

An Introduction to Plant Anatomy. By Prof. Arthur J. Eames and Prof. Laurence H. MacDaniels. (McGraw-Hill Publications in the Agricultural and Botanical Sciences.) Pp. xv+364. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1925.) 17s. 6d. net.

It is rare, indeed, that one meets a book that needs little but commendation, yet such is the case in connexion with this detailed text-book of plant anatomy. Without embarking upon general theories, the authors are merely concerned with the descriptive morphology of vascular plants. Physiological and ecological aspects of morphology, and the practical applications of this subject, are indicated incidentally to the general treatment, while comparative morphology is used only when it may help to make clear structural complexity. Although the treatment of the subject is in no way causal, yet the developmental side of morphology is well to the fore in chapters on meristems, the primary and secondary plant bodies, and in the treatment of cambial activities.

The view-point from which the organisation of the vascular tissues is developed is that these are primarily laid down on a cylindrical plan, from which various subordinate types can be traced. The treatment of this subject is as thoroughly up-to-date as the rest of the book. Lists of recent references are given at the end of each chapter, while excellent illustrations abound, notably those of different types of wood, presented by the courtesy of the United States Forest Service. The result is a well-balanced book which can scarcely fail to be of value to any botanist who uses morphological data.

Geology.

- (1) *Mineralogie.* Von Prof. Dr. R. Brauns. (Sammlung Göschen, Band 29.) Sechste verbesserte Auflage. Pp. 143. 1.25 gold marks.
 (2) *Geschichte der Geologie.* Von Prof. Dr. K. Hummel. (Sammlung Göschen, Band 899.) Pp. 123. 1.25 gold marks.
 (Berlin und Leipzig: Walter de Gruyter und Co., 1925.)

THESE are recent issues of this excellent series which has been employed in Great Britain for practice in reading scientific German. The first (1) is a miniature text-book of mineralogy quite sufficient to give a sound elementary knowledge of the subject. It will be all the more welcome in Britain that Naumann's notation of crystal faces is discarded and only those of Weiss and Miller are placed before the student. The second (2) is a remarkably full but concise description of the historical development of geological science in all its branches.

Gestaltungsgeschichte der Erde. Von Dr. Leopold Kohn. (Sammlung Bornträger, Band 7.) Pp. vii+200. (Berlin: Gebr. Bornträger, 1925.) 7.50 gold marks.

THIS is a readable but somewhat discursive account of the problems presented by the history of the earth. Special attention is given to the geosynclinal theory of mountain formation, which in one form or another has gained considerable support in recent years, though it has not obtained the approval of Prof. Heim. On

this and other subjects the opinions of different authors are freely quoted. Altogether it is a stimulating book, and if it is somewhat inconclusive, that is largely to be attributed to the difficulties inherent in many of the questions with which it deals. A folder is included, giving a synopsis of the different stages in the earth's history.

Popular Astronomy.

A Popular Guide to the Heavens: a Series of Eighty-six Plates; with Explanatory Text and Index. By Sir Robert Stawell Ball. Fourth edition, completely revised and edited by the Rev. T. E. R. Phillips. Pp. xii+84+86 plates+13. (London: George Philip and Son, Ltd.; Liverpool: Philip, Son and Nephew, Ltd., 1925.) 15s. net.

AFTER an interval of fifteen years since the publication of the third edition, this book now appears rehabilitated under Mr. Phillips's able revision. To the usual planetary diagrams, numerous lunar and stellar charts, drawings of planets and comets, a number of photographs have been added to represent the work of modern astronomical photography, together with a concise summary of such topics as methods of measuring the distances of the stars, the classification of stellar spectra, and new information on variable stars.

It is to be regretted, however, that sunspots—a source of interest to many people possessing small telescopes—are not represented by a short series of photographs, illustrating, for example, the growth of a typical stream of spots. The single plate portraying sunspots by direct photography is, we think, unwisely retained from the last edition to the exclusion of more recent and better photographs. The Stonyhurst charts might also have been mentioned as being very useful to the amateur.

It can be said with confidence that every one interested in astronomy, whether possessing a telescope or not, will be well equipped with this popular guide—a title which deservedly expresses its purpose in the fullest sense.

A Voyage in Space: a Course of Six Lectures "Adapted to a Juvenile Auditory" delivered at the Royal Institution at Xmas 1913. By Prof. H. H. Turner. Second edition, with an Addendum on Recent Discoveries. Pp. xvi+344. (London: The Sheldon Press; New York and Toronto: The Macmillan Co., 1925.) 7s. 6d. net.

THE first edition of this book was published during the unsettled times of 1915. The publication of a second edition comes, therefore, as a welcome reminder of these excellent lectures, which being reproduced in print are made accessible to an increasing number of hearers beyond the limits of the lecture room. To those who have heard one of Prof. Turner's discourses on astronomy, the book will require no further introduction. To others, a hearty invitation may be given to share in the good things provided for the young people (and their seniors) at the Royal Institution. A glance at the numerous illustrations, averaging at least one to every three pages of text, will show the