

chemistry only: it contains numerous references to original papers and structural formulæ are freely used. Numerous tables are also included which are useful, but seem somewhat out of place in a book which is not meant for a work of reference.

The general plan of the book follows the usual lines: after a chapter on physical chemistry, the carbohydrates, proteins, and fats are each separately considered; chapters on digestion and absorption and the blood and lymph follow. Metabolism is dealt with in detail, and sections on the chemistry of the internal secretions and on nutrition follow: these accounts appear up-to-date, except in one or two instances, where a marked advance has taken place during the past year. We feel that the book will be of use to those who are revising the subject for an advanced examination and to those who wish to obtain some idea of modern trends in this branch of science.

*Technical Drawing: a Manual for Evening Classes and Junior Technical Schools.* By G. E. Draycott. Pp. vii + 232. (London: Oxford University Press, 1927.) 6s. net.

THIS is a very elementary text-book intended for the use of schoolboys just beginning the study of technical drawing. Well-informed students will be familiar with some of the earlier problems, but there are always a few who seem to evade any acquaintance with this subject during their school days, and it is probably for these that the simpler problems have been introduced.

In the later chapters the book deals with some of the properties of the circle and the ellipse, the areas of irregular figures, the projection and intersection of simple solids, the development of surfaces, pictorial projections, and simple machine drawing. The examples have been chosen to suit both engineering and building students, and are presented in such a way that the use of models (which are usually too expensive to be obtained in adequate quantities) is not of pressing importance. With the addition of two or three more complicated machine drawings, this book would cover a very satisfactory two years' course of the evening continuation school type.

It is unfortunate that Fig. 157, which illustrates a rather important principle of projection, should be so obscure. On the whole, however, Mr. Draycott has produced a useful small book plainly written and clearly illustrated.

*A System of Qualitative Analysis for the Rare Elements.* By Prof. Arthur A. Noyes and Prof. William C. Bray. Pp. xii + 536. (New York: The Macmillan Co., 1927.) 21s. net.

IN recent years the line of separation of the common from the rare elements has become very indistinct, and many substances which were until recently mere curiosities in some chemical laboratories have now found extensive industrial application. Many alloys, for example, which are in common use may now contain elements such as vanadium, tungsten, molybdenum, and cerium, whilst many other uses of the rarer elements are being discovered daily. The

methods of testing for these elements have not been worked through systematically as has been the case with those in use for the common elements, and the present work is therefore of great interest and value. Many of the tests and separations are quite new, and one striking novelty is the extended use of perchloric acid in many of the separations.

The second half of the book contains much detailed information on the experiments made by the authors and their students on the subject, and there are useful references to original papers, although these have been carefully selected and are not large in number. This book cannot fail to be of service both to students and investigators and also to analysts.

*River Engineering: Principles and Practice.* By F. Johnstone-Taylor. (Lockwood's Manuals.) Pp. xiv + 119. (London: Crosby Lockwood and Son, 1927.) 4s. 6d. net.

THE control of the flow in natural streams has been practised for many centuries, and to-day, in nearly all parts of the civilised world, one of the most important of engineering problems is the control of the flow not only for power purposes, for irrigation, and for navigation, but also to prevent silting, the scouring of banks, and to prevent valuable land being spoiled by flooding. The small volume before us attempts to give only the rudiments of the subject, and it can scarcely be said that it does even that to the satisfaction of all those who may desire information upon certain branches of river engineering. The chapters on "Hydraulic Considerations" are, probably perforce, very incomplete, and will not in themselves be very helpful to the serious student. What may be called the constructional chapters, dealing with embankments, weirs, and control, and navigation are sketchy, and scarcely give sufficient information to help in the design of particular works, but they will be found of interest as an introduction to the subject, and practical hints of importance are given in the text.

*Les larves et nymphes des Dytiscides, Hygrobiides et Haliplides.* Par Dr. Henri Bertrand. (Encyclopédie entomologique, 10.) Pp. vi + 366 + 33 planches. (Paris: Paul Lechevalier, 1928.) 100 francs.

THIS very complete work deals with the immature stages and biology of the Dytiscidæ and related families of water beetles found in France. Out of a total of 94 species the larvæ of which are more or less known, 44 are studied afresh and in greater detail, and 33 others are described for the first time. The descriptions are very adequate and detailed, and are accompanied by 750 figures illustrating special structural features. Entomologists will find in this work a storehouse of information respecting the families concerned: useful tables are provided for the identification of the larvæ, while the discussions on the biology, adaptations, and phylogeny of the several groups should appeal to the special student of such subjects.