

BOOK NOTICES AND REVIEWS.

Plant Physiology.—By Vladimir I. Palladin. 2nd American Edition, 1922. 360 pp. 173 illus. Translated and edited by B. E. Livingston.

The present second American edition of the book is based on the German translation, and the 7th (1914) Russian edition. A biographical note of great interest is taken from the 9th Russian revision, published in 1922, shortly after the death of Palladin. An excellent photograph of Palladin is also inserted.

The book is written for the elementary student of plant physiology. A classified list of reference books is included. The contents are divided into two parts, the Physiology of Nutrition, and the Physiology of Growth and Configuration. In the first part are discussed assimilation of carbon and energy by plants with and without chlorophyll, assimilation of nitrogen, absorption of ash-constituents, gases and other substances, movement of materials in the plant, transformation of plant constituents, and finally fermentation and respiration.

In the second and much shorter part, a general discussion of growth is followed by a discussion of the influence of internal and external conditions on growth and configuration. In other chapters climbing plants and plant movement and the development and reproduction are briefly discussed.

The text on the whole is very little changed from the first edition published in 1918. The same illustrations, quotations and notes have generally been retained. A few striking recent investigations have, however, been included. In some cases also the book references have been revised and more recent editions, instead of older ones, have been given.

The most striking feature, and an exceedingly useful addition, made by the editor, is the series of summaries concluding each of the chapters. While advanced students may desire a more detailed discussion of recent investigations, including Palladin's own investigations on respiration and fermentation enzymes, the book is remarkably well suited for an introduction to plant physiology and can be heartily recommended to pharmacy students, pharmacists and other workers interested in this subject.

A. VIEHOEVER

PUBLICATIONS RECEIVED.

Bulletins, 192-196, from the Wellcome Chemical Research Laboratories, Snow Hill, London:

The "Chemotherapy of Antimony,"—comparison of the antimony tartrates with organic compounds of antimony—by Robert George Fargher and William Herbert Gray. "Chenopodium Oil," by Thomas Anderson Henry and Humphrey Paget. "The Constituents of the Flowering Tops of *Artemisia Afra*, Jacq.," by John Augustus Goodson. "Mercury Compounds of Hydroxybenzaldehydes," by Thomas Anderson Henry and Thomas Marvel Sharp. "Silver Salvarsan," by William Herbert Gray.

Reprints from *Journal Association of Official Agricultural Chemists*, Vol. VI, No. 4: "A New Sedimentation Tube and Its Use in Determining the Cleanliness of Drugs and Spices," "Sublimation of Plant and Animal Products—Third Report," by Arno Viehoever. "Domestic Sources of Cantharidin,"—I. *Macrobasis albida* Say, by Arno Viehoever and Ruth G. Capen.

Correcting Misuse of the Word "Drug."—A campaign of interest to those associated with the manufacture, sale, distribution and use of drug store products. By Charles H. Eyles, President of Richard A. Foley Advertising Agency, Inc., 219 N. Broad St., Philadelphia.

The opening paragraphs of this booklet which is being widely distributed, read:

"The Drug Trade Board of Public Information in its June Bulletin addresses an appeal to 500 newspapers in various parts of the country for the purpose of enlisting their support in curbing the misuse of the word 'drug' in connection with stories involving the illegal use and sale of narcotics, commonly known as 'dope.'

"The legitimate drug and pharmaceutical business is being injured every time a story about narcotic peddlers and dope fiends is published and such terms as 'drug peddlers,' 'drug addicts' and 'drug fiends' are used in connection with such stories.

It will be noted that due credit is given to the Drug Trade Board of Public Information, and the work undertaken by Mr. Eyles and the Company of which he is the President, deserves commendation. The success with which the effort has met is evidenced in the booklet by excerpts from letters of endorsement and cooperation written to Mr. Eyles by newspapers, magazines and publishing houses, among them are: *New York Tribune*, *New York American*, *Curtis Publishing Company*, *Pittsburgh Leader*, *Cosmopolitan*, *Review of Reviews*, *Doubleday Page & Co.*, and many others, and the work is going on; in fact, from the interest expressed

in communications to the Journal A. Ph. A. the subject will be brought to the attention of every publication in the United States and Canada.

Merck's Manual of the Materia Medica.—A ready-reference pocket book for the physician and surgeon. 5th edition, $4 \times 6\frac{1}{4}$ inches. Compiled and published by Merck & Co., New York. Cloth, 50 cents, artificial leather, \$1.00.

While this book is intended principally as a pocket reference book for physicians, pharmacists and members of the allied professions will find much that will be informative and helpful to them. The contents of the volume are arranged in four parts. Part I embraces drugs, chemicals and preparations—not confined to "Merck's" alone—and gives their synonyms, solubilities, physiological effects, therapeutic uses, doses, incompatibles, antidotes, and other useful information; Part II, on therapeutic indications, summarizes the principal means of treatment for each form of disease, giving numerous standard prescription formulas; Part III classifies the various medicaments according to their physiological action; Part IV comprises a comprehensive essay on poisoning and its treatment; an exhaustive dose table; a chart showing the diagnostic points of difference between the eruptive fevers; thermometric equivalents; approximate metric equivalents; a comprehensive chapter on urinalysis; a list of remedies which interfere with urinary tests; tables on infant feeding, and much other useful data.

A Bibliography of Colloid Chemistry.—By Harry N. Holmes. The National Research Council has recently issued a Colloid Bibliography in mimeographed form. The author, Dr. Harry N. Holmes of Oberlin College, Chairman of the National Research Council Committee on the Chemistry of Colloids, intends this edition to be preliminary to a more comprehensive one. Yet it is a book of 135 pages containing 1800 references on 106 topics. All the references are classified and many are accompanied by brief comment as an aid in deciding on their relative importance. This book of 135 pages may be purchased from the Washington office at \$1.00.

Among the classified groups are Adsorption, Asphalt, Baking, Biocolloids, Capillary Analy-

sis, Casein, Cellulose and Cellulose Esters, Cements, Clays and Soils, Cleansing, Coagulation, Dialysis, Emulsions, Filtration, Flotation, Foam, Flour, Fogs, Gels, Gelatin, Glass, Glues, Peptization, Petroleum, Photography, Protein Swelling, Protection, Rubber, Sewage, Silver, Soap, Sulfides, Surface Tension, Tanning, Ultramicroscope, Viscosity and Water Proofing.

The theoretical and industrial importance of colloid chemistry is now admitted without question. In fact it links together the sciences of chemistry, physics, zoölogy, botany, geology, medicine, agriculture and even astronomy, whenever that science deals with comets' tails. Few are the industries that do not have colloid problems to solve. The average citizen is surprised to learn that his own body is colloidal in composition, that his digestive processes are governed by colloidal rules of action and that the bacteria of disease are of a colloidal degree of dispersion. And he is astonished to learn that but for the colloidal adsorption of calcium phosphate from the blood stream by his bony cartilage he would be a mere spineless jelly fish; and colloid chemistry is surface chemistry, it is of importance to this same average citizen to know that the total surface of his blood corpuscles is about one acre.

Plant and animal tissue is largely colloidal too, and should be studied from that viewpoint.

Optical Methods in Control and Research Laboratories.—By J. N. Goldsmith, Ph.D., M.Sc., F.I.C.; S. Judd Lewis, D.Sc., B.Sc., F.I.C., Ph.C.; F. Twyman, F. Inst. P. Vol I. (Second Edition, November, 1922).—Spectrum Analysis, Absorption Spectra, Refractometry, Polarimetry. Published by Adam Hilger, Ltd., 75A Camden Road, London, N. W. 1 England. 60 pages. Limp Cloth. Price 1 s. 8 d. It is a guide to applications and to the selection of apparatus. The five illustrations of the book show—arc spectra of lead and copper, absorption spectrum of pseudo-globulin solution, spectroscopic determination of chlorophylls, absorption spectrum of uric acid solution, and absorption curve of anthracene.

Epidemiological and Statistical Data, U. S. Navy, 1918.—Reprint from the annual report of Surgeon General, U. S. Navy for the fiscal year 1919. 574 pages. A number of tables and charts are included.