

more easily than others, as D, F, G, or Bb; and by this adjustable key-board he can properly play any piece with his favorite scale of touch-keys. This sliding of the key-board to the right or left requires only the time of a quarter note, and therefore generally can be done quickly enough where the key (or signature) changes. Whatever handicap from this source may exist is many times offset by the greater freedom supplied the composer in its other features. All music, indeed, has to be composed with reference to the limitations of the instruments for which it is designed.

By the way, it is a great pleasure, as well as profitable, to transcribe music from the present five-line system to this three-line staff method, whether for the voice or almost any instrument, as by this means difficult passages are rendered clear and easy to the vision and fixed in the memory.

But inventions, as you already know, that are made to supersede a universal custom, cannot be made to succeed in public use, as for example reformed spelling of the English language, artificial language for universal use, etc. Pity!

EWING SUMMERS.

314 7th St., N. E., Washington, D. C.

BOOK REVIEWS AND NOTES.

LES RELIGIONS ORIENTALES DANS LE PAGANISME ROMAIN. Par *Franz Cumont*. Paris: Ernest Leroux, 1907. Pp. 333.

Prof. Franz Cumont, well known in the world of scientists as the greatest authority on the history and development of Mithraism in the Roman empire, has written this exceedingly interesting book for the *Annales du Musée Guimet*. It is the result of a series of lectures before the College of France at Paris, and has been published by Ernest Leroux, of Paris, Rue Bonaparte 28.

The book is interesting mainly because it gives us several new points of view, and removes a misconception of the conditions in the Roman empire which will be surprising to those who are otherwise well versed in the history of classic antiquity. We are accustomed to think of Rome as having conquered the Orient and Romanizing the entire Eastern world, and Roman civilization appeals to us as a more powerful factor which seizes upon and changes the Orient. We are too much accustomed to look upon the Orient as being the same as it is now, impoverished and degraded in financial as well as moral respects. Professor Cumont teaches us that conditions were different in the last part of Roman history. In the days of Augustus we find the Roman empire having conquered by its superior militarism the entire Mediterranean world. Rome preserves the form of republican institutions and the conquered territories enjoy a certain local self-government subject only to the appointment of governors dependent upon the emperor. How different are the conditions of the later empire, as for instance in the days of Diocletian. Everything is centralized and the emperor has become an absolute monarch. Local autonomy in the province is lost and the Roman empire has been modeled after the pattern of an Oriental state, and the political situation is only one side of a change which extends to other branches of the social and political life of the empire. Professor Cumont calls it the pacific penetration of the Occident by the Orient. He reminds us that in the days of Augustus the Orient was not yet the degraded Levant which it is to-day. Though the Roman soldier was superior, the Eastern countries were after all the seats

of wealth, of culture and of learning, so that even Nero could think of removing the capital of the empire to Alexandria. In these days the Occident was gradually permeated by Eastern religions. Christianity did not take its first hold in Eastern provinces but it took first root and developed its historical peculiarities among the Western territories of the empire. Professor Cumont excludes from the present volume a consideration of the problem how far Christianity has been influenced by other religions, and how far in return it may have influenced them. He points out that the similarities of ceremonies and rituals are not always a proof of an adoption on either side. They may under similar conditions develop similar forms. So for instance the third degree of Mithraism is called *Miles*, i. e., soldier, and there everything was modeled in a military fashion. The devotee takes the oath and promises to fight the evil one. He is supplied with arms which symbolize the religious virtues and we notice the old Mazdean dualism throughout, but St. Paul uses the same simile in his epistles, and St. Paul is older than the Mithraistic religion as it was worked out in the second century of the Christian era. Both views, the Mithraistic and St. Paul's, may have developed independently, or be referred back to an older common source. The question of mutual adoption has not been answered in a simple manner because, says Professor Cumont, every single instance would have to be investigated separately, and we may in different cases come to the most opposite conclusions.

Professor Cumont has collected here perhaps all that can be said concerning the ancient Oriental cults in the Roman empire, but if we consider the significance of the subject we must complain that the harvest in itself is meagre enough, because of the lack of sources. It is to be regretted that the ancient pagan litanies have almost entirely been lost and we have only little scraps of evidence in the ancient monuments and accidental references to religious rituals among which the most important ones are satirical parodies.

Professor Cumont treats his subject in eight chapters, which are as follows: Rome and the Orient; Why the Oriental Cults Propagated Themselves; Asia Minor, The Arrival of Cybele at Rome and Her Court in Asia Minor, etc.; Egypt, the Foundation of the Cult of Serapis, the Hellenized Egyptian Court, etc.; Syria and the Syrian Goddesses; Persia, the Influence of the Empire of the Achæmenides, Mazdaism, the Origin of the Mysteries of Mithra, etc.; Astrology and Magic; The Transformation of Paganism, Paganism before Constantine, Christian Polemics, etc.

TSZE TEËN PIAO MUH JI-TEN HIYO MOKU. A Guide to the Dictionary of the Chinese Language, and to the Katakana Syllabary of the Japanese Language. Second edition. By *Thomas Jenner*. London: Luzac & Co. Pp. 122.

Owing to the extreme complexity of the Chinese ideographs, Western scholars are generally discouraged to grapple with them, though the importance of China, politically, commercially, in literature, or otherwise, is well recognized and commands serious attention. Therefore anything that purposes to make easier the study of the Chinese language must be welcome. Mr. Thomas Jenner, member of the China Society, offers us in this book a certain artificial method of memorising the Chinese radicals which is based upon the psychological principle of association. The principle was first applied to a practical use by William Stokes, teacher of memory, and the author has

utilized it for his Chinese study, finding it very practicable. The book contains not only the list of radicals, but also the names and dates of the twenty-six Chinese dynasties and two hundred thirty-seven emperors, all numerically arranged; along with a chapter on the geography of China and its map, and followed by some other sundry matters among which an account of the Chinese *swan-ben* (abacus). These compose Part I of the book.

The second part is devoted to the Japanese Katakana syllabary. It also contains the names of the emperors and a map of Japan.

To illustrate Mr. Jenner's method of memorizing Chinese radicals, I may take one instance from the book. The 119th radical is *mi*, meaning "uncooked rice." To memorize the sound and the meaning of the character, the author devises the word-combination "*meal of rice*," and then he composes a sentence containing this combination, thus: "These broad cloths are damaged with the *meal of rice*," a complete association of ideas being thus formed. While some of these memorial sentences are very good, others seem to be unsatisfactory, and the author may in another edition replace them by better ones.

The same method is applied to the Japanese syllabary commonly known as *iroha* (Japanese alphabet). But in this case the method is much simpler, for the Japanese syllables are not complicated. The second character of *iroha* is *ro*, which when written in Katakana style looks like a square, that is, "The row-lock hall of an ancient gallery"; and thus the sound and the symbol are associated together in memory.

D. T. S.

DIE GEHEIMLEHRE DES VEDA. Ausgewählte Texte der Upanishads aus dem Sanskrit übersetzt von Dr. Paul Deussen. Leipsic: Brockhaus, 1907. Pp. xxiii, 221.

It is strange how easily scholars identify themselves with the subject of their inquiry. Just as Max Müller was identified with the idea of the Self which he adopted in his philosophy almost literally in the sense in which it is used by the Brahmans, so Dr. Paul Deussen has become an enthusiastic expounder of Brahman philosophy as set forth in the Upanishads. The Upanishads were foreshadowed in the Veda, and for a long time the conception of the Self was the esoteric doctrine of the Brahman sages which was handed down from father to son and from teacher to pupil, not openly but in the form of a secret. We read for instance:

"Then spake Yajnavalkya, 'Take me by the hand, oh Arthabhaga, my dear one, for thus we must both come to an understanding by ourselves and not here in the assembly.'"

And again in another Upanishad we read:

"Therefore shall a father as a Brahman teach this doctrine only to his eldest son or perhaps also to a trusted disciple, but not to any one else whatsoever he may be. Even if a man should offer him in payment the whole earth and all its wealth, 'This is worth more,' he should then think,—'This is worth more,' he should then think."

These are the mottoes with which Professor Deussen prefaces a collection of selected texts of the Upanishads chosen for the purpose of characterizing the esoteric doctrine of the Atman, or the Self, which constitutes the central idea of Brahman philosophy. It is practically a metaphysical conception which assumes the Self as an independent being that exists by itself, the existence of which is denied by Buddhism. Professor Deussen here represents to us an

authoritative statement of the Brahman doctrine as taught in the texts themselves, nor is there any doubt about his being an indispensable authority in the comprehension and correct rendering of both the Sanskrit texts and ideas.

THE SACRED CITY OF ANURADHAPURA. By *Brahmachari Walisinha Harischandrar*. Published by the author at 44 First Cross St., Colombo. Pp. 132. Price. 3 Rs.

Under this title Mr. Harischandrar has published a fully illustrated book for the purpose of making known the true history of the ancient capital of Ceylon, the sacred city of Anuradhapura with its many interesting ruins. The illustrations consist of the sacred Bodhi tree, a number of dagobas and ancient shrines, several portions of the stairs of Mihintale, with statues and other monuments of interest. The history of this ancient center of Buddhist civilization is almost unknown to Western people, which makes it the more interesting to read an author who has purposely studied the records and evidences of the glorious past of his country. The book is presumably printed by the author at his own expense, which must have been considerable, and its typography as well as its style betray its native origin. Nevertheless the reader will easily condone the shortcomings if he feels at all in sympathy with the enthusiasm and religious and patriotic zeal of the author. At any rate the book will be important to all who are interested in the history of Buddhism in Ceylon, for it brings within reach many data extracted from the author's knowledge of native documents, which are of difficult access to those not fully conversant with Singalese.

KRITIK DER REINEN ERFAHRUNG. Von *Richard Avenarius*. Leipsic: Reiland, 1907. Pp. xxvii, 222.

Richard Avenarius, late professor at the University of Zürich, died a few years ago, and his widow has caused the republication of his main works in a second edition. He is not much known, and although it appears that his presentation is bewildering we believe that his method ought to be taken into consideration by professional philosophers. His intention was to work out a philosophy of experience. We think that he has failed in many significant points, but his ideal is right. His first essay was entitled "Philosophy as Thinking the World According to the Principle of the Smallest Effort," which is a valuable idea and strongly recalls Ernst Mach's "economy of thought."

He further offers a book entitled "Critique of Pure Experience" in which he endeavors to analyse experience and let nothing but the facts of experience enter into his conception of the world. A further step in bringing his philosophy before the public is his human conception of the world.

In all his writings he attempts to strike out into new paths by following closely the example of naturalists, but by avoiding the work done by philosophers before him he comes to some extent practically to similar conclusions, although he misunderstands that others have thought and said similar things, and accuses his predecessors of metaphysicism where they often are as positivistic as he is himself. The latest publication before us is the first volume of the second edition of his "Critique of Pure Experience," edited by Petzoldt, who utilized the posthumous notes of Avenarius, but has otherwise left the work in the same shape as it was when it appeared in its first edition.

MENDELSSOHN. By *Camille Bellaigue*. Paris: Felix Alcan, 1907. Pp. 227. Price, 3 fr. 50.

In a series of books devoted to music and musicians, entitled *Les maitres de la musique*, M. Felix Alcan publishes a charming life of Mendelssohn, who though not one of the greatest composers, is nevertheless one who is near to them in spirit, in technique, and classical seriousness. Our author, the musical critic of the *Revue des Deux-Mondes*, has made a special study of this great musician, who began his career at the early age of seven years. He follows him in his travels to Italy, Switzerland, France, England, and tells his life in Germany where he finally died a premature death. The work contains 227 pages and is divided into two books, each of five chapters. Those of the first book are (1) From Childhood to His Sixteenth Year, (2) From the Sixteenth to the Twentieth Year, (3) The Years of Travel (1829-32), (4) His Return and His German Career at Düsseldorf (1833-35), (5) From His Settlement in Leipsic (1835) Until His Death (1847). The subjects of the second book, which treats of his genius and his works, are as follows: (1) Generalities, (2) His Form and Technique, (3) His Sentiment or *Ethos*, (4) His Influence, and (5) Conclusion.

An appendix enumerates the works of Mendelssohn, and offers also a bibliography of the most important works written about him.

ESSAIS DE JEAN REY. Découverté et preuve de la pesanteur de l'air. Edition nouvelle avec commentaire publiée par *Maurice Petit*. Paris: Hermann, 1907. Pp. XXVII, 191. Price, 7 francs.

Frémy says in his *Encyclopédie chimique* that "J. Rey, the physician of Périgord as he has frequently been called with a certain intention of belittlement, was a distinguished observer who lived before his time, and it is surprising that when speaking of the fine works of Torricelli, published in 1643, and those of Pascal in 1648, no mention is made of the grand discovery of Jean Rey. I look upon this silence as one of the great injustices which have been committed in the history of science."

To make up for this injustice A. Hermann of 6 Rue De La Sorbonne, Paris, now republishes M. Rey's essay on the discovery and proof of the weight of air, which appeared for the first time in 1630 and may indeed be regarded as one of the most important investigations that paved the way for a better physical comprehension of nature. The book is edited by Maurice Petit, a French pharmacist, and is accompanied by some letters and critical notes. The publishers have printed it on good paper, and have reproduced the original title page of the first edition.

Mrs. Janet E. Ruutz-Rees has published a series of sermon-like "Reflections of the Psalms" in a small booklet of 43 pages bearing the same title and containing the following chapters, "God and the Soul," "The True Nature of Love," "Blessedness," "The Search for God," "The Conflict," "The Soul's Victory."