

pharmacist are the tables of maximum doses and of newer remedies, and the glossaries of uncommon words. The various tables, including one on group doses, are convenient for review by the student. The book is printed in clear type on good paper and is of convenient size.

Typographical errors are rather numerous, even for a first edition; some of these would not readily be detected by the student, as for example on page 213, lines 6 and 13, where "sodium chlorate" is twice specified in place of "sodium chloride." Likewise on page 216 Compound Acetanilid Powder is listed as containing sodium carbonate, rather than the bicarbonate. On page 209 the synonym "I. Q. and S." is given for Elixir of Ferric Pyrophosphate, Quinine and Strychnine, rather than for the Elixir of Iron, Quinine and Strychnine as specified in the N. F. In the table of official collodions on page 292, Collodium Cantharidatum is listed, though it is no longer official, and the following N. F. collodions are omitted: Collodion of Sulphonated Bitumen; Compound Salicylic Collodion. The table of U. S. P. Solutions is omitted entirely, although a table of N. F. solutions is given. On page 307, the maximum dose of arsenous acid is given as " $\frac{1}{6}$ gr.; 0.1 Gm." rather than as " $\frac{1}{6}$ gr.; 0.01 Gm."

A historic fallacy, which originated with a prominent American pharmacist of a generation ago, is perpetuated on page 167, where it is stated that in supersaturated sugar solutions made by heat, the crystallization which takes place on cooling "usually goes beyond the point of saturation, yielding a solution less than saturated."

A desirable feature of the book is the encouragement given to direct use of the U. S. P. and N. F. by the student, by omission of the quantitative formulas of these books, the discussion being thus directed chiefly to fundamental principles and to comments.

This book will be a useful addition to any pharmaceutical book shelf, and will be of interest to those teachers who have felt that pharmacy books have been too unwieldy, with too much repetition of material which is in the U. S. P. and N. F. and which should be sought there by the student.—WILLIAM J. HUSA.

Recent Advances in Analytical Chemistry, Vol. II, Inorganic. By C. AINSWORTH MITCHELL, editor, and NORMAN EVERS, S. G. CLARKE, W. R. SCHOELLER, A. T. ETHERIDGE, BRYNMOR JONES, A. R. POWELL, JANET W.

BROWN and J. W. H. JOHNSON, contributors. Published by P. Blakiston's Son and Co., Inc., Philadelphia, 1931. XIV + 452 pages, 26 illustrations. Price \$3.50.

The literature pertaining to advances in analytical chemistry increases so rapidly that it is impossible for the busy analyst to keep informed of progress except in a very specialized field. This volume prepared under the editorial direction of one so well qualified as the editor of *The Analyst* and contributed to by a number of experts in restricted fields should be of value to all persons engaged in practical analysis or in the teaching of analytical chemistry. Considered in conjunction with Volume I published in 1930 and dealing with recent advances in analytical organic chemistry, the work comprises a comprehensive survey of the progress made in the development of qualitative and quantitative methods during the past ten years. In many cases, concise working directions of new methods are given.

The subject matter of the book is subdivided into 16 chapters. Thirteen chapters are given over to the consideration of the detection and determination of the common and rare elements and gases. One chapter is devoted to each of the following subjects: Hydrogen-ion concentration, microchemistry, and water and sewage analysis. In the chapter on microchemistry, the progress in the analysis of inorganic as well as organic substances is reviewed. In the chapter on water and sewage analysis, an extended list of the botanical and zoölogical organisms in relation to pollution is given which is probably more complete than any such list found in references written in the English language.

Working details of new qualitative and quantitative methods are not given in every case, but a critical survey of published work is presented with very numerous references to the original literature. A bibliography is included after the consideration of each subject which might be improved by giving the name of the publisher.

The advances in analytical chemistry surveyed in this and in the preceding volume are made available in convenient form and at an opportune time for study by those engaged in the revision of the chemical monographs of the United States Pharmacopœia and of the National Formulary.—GLENN L. JENKINS.

Quantitative Chemical Analysis, an Intermediate Textbook. By FRANK CLOWES and J.

BERNARD COLEMAN revised by D. STOCKDALE and J. DEXTER. Thirteenth edition, 1931. Published by P. Blakiston's Son and Co., Inc., Philadelphia. XIV + 605 pages, 133 illustrations.

It was claimed for the earlier editions of this book, the first of which appeared in 1891, that it was useful to the advanced student, to the consulting and analytical chemist, and that it was in a large measure a work of reference. With the appearance of many specialized texts and comprehensive reference works in various fields of analytical chemistry, the value of a book such as this has decreased markedly. In the work of revision, the authors thought that it would be best not to change the text greatly since, in its present form, it is of value as an intermediate textbook to give advanced students a preliminary knowledge of the more important special processes used in the various branches of analytical chemistry. Little change has been made in the text except certain additions which bring in modern methods. Part I which deals with the preliminary and general operations required in analysis has been left practically unchanged. Parts II and III devoted to gravimetric and volumetric analysis, respectively, have been modernized by the addition of such processes as the use of Devarda's alloy in the estimation of nitrates, the use of titanous chloride in volumetric work, precipitation of copper and zinc as thiocyanates and their estimation by volumetric or gravimetric methods, and the use of an internal oxidation-reduction indicator in the estimation of iron and zinc. The descriptions of colorimetric, electrometric and electrolytic methods which were formerly scattered throughout the book have been collected and amplified in Part IV. Part V treating of the general analysis of inorganic and organic materials such as alloys, ores, steel, coal, fertilizers, water, milk, sugar, soap and fats, has been changed little and has been left incomplete in many cases in order to avoid undue enlargement of the volume. Parts VI and VII dealing with the determinations of the molecular weights of organic compounds and volumetric gas analysis have not been changed greatly. In Part VIII, the table of atomic weights, results of typical analyses, buffer solutions, alcohol per cent, weights and measures, etc., have been recalculated and added to. An inconvenient arrangement is brought about by placing the index between tables near the back of the book.

Many analysts will be pleased to see the retention of the scope included in former editions in the revision of this well-known treatise. A great number and variety of analytical processes have been considered fully or in part. The authors do not claim that the book is a complete reference, consequently they include a classified list of works in specialized fields for consultation by those wishing complete methods and details. The book is printed in clear type on good paper and is well bound.—GLENN L. JENKINS.

LIST OF TRADE NAMES PREPARED BY A. D. M. A AND A. P. M. A.

A list of trade names in use by member firms of the American Drug Manufacturers' Association and the American Pharmaceutical Manufacturers' Association has been prepared under the auspices of the Patent and Trade-Mark Committees of the respective groups.

The purpose of the compilation is to furnish information in the preliminary consideration of new trade names. It has been revised to August 1, 1931.

It is the desire of the Associations that the booklet receive the widest possible distribution not only among members but among all others interested in this important field, including firms and individuals identified with allied organizations, trade-mark attorneys and association trade-mark bureaus.

Copies may be obtained from Carson P. Frailey, Executive Vice-President and Secretary, American Drug Manufacturers Association, Albee Building, Washington, D. C., or from Clarence W. Warner, Secretary, American Pharmaceutical Manufacturers' Association, care of The Maltbie Chemical Company, 246 High Street, Newark, New Jersey, at 25¢ each.

"Nos Plantes Medicinales de France." Tenth Series. 8 sheets. Price per set 3 francs. L'Office National des Matières Premières, 12, Avenue du Marne, Paris.

These stiff paper sheets, which measure 7½ in. by 5¼ in., bear on the obverse a figure of a medicinal plant executed with remarkable fidelity to nature of form and color, and on the reverse a miniature monograph of the plant. The specimens illustrated are black currant, horseradish, orris, flax, birch, coriander, caraway, fumitory and alder. The parts figured in most of the illustrations are the root or root-stock, the aerial stem, leaves, flowers and fruits, and in some cases diagram-