

through the medium of the latter. Aids to computation, such as logarithms and the slide-rule, are introduced and largely employed in the later stages. Trigonometrical tables are also explained. The principal feature of the work is perhaps the excellent and extensive collection of practical exercises, in which the student has the advantage of the author's expert knowledge of the building and engineering trades and of his wide experience as a teacher. The subject is developed in the modern spirit, and the book will be very acceptable in many quarters.

GERMAN PHILOSOPHICAL TEXT-BOOKS.

Geschichte der Philosophie. By Karl Vorländer.

I. Band, pp. xiv+361; II. Band, pp. viii+512.

(Leipzig: Dürr'schen Buchhandlung, 1908.) Price 3.60 marks and 4.50 marks.

Grundlinien der Psychologie. By Dr. Stephan

Witasek. Pp. viii+392. (Leipzig: Dürr'schen Buchhandlung, 1908.) Price 3 marks.

Die Entstehung der wirtschaftlichen Arbeit. By Dr.

Ed. Hahn. Pp. iv+109. (Heidelberg: Carl Winters Universitäts-buchhandlung, 1908.) Price 2.50 marks.

PROF. VORLÄNDER'S "Geschichte der Philosophie" is an attempt to compress into two small volumes an account of the course of development of philosophy from the earliest times to the present day. When it is added that the work includes a short account of the life and writings of almost every writer of any importance at all in philosophy during the last five-and-twenty centuries, little hope will be felt of the success of the author in his attempt. It is therefore of the highest credit to Prof. Vorländer that he has achieved the seeming impossible, and produced a work which is both eminently readable and strictly accurate. He displays complete mastery of his subject throughout, and a fine sense of the distinction between the relevant and the irrelevant, the latter quality being possibly in part due to the fact that he is a prominent representative of the Neo-Kantian school, and excels in the application of the critical method. The same fact explains why so large a portion of the second volume is allotted to a treatment of the philosophy of Kant, at the expense chiefly of the description of Hegelianism which follows, and which cannot but be considered extremely inadequate by any school of philosophers. The last hundred pages of the book, on the philosophy of the present day (since 1840), make very interesting reading, and give much information not to be found outside the pages of "Ueberweg-Heinze"; but where so many names are mentioned, it is surely most surprising to find no reference whatever to William James and the pragmatic school, more particularly as the prodigious development of the science of psychology during the last few years and its significance for modern philosophy are distinctly emphasised.

Of late years text-books in psychology have been multiplying rapidly, but no external justification is needed for the publication of Dr. Stephan Witasek's manual. This book is admirably arranged, clearly written, and thoroughly up to date, and is probably

the best and most complete *introductory* text-book of the science which we possess at the present day. In the earlier, more general, chapters the author argues out controversial points thoroughly, yet without profuseness; in the later ones, on "special" psychology, he gives the very latest results in the experimental study of the different forms of mental process. The discussion of the various possible theories of the relation of mind and brain is exceptionally well done. The arguments against psychophysical parallelism and its most recent form, panpsychism, are effectively put, and although the author admits that there are also serious objections to the interaction theory, it is very evident that his own sympathies are in this direction. The outcome of the discussion would seem to be, "Either interaction or a substantial soul," which, if quaint, is decidedly optimistic!

Dr. Hahn's book is a short anthropological essay on the origin of work possessing little more than an academical interest.

WILLIAM BROWN.

OUR BOOK SHELF.

The Radio-active Substances. By W. Makower. Pp. xii+301. (London: Kegan Paul and Co., Ltd., 1908.) Price 5s.

THE author's aim in writing this volume is to present the chief phenomena and theories relating to radio-activity in a concise and simple form. The subject has been competently dealt with in an elementary manner in other works, but it is advancing rapidly, and the present work is intended to enable readers to keep pace with its development. All branches of the subject are treated in this book. Beginning with chapters on the nature of gaseous conductivity and on the methods of measurement employed, the author goes on to describe the discovery of the radio-active substances, the nature of the radiations they emit, the emanations, the active deposits from the emanations, and their successive transformations. In the concluding chapters the activity of substances in general and the mechanism of radio-active changes are briefly discussed.

The author has succeeded admirably in his aim of giving a very full and accurate summary of the chief facts and theories in a concise form, but perhaps the summary is too complete and condensed for general readers. The food supplied is sound and wholesome, but the general reader who has no knowledge of the subject to start with will find it difficult to absorb all the nourishment supplied to him in such condensed form. In some parts, notably when discussing the successive transformations of the radium atom, the author has successfully made use of simple analogies in presenting the results to his readers.

In the introduction the author is guilty of stating that the properties of radio-active substances have necessitated a "revision of many of our conceptions both in physics and chemistry." In no sense is this statement defensible, and occurring in a book intended in some measure for non-scientific readers, who are too prone to consider every new discovery as upsetting previous conceptions, it is likely to lead to the aggravation of an evil already sufficiently pronounced. It is due to the author, however, to point out at once that the above statement is an isolated one, and that the book as a whole conveys no such impression, showing as it does how the conceptions evolved from the study of radio-activity follow as a natural sequence