. FRAZER

Part I. The Magic Art and the Evolution of Kings. Two volumes. Price \$2.75 each.

- " II. Taboo and the Perils of the Soul. One volume. \$3.00
- " III. The Dying God. One volume. Price \$3.00
- " IV. Adonis, Attis, Osiris. One volume. Price \$3.00
- "V. Spirits of the Corn and of the Wild. Two volumes. Price \$2.75 each.
- "VI. The Scapegoat. One volume. Price \$3.00
- "VII. Balder the Beautiful. Two volumes. \$3.00

OTHER BOOKS ON EGYPTOLOGY

- THE BELIEF IN IMMORTALITY, J. G. Frazer. Price \$3.00
- OSIRIS AND THE EGYPTIAN RESURRECTION, E. A. Wallis Budge. Two volumes, beautifully illustrated and bound. Price \$5.00 each.
- GODS OF THE EGYPTIANS, E. A. Wallis Budge. Two volumes, 98 colored plates, full page. \$10,00 each.
- THE MUMMY, by E. A. Wallis Budge. One vol. \$3.50
- A HISTORY OF EGYPT, by James H. Breasted. One vol. with 200 illustrations and map. Price \$5.00

Send for our special list of books relating to Egyptian History and Art

Open Court Publishing Co.

122 S. Michigan Avenue : : : : Chicago

The Philosophical Review

EDITED BY J. E. CREIGHTON

Volume XXII, No. 4 (July, 1913) contains:

Philosophy in France in 1912Prof. ANDRE LALANDE

Ethical Objectivity in the Light of Social Psychology

Dr. W. K. WRIGHT

Discussion: Error and the New Realism .. Prof. A. O. LOVEJOY

Reviews of Books:

James H. Leuba, A Psychological Study of Religion: by Dr. Ernest L. Talbert—Emile Durkheim, Les formes élémentaires de la vie religieuse: by Prof. Irving King—Herbert L. Stewart, Questions of the Day in Philosophy and Psychology: by Prof. George H. Sabine.

Notices of New Books:

J. Segond, L'intuition Bergsonienne: by Dr. H. M. Kallen—Max Dessoir, Outlines of the History of Psychology—Andre-Thomas, Cerebellar Functions—E. Le Roy, The New Philosophy of Henri Bergson (Translated by Vincent Benson)—Samuel Lourié, Die Prinzipien der Wahrscheinlichkeitsrechnung—Irving Babbitt, The Masters of Modern French Criticism—Ch. Andler et al., La philosophie allemande au xix siècle—A. E. Taylor, Aristotle—H. Wildon Carr, Henri Bergson: The Philosophy of Change.

Summaries of Periodical Literature.

Notes.

The Editor should be addressed, Cornell University, Ithaca, N. Y.

PUBLISHED BI-MONTHLY

LONGMANS, GREEN, & COMPANY

LANCASTER, PA.

Fourth Avenue and Thirtieth Street, NEW YORK

Single Numbers, 60c. (3s. net.)

Per Annum, \$3.00 (14a.)

NON-EUCLIDEAN GEOMETRY

A Critical and Historical Study of Its Development By ROBERT BONOLA

Authorized English Translation, with Additional Appendices, by H. S. Carslaw,
Professor in the University of Sydney, N. S. W. with An Introduction by
Federigo Enriques, Professor in the University of Bologna.

Cloth; pp. 268. Price, \$2.00.

NOTES AND REVIEWS

"For simplicity and elegance of treatment of a subject which was a source of confusion to mathematicians for centuries, Robert Bonola's 'Non-Euclidean Geometry' leaves little to be desired. The English translation, by H. S. Carslaw, now renders this book accessible to an extensive class of readers. . . . The subject is taken up mainly in the order of historical development, beginning with the attempts of the Greeks and Arabs to prove Euclid's famous Fifth Postulate, and tracing the history of this postulate and the theory of parallels until it was finally shown that postulates which contradict the Fifth Postulate may be used as a basis for a logically consistent geometry. . . . Three such (Non-Euclidean) geometries are given particular attention. . . Numerous references to the literature of the subject make the book particularly valuable to the thorough student of geometry."—
E. J. Moulton, Journal of Western Society of Engineers, Chicago.

"The author traces in admirable fashion the gradual development of Non-Euclidean geometry. The clear and concise way in which the subject is treated and the large number of references given make this book interesting and valuable."—The Evening Post, New York.

"The recent untimely death of Professor Bonola lends unusual interest to this book. . . . In a review of the original Italian edition which appeared in the Bulletin in 1910, I spoke of the desirability of having 'an English edition of so valuable and interesting a work.' This want is now well supplied by Professor Carslaw's translation . . . which is a very readable and satisfactory English version of the best historical introduction we have to the elements of Non-Euclidean geometry."—Arthur Ranum, Bulletin of the American Mathematical Society.

Open Court Publishing Company



WM. ELLERY LEONARD

AESOP HYSSOP

Fables adapted and original, in a variety of verse forms. Cloth \$1.50

A clever critic in THE NEW YORK TIMES describes this contribution to Nonsense Literature as a "Unique and Delightful Folly by a Professorial Vaudevillian." He says:

"One never knows what a Professor will do. They are the most whimsical class in the world. The learned William Ellery Leonard, for instance. Not content with being a successful pedagogue and a respected scholar, he has plucked for himself crowns of poetic laurel and of critical bay. Modesty forbids the naming of the leading review wherein his articies have, of late, delighted the elect; but we may recall the praise which Mr. Kilmer, in these columns, bestowed on his poetry a fortnight ago. And now that we have beheld him on the stage of the day in these eminently proper roles, behold he appears again, like a Protean vaudevillian, with cap and bells, a lilting step, and a mask, with the slightest twist of irony to the smiling lips."

OTHER BOOKS BY THE SAME AUTHOR:

BYRON AND BYRONISM IN AMERICA. \$1.06 postpaid. A study in literary

backgrounds before the Civil War.

THE FRAGMENTS OF EMPEDOCLES. \$1.08 postpaid. Translation in blank verse with introductory study and explanatory notes.

THE POET OF GALILEE. \$1.08 postpaid. An examination of the sayings of

Jesus from the point of view of literary criticism.

THE OREGON TRAIL OF FRANCIS PARKMAN. 45 cents postpaid. Edited with introduction and notes.

GLORY OF THE MORNING. 40 cents postpaid. One act Indian play in poetic prose. THE VAUNT OF MAN, AND OTHER POEMS. \$1.35 postpaid.

Ready for the Press

LUCRETIUS. A blank verse translation of the entire six books.

Open Court Publishing Co. Ave., CHICAGO

Dr. Paul Duessen's Classical Work

THE SYSTEM OF THE VEDANTA

Has just been published in an authorized translation by

CHARLES JOHNSTON

Cloth. Gilt Top. Pp. 514.

Price, \$3.00 Net

NDIA has been the classical land of Psychological investigation. As the Jews developed religion, the Greeks art and science, so the sages of India, psychology. Professor Duessen, who is both a philosopher and a most prominent Sanskrit scholar, has devoted his life to the Vedanta, and in this great work he has collected all pertinent material.

PRESS NOTICES

American Review of Reviews, New York—"This is a rare and wonderful book that is chiefly concerned with the science of the soul . . . in the Vedanta you will find the seeds of all known philosophical systems . . . Emerson's lofty thought was merely the philosophy of Brahman filtered through a marvelous Western Mind."

Boston Transcript, Mass. — "Dr. Duessen is a recognized authority in everything pertaining to Hindu philosophy. This book is a systematic exposition of that Hindu philosophy known as the Vedanta. The volume is like a combination of a work on metaphysics, theology and practical religion. The book is not only the work of a great scholar, but that of a man who knows how to make things clear."

The Continent, Chicago—"This is perhaps the most comprehensive and best balanced presentation we have had of the Hindu system of religious philosophy, called the Vedanta."

Springfield Republican, Mass.— "The author has attempted and accomplished an enormous task . . . an immense amount of material is collected and compressed into the space of the volume . . . The quoted portions of the Vedic text are clear and effective and the comments more than commonly readable for even the lay reader."

The Expository Time, London—"Professor Paul Duessen of Kiel is one of the great students of Indian literature. His Upanishads has had a wide circulation."

In this book the name of Vedanta is applied to the theologicophilosophical system, founded upon the Upanishads which may be called the Dogmatics of Brahmanism. The translation makes easy reading and yet it is reliable.

Send us the name of your book dealer and we will send a copy, postpaid, for examination on a 10-day return privilege.

THE OPEN COURT PUBLISHING COMPANY

122 S. Michigan Avenue, Chicago, Ill.

RATIONALIST LITERATURE

HISTORY OF PSYCHOLOGY.

By Professor J. Mark Baldwin. 2 vols., 320 pp. and illustrations; cloth 50c each.

A RELIGION OF THIS WORLD.

Being a Series of Positivist Addresses given at the London Church of Humanity. By Philip Thomas, Minister of the Church. viii+138 pp.; cloth \$1.25.

WHAT ARE WE TO BELIEVE?

By C. R. A. xii + 138 pp.; cloth \$1.00 net; paper cover, 60c net. The task of the author of this little work has been mainly to collect and to analyse the interpretations given to the Gospels by men who have spent their lives in this branch of study. He speaks much less with his own voice than with those of distinguished scholars. His book will therefore enable even a hasty reader to realize exactly how things stand as regards the evidence for Christianity supplied by the New Testament and by history.

ESSAYS TOWARDS PEACE.

By John M. Robertson, M. P., S. H. Swinny, Prof. Ed. Westermarck, and Norman Angell. With Introduction by Mrs. H. Bradlaugh Bonner. 92 pp.; fcp. 8vo; cloth 50c. net; paper cover, 30c net.

THE IDEA OF A FREE CHURCH.

By Henry Sturt, M. A. Cheap edition; xiv + 312 pp.; cloth, 50c; paper cover, 25c.

"No one can read the very able chapter entitled 'A Historical Criticism of Christianity' without being impressed by the extraordinary freshness and vigour displayed throughout in handling what might have seemed an exhausted subject. Let me be content with warmly recommending the whole work to all who are interested in the double process of carrying life into ideas and ideas into life."—A. W. Benn.

WAR AND PESSIMISM; AND OTHER STUDIES.

By George Chamier. Cheap edition; 128 pp.; paper cover, 50c. This delightful little book comprises interesting studies of the Moral Aspect of War, Pessimism, Carlyle on Hero-Worship, Emerson on Self-Reliance, Thomas More's "Utopia," Ruskin's "Frontes Agrestes," Ibsen's "Hadda Gabbler," Marcus Aurelius Antoninus, Shakespeare's "Macbeth," and Ruskin's "Sesame and Lilies."

A SHORT HISTORY OF CHRISTIANITY.

By John M. Robertson, M. P. xx + 354 pp.; cloth, \$2.25.

This is a considerably revised and amplified edition of one of Mr. Robertson's most popular works, and is issued uniform in price and get-up with Christianity and Mythology, Pagan Christs, and The Evolution of States.

OBSCURANTISM IN MODERN SCIENCE.

By Edward Clodd. 20 pp.; demy 8vo., paper cover, 10c.

Open Court Publishing Co. 122 S. Michigan Ave. Chicago

Editeurs: ZANICHELLI de Bologna, ALCAN de Paris, ENGELMANN de Leipzig, WILLIAMS & NORGATE de Londres.

"SCIENTIA"

REVUE INTERNATIONALE DE SYNTHESE SCIENTIFIQUE

Paraissant tous les deux mois (6 numéros par an de 240 à 250 pages chacun)

DIRECTION:

G. BRUNI, A. DIONISI, F. ENRIQUES, A. GIARDINA, E. RIGNANO.

"SCIENTIA" a été fondée en vue de contrebalancer les fâcheux effets de la spécification scientifique à outrance. Elle publie des articles qui se rapportent aux branches diverses de la recherche théorique, depuis les mathématiques jusqu'à la sociologie, et qui tous sont d'un intérêt général: elle permet ainsi à ses lecteurs de se tenir au courant de l'ensemble du mouvement scientifique contemporain.

"SCIENTIA", qui est, en 1912, dans sa sixième année d'existence, a conquis du premier coup la faveur du monde savant, grâce à la collaboration qu'elle s'est assurée des autorités scientifiques les plus éminentes de l'Europe et de l'Amerique. Elle a publié, outre les articles de ses Directeurs, MM. Bruni, Enriques, Dionisi, Rignano, des travaux de MM. Mach, Poincaré, Picard, Tannery, Borel, Boutroux, Volterra, Levi-Civita, Zeuthen, Arrhenius, George Darwin, Schiaparelli, Celoria, Seeliger, Lowell, Maunder, Crommelin, Eddington, Fowler, Bohlin, Puiseux, Moreux, Herz, Suess, Chwolson, Lebedew, Righi, Bouasse, Brunhes, Ritz, Langevin, Fabry, Zeemann, G. H. Bryan, Soddy, Ostwald, Nernst, Wallerant, Lehmann, Sommerfeldt, Ciamician, Abegg. Bayliss, Höber, Bottazzi, Fredericq, Demoor, Boruttau, Foa, Galeetti, Ebstein, Asher, Raffaele, Delage, Caullery, Raband, Le Dantec, Semon, Driesch, Pearl, Hartog, Russell, Wiesner, Haberlandt, Costantin, Ziegler, Uezkill, Bethe, Sherrington, Bohn, Piéron, Claparède, Janet, Rey, Pikler, Hoermes, Sollzs, Jespersen, Meillet, Simmel, Ziehen, Cunningham, Westermarck, Kidd. Landry, Edgeworth, Bonar, Pareto, Loria, Carver, Fisher, Sombart, Oppeaheimer, Scialoja, Ph. Sagnac, Salomon Reinach, Guignebert, Loisy, etc.

"SCIENTIA" joint aux texte principal, portant les articles dans la langue de leurs auteurs, un supplément avec la traduction française de tous les articles allemands, anglais et italiens. Elle est ainsi accessible à quiconque

connait la seule langue française.

PRIX DE L'ABONNEMENT: 30 frs.—24mk.—28s.

DIRECTION ET REDACTION:

MILAN: VIA AURELIO SAFFI 11.

A History of Japanese Mathematics

BY

DAVID EUGENE SMITH AND YOSHIO MIKAMI

Price, Cloth \$3.00 Net

This work sets forth, in a style that the non-mathematical will have no difficulty in following, the history of the native mathematics of Japan. It traces the development of the science from the earliest period, when the influence of China was only slightly in evidence, down to the nineteenth century when the mathematics of Europe finally replaced the ancient wasan. In particular it tells the interesting story of the soroban and the sangi, the abacus and computing rods of Japan; it relates the history of the rise of higher mathematics in the sixteenth and seventeenth centuries; it sets forth in a non-technical manner the work of scholars in the field of the yenri, the native calculus of the country; and it shows the nature of the problems that were studied, problems that display the same patience that is seen in the intricate ivory carvings of the Japanese artisan.

Professor Smith's interest in the history of mathematics, his first-hand acquaintance with Japan, and his large collection of books and manuscripts on the native wasan, fit him peculiarly to write upon the subject. Mr. Mikami's numerous contributions in European journals, his two published works in Oriental mathematics, and his association with Endo, the greatest of native historians of the science, in the library of the Tokio Academy of Sciences, make him an ideal collaborator.

The work is profusely illustrated with facsimiles from important books and manuscripts in the collection of Professor Smith.

This valuable contribution to the science of mathematics is in preparation. It will be published in October. Advance orders may now be sent in through your local book dealer.

The Open Court Publishing Company is at all times pleased to send advance information concerning its publications, and sample copies of its two periodicals. The Monist, quarterly, and The Open Court, monthly, may be obtained upon request.

Send for our latest book list.

OPEN COURT PUBLISHING CO.

122 South Michigan Avenue, Chicago, Illinois, U.S.A.