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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 Krais 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.

Woods by W. von Brehmer. This sec-Ι. tion 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, Guttapercha 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 $3^1/_2$ " 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.