

some, on the other hand, give a good idea of the habit of the plants.

Taking it altogether, the "Synopsis" is a very useful addition to the literature of the order, and it will be found a convenient handbook for reference.

H. AND J. GROVES.

#### OUR BOOK SHELF.

*The Unconscious Mind.* By A. T. Schofield, M.D., M.R.C.S. Pp. vii + 436. (London: Hodder and Stoughton, 1898.)

DR. SCHOFIELD has set himself the task of familiarising the English public with the famous German theory of unconscious mental states. In his anxiety to let more accomplished psychologists speak for themselves he has, in many parts of his book, been content simply to reproduce the *ipsissima verba* of his authorities without criticism. Unfortunately he is himself scarcely psychologist enough to distinguish good authorities from bad, and trusts far too implicitly to the crudities and vagaries of such writers as Eduard von Hartmann. His work will hardly do much towards shaking the conviction of most English students of the science that "unconscious mind" is much such another phrase as "invisible colour" or "unextended body." Unconsciousness seems to mean very different things for him in the course of his argument. Instinct, he says, belongs to the "unconscious mind," because the animal executing the instinctive movement is unaware of its purpose. This seems quite unreasonable; the instinctive act is conscious enough in the sense of being attended both with sensation and with pleasure or pain; how then does the absence of knowledge of its biological value make it "unconscious"? Again we hear of "unconscious sensations," but they seem to mean no more than neural changes which would, under other conditions, be attended with consciousness. But surely it is obvious that it is one thing to say that if my attention had not been preoccupied a certain neural change would have resulted in a conscious sensation, and quite another to say that it has actually produced a sensation in my "unconscious mind." The unconscious execution of habitual mechanical processes is, of course, said to be presided over by "unconscious mind"; but where does the need of this undefined *tertium quid* come in? What is there, apart from the unscientific assumption as to the absolute heterogeneity of the psychical and physical, to prevent our saying quite simply that as a process becomes habitual and unconscious it ceases to be mental at all and becomes purely nervous? The believers in "unconscious mind" indeed profess to find it unthinkable that a combination of psychical elements should come to be replaced by a combination of physical elements, but they seem to have no better reason for their view than what Ebbinghaus well calls "this vulgar prejudice of the absolute distinction between mind and matter." It is probably not too much to say that Leibnitz's invention of the "petites perceptions" and Herbert's unlucky metaphor of the "threshold of consciousness" are responsible between them for an incalculable amount of psychological myth-making and confusion. Far the most valuable part of Dr. Schofield's book, the chapters in which he relates facts as to the therapeutic value of mental influences, is quite independent of his psychological theory.

A. E. TAYLOR.

*Higher Arithmetic.* By W. W. Beman and D. E. Smith. Pp. xvi + 193. (London: Ginn and Co., 1897.)

THE book before us is for the service of teachers. It is not intended as a first course, but for those who have already had some experience, and wish to review and extend their knowledge.

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The authors have adopted quite a new line of treatment, and instead of making the subject into a set of puzzles, as is so often done, they have introduced many improvements by showing how the subject is applied to every-day use. Thus we have a chapter on "Longitude and Time," and the reader is made acquainted with the relationship between them, together with the excellent system of universal time in use in the United States and nearly all over the world. Again, it is pointed out how a knowledge of arithmetic is applied to solve problems in elementary electricity. From the beginning to the end of the book the authors have made it their chief aim to point out the utility of the subject in its various applications. The book contains, besides an excellent list of definitions and etymologies arranged alphabetically, a great number of well chosen and appropriate examples.

*The Story of Marco Polo.* With Illustrations. Pp. xiv + 248. (London: John Murray, 1898.)

THE preface is signed "Noah Brooks," and the little book is prepared specially for young readers. The plan is excellent, and well carried out. Selected extracts from Yule's "Book of Ser Marco Polo" are accompanied and woven together by a pleasantly written commentary, which seems to have been designed to interest the young people of the United States and the United Kingdom. Nothing could be better for the purpose. The extraordinary fidelity of many of Marco Polo's descriptions to fact is pointed out, and the incredulity with which they were received in a credulous age is duly dwelt on: a few of the more fanciful passages are also given, and the antiquity of these old stories noted. Probably many older people will see with surprise the minute exactness with which Marco Polo, six hundred years ago, described some of the most marvellous stock tricks of the modern Indian conjurers. The illustrations are not numerous, but very graceful and well selected. A map would have been a desirable addition.

H. R. M.

*L'Art de Découvrir les sources et de les Captiver.* By E. S. Auscher. Pp. 278. (Paris: J. B. Baillière et Fils, 1899.)

BEGINNING with the physical properties of water, and dealing in order with the substances usually found dissolved in natural waters, the sources of these soluble materials, and the geological nature of the rocks through which subterranean waters percolate, the reader is introduced to the methods of water analysis in common use. The arrangement of strata and the characteristics of common rocks are explained with a view to making the circulation of underground waters easily understood. The third division of the volume, dealing with "La recherche des sources et des eaux souterraines," includes a chapter on "les signes extérieurs," which is only of doubtful scientific value, though many water-diviners doubtless receive great guidance from such considerations. Several of the illustrations are ingenious, and the book will be interesting to civil engineers who are concerned with questions of water supply.

*Handbook of Insects Injurious to Orchard and Bush Fruits, with Means of Prevention and Remedy.* By Eleanor A. Ormerod. Pp. x + 286; portrait and woodcuts. (London: Simpkin, Marshall, Hamilton, Kent, and Co., Ltd., 1898.)

MISS ORMEROD has now added to her long and useful series of works on agricultural entomology by publishing a volume specially devoted to the insects and mites injurious to fruit. It is hardly necessary to say that the book is worked out in her usual careful manner, and freely illustrated. The principal fruits are arranged in alphabetical order, commencing with apple; and