

*Dairy Engineering.* By John T. Bowen. (Wiley Agricultural Engineering Series.) Pp. xiv + 532. New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1925.) 18s. 6d. net.

THIS volume deals with the principles of engineering and their application to dairy practice. The method of presentation is clear and the subject matter well arranged, so that the book will serve as a useful and trustworthy guide to the dairy engineer, and also as a text-book to the student of dairying.

After a preliminary chapter on definitions, the subject of great importance in dairying—namely, the raising and application of steam—is dealt with. First the boiler and its fittings; then combustion and firing; then control of the air supply, which is an important factor in the economical use of fuel. The types of steam engine usually employed are described and their advantages and disadvantages discussed. As a proper arrangement for the carrying of steam to the different appliances is not infrequently overlooked in designing a factory, the chapter dealing with steam piping and accessories is of special interest. Attention is also directed to the advantage which is gained by the use of exhaust steam, as by its employment much can be done in dairy practice.

The chapters dealing with refrigeration and insulation are good, but no detailed consideration is given to such operations as pasteurisation or cream separation. The internal combustion engine and various types of electric motors are considered in detail so far as their applicability to the dairy factory goes. The advantages and disadvantages of electric power are also discussed. There is a chapter on temperature measurement and control.

*Admiralty Handbook of Wireless Telegraphy,* 1925. Prepared by Capt. W. G. H. Miles. Pp. viii + 547. (London: H.M. Stationery Office, 1925.) 5s. net.

THE style of this book is lively and spirited and the information conveyed is clear and accurate. It is meant for the information and guidance of officers and men of H.M. fleet, and the editor is to be congratulated on making the subject so interesting. The modern theory of electricity is first described, and so the theory of thermionic tubes follows very convincingly later on. Resonance is first described analytically and then illustrated by what happens in daily life. We are told to "walk across a room carrying a cup of tea, and note . . ." The "jar"—the Service unit of electrostatic capacity—which equals the gooth part of the microfarad, is much in evidence and so also is the "mic" (the microhenry). W/T and R/T seem to be the contractions used in the Navy for wireless telegraphy and radio telephony respectively, and this book proves that they are very convenient.

There are one or two slips that might be altered with advantage. The lines of magnetic force round two parallel wires carrying equal currents flowing in opposite directions are circles and have not the oval shape shown in Fig. 18. The modified type of Fourier series, also, shown on p. 439, will certainly not represent any kind of wave form. But these are very small matters. Considering its value it is a very cheap book, and can be strongly recommended.

*The Extra Pharmacopœia of Martindale and Westcott.* Revised by Dr. W. Harrison Martindale and W. Wynn Westcott. Eighteenth edition. Vol. 2. Pp. xlii + 728. (London: H. K. Lewis and Co., Ltd., 1925.) 20s. net.

WHEN "Martindale" was divided into two volumes on the issue of the fifteenth edition in 1912, the dividing line ran roughly between drugs used in the treatment of disease, which were dealt with in volume 1, and an account of recent therapeutical research which, with much bacteriological, analytical, and other information of value to medical men and pharmacists, composed volume 2. This arrangement, which has proved convenient in practice, is still maintained, and as this is the third edition published since the division took place, it is clear that in its new form the book has lost none of its popularity.

Only those familiar with the enormous output of work, of very varied quality, in therapeutics and the associated sciences, can have any idea of the trouble expended by the authors in selecting material for inclusion, and of the labour necessary for the presentation of the approved data in the highly condensed form with which users of this book have become familiar. These two features are as characteristic of this edition as of its numerous predecessors.

The senior author will have the cordial sympathy of all his readers in the loss of his collaborator, Dr. Wynn Westcott, who died at Durban on July 30, 1925, while this edition was in the press.

*Grundlinien zur Entwicklungsmechanik der Pflanzengewebe.* Von Dr. H. Pfeiffer. (Abhandlungen zur theoretischen Biologie, Heft 20.) Pp. vi + 99. Berlin: Gebrüder Borntraeger, 1925.) 6 gold marks.

A GREAT deal of this small volume on a particular branch of "theoretical biology" will be too theoretical for the average biologist. It seems doubtful whether long Latin terminologies and chapters on such subjects as "Die erkenntnistheoretische Begründung der Entwicklungsmechanik pflanzlichen Gewebe" really advance the subject appreciably.

Later chapters, however, are of interest, especially where they treat of recent work in this field, which is such a complex one, and so different in many ways from the corresponding field in animals, that every attempt to summarise and sift critically the materials is bound to be of service. We hope that Dr. Pfeiffer will follow this up by a further volume on the achievements rather than on the theoretical bases of this branch of science.

*Mesopotamia: the Babylonian and Assyrian Civilization.* By Prof. L. Delaporte. (The History of Civilization Series.) Pp. xvi + 371. Translated by V. Gordon Childe. (London: Kegan Paul and Co., Ltd.; New York: Alfred A. Knopf, 1925.) 16s. net.

THIS is a quite useful summary of present knowledge of the subject, including a short history of each region, and chapters on its institutions, religion, economic and social structure, and contributions to knowledge. There are a number of small line drawings of typical works of art. The translation is not very happy in places, and there are some odd mistakes.