

but of human existence. The blow was parried by the wisdom or the folly of the vast majority of mankind, who refused to purchase a chance of saving their souls with the certainty of extinguishing the species."

The substance of "Adonis, Attis, Osiris" is the story of how their faiths provided the machinery for Christianity. The moral of it is the historical appraisal of Occidental religion in modern culture which the student who runs may read.

A. E. CRAWLEY.

HABERLANDT'S PLANT ANATOMY.

Physiological Plant Anatomy. By Prof. G. Haberlandt. Translated from the fourth German edition by Montagu Drummond. Pp. xv+777. (London: Macmillan and Co., Ltd., 1914.) Price 25s. net.

ANATOMY, whether of animals or of plants, is apt to prove dull reading if treated merely from the descriptive point of view. Such books we know; some have even been translated into English—it is hard to say why, for they are mere repositories of dry facts, and the individual dry bones, one would have thought, could well enough have been dug out of the original treatises whenever they were wanted. It is only when it is related to, or becomes part of, a larger and more philosophical scheme that anatomy becomes attractive to the ordinary scientifically minded reader who is not a specialist in the subject.

The great charm of Prof. Haberlandt's book has always lain rather in the circumstance that the anatomical facts had there been welded into a coherent theme of which the *leit motiv* was Function. It is true that speculation sometimes usurps the place of proof, and that teleology now and then breaks out, cloaked but thinly in the disguise of physiology. But it is a great book, and the fact that it has passed through four German editions, each an improvement on its predecessor, is a testimony to its intrinsic value.

Now that it is accessible to the English reader who happens to be unacquainted with German, its influence will be more widely felt amongst the students of botany in English-speaking countries. It deserves to be well received, for Mr. Drummond has discharged his task with ability, and by deciding on a somewhat free style of translation he has succeeded in producing a very readable volume which contains but little trace of its exotic origin.

In so far as we have tested the translation, we have lighted upon remarkably few errors of any importance; but perhaps it is not altogether superfluous to point out one instance in which a closer adherence to the text would have been of advantage. On p. 550, in discussing the relations

existing between the assumed micellar structure and differential imbibition, the micellæ are said to "cohere with different intensities in different tangential planes." By translating the German word *richtungen* (directions) as *planes*, the meaning of the passage is obscured, and a situation already sufficiently complicated is rendered less intelligible.

It may be questioned whether any good purpose has been secured by placing all the notes at the end of the book, instead of grouping them with the chapters to which they severally belong, as they appear in the German edition. But this is, after all, a trifling matter, and at the most detracts but little from the excellent form in which a valuable and indeed classical work has been presented to the English reader.

J. B. F.

ELECTROTECHNICS.

- (1) *Switchgear and the Control of Electric Light and Power Circuits.* By A. G. Collis. Pp. 85. (London: Constable and Co., Ltd., 1913.) Price 1s. net.
- (2) *Elementary Theory of Alternate Current Working.* By Capt. G. L. Hall. Pp. vi+195. (London: The Electrician Printing and Publishing Co., Ltd., n.d.) Price 3s. 6d. net.
- (3) *Electricity in Mining.* With plans and illustrations. Siemens Brothers Dynamo Works, Ltd. Pp. xiv+201. (London: C. Griffin and Co., Ltd., 1913.) Price 10s. 6d. net.
- (4) *Electric Circuit Theory and Calculations: a Practical Book for Engineers, Students, Contractors, and Wiremen.* By W. Perren Maycock. Pp. xiv+355. (London and New York: Whittaker and Co., 1913.) Price 3s. 6d. net.

(1) IN the preface to this manual the reader is referred for further information to the author's larger work on the subject. The present book would have been more valuable had it been carefully prepared. Some of the diagrams of the connections are inaccurate, and it is very difficult to make out what they mean.

(2) This work can be well recommended to those who are seeking the elementary theory of the subject. It has been compiled with accuracy and care, and forms a good introduction to the larger works on the subject of alternate current working. The latest developments are dealt with, and the whole treated in a simple manner without the aid of advanced mathematics.

(3) The novelty attaching to this work lies in the fact that it is compiled by a firm of electrical engineers. It is not a mere catalogue or description of electrical apparatus, but goes further, and deals with the technical part of the subject. The illustrations are good, and the book is well produced.