

Textbook of Chemical Toxicology and Guide to the Detection of Poisons (in German), prepared for pharmacists, chemists, and physicians by Dr. J. Gadamer, o. Professor of Pharmaceutical Chemistry at the University of Marburg. Second enlarged edition, Quarto, X + 714 pages, with ten double page folded tables, 1 colored plate, 1 plate of blood spectra and 36 figures and photographs in the text. 1/4 cloth. Vandenhoeck & Ruprecht, publishers, Göttingen, 1924.

This is the second edition of a work first published in 1909. The first edition in turn was based upon Dragendorff's early work, "Forensic-Chemical Treatise on Poisons," together with over ten years of painstaking experimental work in checking many of the chemical tests in the work, by Prof. Gadamer and several collaborators.

Besides a well-written introduction of a few pages, conditions influencing the definition of a poison are discussed; the body of the work includes, first, a general part of about a dozen pages, second, the special part, comprising the main portion of the volume, of over six hundred pages, and finally an additional part of about fifty pages. The first of these is devoted to a general discussion of the responsibilities of the chemical toxicologist to society, general rules for forensic analyses, the avoidance of the accidental introduction of poisons into the material under examination, testing of reagents, rules for conducting the analyses, and interpretation of results.

The special part is first divided into inorganic and organic poisons. The inorganic poisons in turn are subdivided into several main groups: (1) free halogens, ozone, nitrogenous compounds, carbon monoxide, etc.; (2) phosphorus; (3) anion reactions, free mineral acids, hydroxyl ions, hydroxylamine salts, etc.; (4) decomposition of organic material, analysis to determine the presence of metals, determination of the form of combination, electrolysis, and the individual metallic poisons, *e. g.*, arsenic, antimony, tin, lead, mercury, etc. The organic poisons are divided into the following main groups: (1) volatile poisons, including hydrocyanic acid, halogen compounds volatile with steam and carbon disulphide, alcohols, aldehydes, ketones, phenols, etc.; (2) non-volatile poisons, divided into amido nitrogen-free and amido nitrogen-containing non-volatile poisons, the former including among others picrotoxin, santonin, cantharidin, purgatives and drastic cathartics, glucosides and

saponins, the latter xanthine bases, veronal, purine derivatives, and the alkaloids and ptomaines.

The additional part embraces the series of ten tables for a systematic procedure of investigation for the recognition of nitrogenous medicinals, a section on German legal statutes, another on the testing of reagents with many references, and finally a table of blood spectra. The appended color plate relates to the qualitative and quantitative determination of arsenic by the method of Smith by Beck and Merres. The book contains a well-arranged table of contents and a serviceable subject index, but no author index.

The book is plainly the result of very careful work and has several admirable features. The handling of every topic is characterized by thoroughness and by systematic treatment. Its citations of the literature are numerous and up to date. The systematic scheme for the recognition of organic nitrogen-containing medicinals in the ten tables of the third part constitutes a valuable addition and distinctly new departure in this field of work. Tables I to V furnish a qualitative scheme for the detection of nitrogenous medicinals without heavy metals, arsenic, sulphur or halogens. Tables VI to IX, inclusive, present schemes for nitrogenous medicinals with sulphur, bromine, iodine and sulphur without halogens, respectively, while Table X is for those containing besides nitrogen also arsenic, silver, mercury, bismuth or iron. This extensive scheme is supplemented by auxiliary tables of melting points of an unusually large number of synthetic and natural nitrogenous medicinal substances with handy cross references to their places in the main scheme. A similar scheme, it is explained, is in preparation for the less generally forensic important class of nitrogen-free medicinals.

The comprehensiveness of the work makes it attractive to a large number of workers in related fields as well as to students. It includes excellent chapters on the ptomaines, their occurrence, constitution, and preparation; on an unusually large number of alkaloids and related substances, on food and plant poisons, and other related topics. It appears to cover its field more thoroughly than any other single volume and there is every reason to expect that it will be very well received.

The quarter cloth covers are too light for a volume of the size and character of this one. A statement on the paper wrapper indicates

that other more substantial styles are available. Otherwise the binding is excellent. The printing includes a variety of styles of type and spacing, is well laid out on the page, and is easy to read. Only one, a minor, typographical error was noticed.

H. W. VAHLTEICH.

PUBLICATIONS RECEIVED.

Proceedings of the American Drug Manufacturers' Association. Twelfth annual meeting April 16-19, 1923. The book contains over 300 pages and is divided into five parts. Part I contains abstracts from business sessions; Part II, of the Scientific Section; Part III, of the Pharmaceutical Section; Part IV, Memorials; and Part V, Appendix—constitution and by-laws, membership, etc. The first three parts have an interest for pharmacists and particularly II and III wherein such subjects as assay, standardization, crude and milled drugs are reported. Excellent halftones of President Alfred S. Burdick and Secretary Carson P. Frailey adorn the first two pages.

Abstract of the Proceedings of the U. S. Pharmacopœial Convention, 1920. Compiled and edited by Secretary Lyman F. Kebler and published by the Board of Trustees, Washington, 1923. A halftone of Dr. Harvey W. Wiley, president of the U. S. Pharmacopœial Convention, and that of the late Professor Joseph P. Remington, chairman of the Committee of Revision, July 6, 1901 to January 1, 1918, constitute the frontispiece of the proceedings. The introductory gives a brief historical account of the U. S. Pharmacopœia followed by articles of incorporation and that by the officers and committees for the revision of 1920-30. The report contains an abstract of the meetings, constitution and by-laws, financial reports, list of delegates to the convention and the general principles to be followed in revising the Pharmacopœia. The compilation reflects credit on the Secretary.

Popular Science Talks. A series of popular lectures on twelve interesting topics published by the Philadelphia College of Pharmacy and Science. Price, \$1.00. Several articles are well illustrated, Hippocrates, Aesculapius and Paracelsus are shown in full-page halftones; also quite a number of illustrations of plants accompany the lecture on "Animal-Eating Plants" by Professor Heber W. Youngken; the "Romance of Spices" by Dean Charles H. LaWall

has a number of interesting etchings; likewise that of the "Story of Glass" by Dean J. W. Sturmer and "Chemistry as an Aid in the Detection of Crime" by Dr. Henry Leffmann. In delivering these lectures many slides were used and the audience present was composed chiefly of pharmacy patrons and not members of the profession. Other subjects of the lectures than those named are "Corn and Its Products," Prof. Freeman P. Stroup; "Bacterial Preparations in Common Use," Prof. Louis Gershfeld; "Another Drop of Blood," Prof. Ivor Griffith; "Catalysis and Catalysts," Dr. Samuel P. Sadtler; "The Aluminum Age," Prof. Ralph H. Foran; "Explosives and Explosions," Dr. Henry Leffmann; "The Making of Medicines," Prof. E. Fullerton Cook; "Iron and Iron Alloys," Prof. Frank X. Moerk.

Proceedings of the 20th Annual Convention of the National Association of Boards of Pharmacy held in Asheville Sept. 3-4, 1923. The frontispiece of this issue of the proceedings is a picture of Edward H. Walsdorf, president of the Association 1922-1923. The volume contains the usual matter of other issues, the president's address, the secretary's and the treasurer's reports and reports of the various boards of pharmacy, also the proceedings of the joint meeting with the American Conference of Pharmaceutical Faculties. The volume contains over 200 pages, replete with information relating to boards of pharmacy and reflects credit on Secretary H. C. Christensen.

The 30th Annual Report of the State Board of Pharmacy of Colorado for the year ending July 2, 1923. The report contains also a list of registered and assistant pharmacists and apprentices in pharmacy and a directory of stores, proprietors and managers engaged in the retail drug business in Colorado; also state and federal laws applying to the drug business.

Proceedings of the 42nd Annual Meeting of the Nebraska State Pharmaceutical Association held at Hastings June 12-14, 1923.

Proceedings of the 17th Annual Meeting of the West Virginia State Pharmaceutical Association held at Deer Park, Md., June 26-28, 1923.

Bulletin No. 1, Research on Operating Costs in Northwest Drug Stores, by J. H. Ostlund, Department of Accounting, School of Business, University of Minnesota. Printed jointly by the *Northwestern Druggist* and the *Northwestern Pharmaceutical Bureau*. E. L. Newcomb is president of the latter and Al Falkenhainer is