BOOK NOTICES AND REVIEWS.

Handbuch der Pharmakognosie (Handbook of Pharmacognosy). By A. Tschirch. Volume III, Part I. Pp. IX and 748, with 189 illustrations in the text, 13 plates, 1 map and 1 table. Published by Chr. Herm. Tauchnitz, Leipsic, 1923.

Nearly four years have now elapsed since the writer had the pleasure of presenting a notice of the above-mentioned work, of which two volumes had at that time appeared (THIS JOURNAL, 1920, Vol. IX, p. 553). In the meantime the work has been extended in such a manner as to include a number of drugs which had not previously received consideration, and the first part of Volume III has recently been completed. The occasion is therefore opportune for again bringing to notice the compendious Handbook on which so many years of labor and literary research have been bestowed, as also more particularly for indicating the contents of that part of the third volume which is now available.

In the first part of the volume now under notice the author has described a large number of drugs which are classified in three principal groups. These are designated, respectively, as I. Phloroglucin drugs (Taenicide drugs); II. Tannide drugs, or those which contain a large proportion of tannin; and III. Alkaloid drugs. The last-mentioned group is subdivided into a large number of sections in accordance with the constitution or chemical derivation of the respective alkaloids, when this is known, and this group occupies by far the larger part of the subject-matter of the present volume. In the description of the drugs the same general plan has been followed as in the preceding volume, and there are numerous interesting and instructive illustrations as well as abundant citations of the literature.

With a work of such magnitude as the Handbook of Pharmacognosy it is impossible within the scope of a brief notice to convey an adequate idea of its comprehensiveness or the amount of information it contains. On account of this extended character of the work it is also not to be considered remarkable that some of the literature pertaining to particular subjects should have escaped notice. Under drugs obtained from the *Liliaceae* and *Amaryllidaceae*, p. 713, it is stated, for example, that the bulbs of the East Indian plant *Gloriosa superba*, Linné, contain "Superbin," a name given by Warden in 1880 to its bitter principle. It was shown, however, in a publication by Clewer, Green and Tutin (*J. Chem. Soc. Lond.*, 1915, 107, pp. 835–846) that the active principle of this drug is the alkaloid colchicine, which was obtained in a pure crystalline form and completely identified. This observation was of particular interest, inasmuch as colchicine had hitherto only been known to occur in Colchicum. In connection with the last-mentioned subject (p. 713) the work of Ewins on narcissine, from the common daffodil, may be noted (*J. Chem. Soc. Lond.*, 1910, 97, pp. 2406–2409), as also the isolation of the same alkaloid by Tutin from the bulb of the South African plant *Buphane disticha* (*J. Chem. Soc. Lond.*, 1911, 99, p. 1244). Under *Cortex Erythrophlei* or "Sassy Bark," on page 734, a reference might be made to its chemical examination by Power and Salway, which is more recent than any of the investigations noted (*Am. J. Pharm.*, 1912, 84, pp. 337–351).

The few amplifications of the text, such as those above noted, which have been suggested by a somewhat casual survey of the contents of the Handbook, are of relatively little significance when compared with the vast field of literature that has been covered by the compilation. The work constitutes an enduring monument to the learning and industry of its author and will long maintain its value as a source of information on all matters pertaining to the history, collection, description and constituents of drugs. It should therefore be available to all who are interested in the subject of pharmacognosy in its various aspects and applications. F. B. POWER.

Allen's "Commercial Organic Analysis," 5th Edition, Editors: Samuel S. Sadtler, S.B., Elbert C. Lathrop, A.B., Ph.D., and C. Ainsworth Mitchell, M.S., F.I.C. Volume I. 104 illustrations. 8vo. VIII + 796 pages. P. Blakiston's Son & Co., Philadelphia. Cloth, $7.50.

In this 5th edition many of the older and more or less obsolete analytical methods have been deleted. The 4th edition was published in 1909. Since that time much progress has been made in perfecting old methods and in devising new ones. Many of the latter have been incorporated in the revised edition.

The general arrangement of the previous edition is followed rather closely. The title of the chapter devoted to the "organic acids" has been changed from "Acid Derivatives of Alcohols" to the "Aliphatic Acids." The

number of references has been greatly increased and brought down to date.

Chapter I, comprising the introduction and general physical and chemical analytical methods, has been rewritten by William A. Davis, B.Sc., A.C.G.I., Cheshire, England. "Alcohols" is the title of Chapter II and its author is L. M. Burghart, B.A., M.A., Baltimore, Md.; Julian L. Baker, F.I.C., England has revised Chapter III, "Malt and Malt Liquors." Chapter IV, "Wines and Potable Spirits," has been rewritten by Lewis Eynon, B.Sc., F.I.C., London, England, while Emil Schlicting, Ph.D., New York, has revised Chapter V on "Yeast."

Henry Leffman, M.D., Ph.D., Philadelphia, is the author of Chapter VI, "Neutral Alcohol Derivatives" and the author of Chapter IV is also responsible for the Chapter on "Sugars," known as No. VII. "Starch and Its Isomerides" is the title of Chapter VIII, written by T. H. Pope, B.Sc., F.I.C., Cheshire, England. E. Sutermeister, S.B., Westbrook, Me., is the author of Chapter IX, entitled "Paper and Pulp Testing." The last chapter, "Aliphatic Acids," has been rewritten by Hugo Schlatter, B.S., M.S., of Wilmington, Delaware.

A work of this kind, more or less cyclopoedic in character, is rather difficult to review. A few examples will show how well the revisors have succeeded in bringing the work down to date.

Under "Methyl Alcohol," one finds that not only have several tests and methods been deleted and more modern and satisfactory ones included, but the discussion and criticism of them by the author are of untold value. In common with all other chapters, the analyst finds here a very extensive and satisfactory list of references. The modification of the "Vorisek Chromic Acid Oxidation Method," found on page 95, appears to be very satisfactory.

The tests for the examination of ether take up more than twice the space devoted to this subject in the previous edition.

The Chapter on "Paper and Pulp Testing" is written in such a manner as to make it particularly valuable to the analyst only occasionally working along these lines.

The foregoing are indications of the thorough and careful revision one meets with in every chapter or section of the volume.

It appears strange that in such a carefully prepared and comprehensive chapter as that on "Sugar" no mention should be made in the part devoted to urinalysis to the "Quantitative Benedict Modification" of Fehling's Solution, although the qualitative method is given. This is particularly strange as the former has come into great vogue among clinical chemists and pathologists. Furthermore, authors should never fail to direct attention to the fact that the two solutions are quite different, and that the "quantitative" solution cannot be used for "qualitative" work and *vice versa*.

With reference to quantitative work, the reviewer prefers the term "determination" to "estimation," which is used practically throughout the work.

This slight criticism certainly will not detract from the great value of this deservedly popular work without which the reference library of any research or commercial laboratory would be a poor one indeed.

JEANNOT HOSTMANN.

Le Livre du Preparateur en Pharmacie. By P. Goigoux. Cloth, $7^1/_2$ in. by 5 in. Pp. XV + 650. Figures in text, 45. Vigot Frères, Editeurs, 23, Rue de l'Ecole-de-Médecine, Paris. The "aide" or "preparateur" in pharmacy in France serves an apprenticeship of six to eight years. The instruction which he receives is imparted to him verbally by his employer during the day's work. As a result, the scope and thoroughness of the instruction received vary greatly. To overcome these conditions and to provide the "aide" with something tangible to study in the hours when he is not at work, the author has prepared this volume. It is divided into five parts and an appendix. The first part deals with the elements of human anatomy and physiology, forms of medication, and pharmaceutical operations. Part two is devoted to chemistry, including inorganic and organic medicaments. Part three deals with medicinal agents of vegetable and animal origin. Part four is devoted to the galenical preparations, surgical dressings, organo-therapeutic preparations, serums and veterinary remedies. Part five deals with the laws and regulations covering the conduct of a pharmacy and dispensing. In the appendix, there is given a brief outline for the examination of urine and a short code of ethics for the "aide" prepared by M. Edouard Tercinet, Doctor of Law. While the descriptions and discussions are brief, the essential facts are given, and these are presented in language which it is believed should be understandable to the beginner in pharmacy.

A. G. DUMEZ.