

## BOOK NOTICES AND REVIEWS.

*Julius von Wiesner, Die Rohstoffe des Pflanzenreichs*—(Raw Materials of the Vegetable Kingdom), Volume II, Leipzig, Verlag Von Wilhelm Engelmann, 1928, 1120 pages.

This is the second volume of an encyclopedic work edited by Paul Kraus and Wilhelm von Brehmer dealing with the products of the plant world in the widest sense of the word. The volume before us is a good example of the thoroughness and scholarship of German investigators more particularly in the fields of botany and chemistry. In the present volume the following subjects are exhaustively treated.

*I. Woods* by W. von Brehmer. This section includes over five hundred pages of most valuable information concerning the botany, pharmacognosy, chemistry and other characters of various trees or rather of the woods obtained from various trees. The author first discusses the general structure of woods; then the microscopical characteristics. A very comprehensive and useful classification of the different families of trees is given. Then there follows a discussion of the physical properties and then again the chemistry. Finally general information about the properties and uses of various specimens of wood and statistical tables in regard to the distribution, production, exportation, etc., are appended. Any one interested in the physical, chemical or botanical characteristics of the rarest of woods may profitably browse through the pages and glean a great deal of useful information. There is a wealth of excellent illustrations and not the least important portion of the work is an exhaustive bibliography.

*II.* Following the treatise on woods, the next section by A. Zimmermann devotes some one hundred and forty pages to *Kautschuk, Gutta-percha and Balata*. Those interested in the rubber industry will find this section of the greatest value, not only is there a description of the methods of preparation but the chemistry of rubber and its manifold applications as well as geographical statistics and commercial tables are included.

*III.* A most interesting section by von Brehmer and E. Konstanty follows this section and is devoted to a description of *Cork*.

*IV.* A separate section by F. Boas treats of organic acids found in various trees.

*V.* Another section by the same author is devoted to the consideration of Saponins. Here the various classes of Saponins are described, their chemical constitution is given as

far as known, and pharmacological and physiological properties are touched upon and a very complete literature is appended.

*VI.* Another division of the book by Melchior and Konstanty is devoted to the *Slimes and Vegetable Gelatins*. This discussion is divided into several parts. The first is one of a general character, discussing the physical and chemical properties and reactions of the various slimy products of the plant world. In the second section specific substances are discussed. Here we find most interesting information concerning agar agar, vegetable gelatins, various barks, gums, etc., this section ought to be of great interest to the pharmacist, and also includes interesting illustrations and a large literature.

*VII.* A long chapter or sub-division of the work by von Brehmer and Zeisel is devoted to the *Starches*.

*VIII.* A chapter on *Vitamines* is contributed by Boas.

*IX.* *Waxes* are discussed by H. Wolff.

*X.* And finally in the concluding chapter of the book is a discussion by Kallmann, Jruger and Schneider on *Sugars*. This part of the work discusses a distribution of the sugars with special reference to the sugar-cane and sugar-beet and other sources of supply, the cultivation of these plants, the chemical constitution of sugars and other characteristics of interest in that connection. An exhaustive literature some two hundred and thirty-three references in addition to a list of general treatises accompanies this section of the work.

Altogether the hand-book before us is a most valuable one to have on the shelves of any scientific library and more particularly among the reference books to be possessed by the broad-minded botanist, chemist, pharmacologist and pharmacist.—D. I. MACHT.

*Toxicology or the Effect of Poisons.* By FRANK P. UNDERHILL, P. Blakiston's Sons & Co. This is the second and revised edition of the work before us which consists of some two hundred and eight pages of text 3½" x 6" in size. The comparatively small book contains six chapters, the first of which deals with the principles of toxicology, the second, with corrosive acid and alkalies, the third, with poisonous gases, the fourth, metallic poisons, the fifth, alkaloidal poisons and the final chapter of five pages touches upon a few miscellaneous organic poisons.

It is difficult to comprehend the *raison d'être* of such a book, unless it is intended for popular reading by the laity, nurses, or perhaps that naive, innocent and disingenuous genus of half-baked pharmacists which is, fortunately, rapidly disappearing with the new and higher entrance requirements to schools of pharmacy, to whom every bit of the most elementary and puerile information sounds like a fairy tale. We certainly do not see how such a work could be of much use to a student of the better class of our medical schools. The information contained therein can be gleaned from any textbook on pharmacology and the title "Toxicology" is somewhat misleading. The modern scientist classes toxicology with pharmacology and when the term toxicology is used specifically it is generally meant to stress the chemical side of the subject. That is to our surprise the very aspect which the author himself, primarily a chemist, seems to have overlooked, for while the *résumés* of various drugs or poisons dealt with give a brief description of their pharmacological effects, pathological findings and treatment, there is no reference to chemical toxicology or the methods for detection of poisons, which most texts entitled *Toxicologies* lay stress upon. The most readable chapter in the book is that on poison gases to which forty pages are devoted and which conveys information not usually to be found in textbooks on pharmacology. That is probably due to the special experience of the author on the subject and accounts for the disproportionate amount of space devoted to it in this book. There are certain textbooks of very concise and condensed character such as Schmiedeberg's *Pharmacology*, Authenrieth's "Detection of Poisons" and Prof. Friedrich Müller's "Compendium of Internal Medicine," which have become scientific classics. We cannot class the work before us in the same category.—De V.

#### PUBLICATIONS RECEIVED.

*Contributions to Knowledge and Value of Capsella Bursa Pastoris*, Moench—a dissertation for attaining the Doctor's degree, submitted to the faculty of the University of Hamburg, by Fritz Boeckmann, Wilmersdorf, Germany. Receipt is acknowledged to the Institute of Applied Botany, Hamburg. The copy received is not the complete thesis, the Dean, Dr. Lohmann, reports that the latter has been properly filed. Shepherd's purse was employed in place of ergot and hydrastis

during the War, on account of drug shortage. The candidate makes grateful acknowledgment of assistance rendered and outlines his years of schooling and training.

The Hamburg Institute for Applied Botany is under the direction of Dr. G. Bredemenn, to whom we are indebted for the annual reports (in one volume) from July 1917–June 1924.

*Dissertation on Urginea maritima* by WILHELM BARTHELS, Altona, Germany. The work is in partial fulfilment of the requirements for the Doctor's degree at the University of Hamburg. The contribution is dedicated to Hertha Krauel, deceased. The work represents research and laboratory investigations and is accompanied by a bibliography of a hundred or more references.

*Contribution to Research on Chrysarobin and Methods of Determination*. An abstract from a dissertation for the award of the Doctor's degree at the University of Hamburg by Hans Karl Jenrich. The candidate studied pharmacy at Marburg and passed the state pharmacy examination in 1923. Microchemical methods are reported on in this work.

*Investigation of Gymnocladus Chinensis*, Baill. By WERNER BUCKOFZER, Hamburg. Part of a dissertation filed in the library of the University of Hamburg. The work is in partial fulfilment of the requirements for the Doctor's degree. The candidate entered pharmacy in 1919, came to the University of Freiburg and, in 1923, he passed the state pharmacy examination.

*Investigation of Ammoniac*. Special attention is given to ammosesinol—an inaugural dissertation in fulfilment of the requirement for the Doctor's degree at the University of Basel, by IDA MICHEL, of Basel. The suggestion for this work was made by Prof. Dr. H. Zörnig, head of the Pharmacy Institute of the University of Basel and the work was conducted under the guidance of Prof. Dr. P. Casparis. The candidate thanks her preceptors. The candidate entered the University in 1921 and passed an examination for pharmacist in the year following and received practical experience in "Sevogelapotheke" (Dr. C. E. Markees). Studies were continued at the Institute and in 1925 she passed the state pharmacy examination and in the spring of 1926 the work presented in the thesis was begun.