placed following chapter VI, the one on the "Use of the Microscope" is probably longer than necessary because the average student in the American schools is well acquainted with the microscope by the time he takes up bacteriology.

A section on "Dark-Field Illumination and the Use of the Dark-Field" is very important; this subject is often neglected because the importance of the Dark-Field is not realized until one becomes acquainted with its value. The chapters on "Cultivation of Micro-Organisms" and "Staining Methods" are well written, and that on "Immunological and Serological Methods" has been brought up-todate.

The fact that the work is in the third edition shows that it has fulfilled the authors' wishes and aims; it has been carefully prepared and contains more than 400 pages of text matter. The index is quite complete and the illustrations are clear and demonstrate important points. The book fills a want in bacteriological work and the reviewer recommends it to students and also to those who are reviewing the subject.—JOHN M. HAYNES.

Manual der Pharmazeutischen Zeitung. Prepared under direction of the Pharmazeutische Zeitung by RICHARD BRIEGER, Ph.D., editor of science of that publication. Published by Julius Springer, Berlin, Germany. 234 pages. Price R.M. 11.

The Preface states that, while there are many formularies, numerous requests reach the publication for formulas and, hence, it has been deemed advisable to collect those given in the columns of the *Pharmazeutische Zeitung* from other sources and publish them in book form.

The formulas are classified but not alphabetically arranged-the first fifty or more pages include cosmetics, toilet preparations, etc.-creams, pomades, hair dyes, waters, perspiration powders, tooth powders, talcums, bath powders and the like. A number of related formulas follow for discolorations, itching; pastes, salves, ointments. Digestive aids, pills, laxatives, purgatives are in another group, including manufacture of tablets. A number of pages are given to solutions of various types of polishes, varnishes, cleaning fluids, deodorizers, disinfectants; inks, manifolding methods; treatments for plants and animals. Miscellaneous items include cements, mucilages, colored fires, dyes and some attention is given to dispensing, laboratory products and methods. The book follows the lines of other formularies, some of the preparations are for German demand, but the greater number are serviceable in all countries. The selection of formulas has been made with judgment and the composition of them indicates that they have been employed in practice.

Quarterly Journal of Pharmacy and Pharmacology. Volume IV. January-March, 1931. Pp. vi + 160. Price 10s. Pharmaceutical Press, London.

We are quoting the Pharmaceutical Journal and Pharmacist in the following comment and review: The number of this Journal for the first quarter of the present year contains six research papers, three of which are from the Pharmaceutical Society's Research Laboratories, namely: "Poeophyllum Rhizome -American and Indian. Crude Fibre; Tests for the Resins; Adulteration with Guaiacum Wood," by T. E. Wallis and S. Goldberg; "The Structure of Carbohydrates-I. The Synthesis of a 5-Methoxyketose," by Eric Frank Hersant and Wilfred Linnell; and "A Note on the Buffering Substances in Ergot," by Frank Wokes and G. K. Elphick. The subjects of the other papers are "Electrometric Studies of Complex Formation-II. The Tartrates of Bismuth," by C. Morton; "The Isolation and Properties of Visammin, Visammidin, Visnaginin, Visnagidin, Khellinin, Khellidin and Visnagan," by Karam Samaan and the "Pharmacological Actions of Harmol." There are fifty-two pages of abstracts, the subjects being chemistry and its subdivisions, twenty-eight pages; pharmacognosy, two pages; pharmacy and its subdivisions, seven pages; pharmacology and therapeutics, three pages; bacteriology and clinical tests, one page; and new remedies, three pages. There is something for all classes of practicing pharmacists in the Quarterly Journal, and the pharmacist in retail business would do well by a study of the abstracts and the list of new remedies to keep himself posted up as to progress in the branches of science which have a bearing on pharmaceutical practice."

The Quarterly Journal of Pharmacy and Pharmacology is serving a very useful purpose and American pharmacists will find the publication of great value in the laboratories and in the prescription department.

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## TENTATIVE OUTLINE OF PHARMA-CEUTICAL SYLLABUS FOURTH EDITION.

A tentative outline of the Pharmaceutical Syllabus, Fourth Edition, has been completed through the splendid efforts and guidance of Chairman J. G. Beard. It is the first draft of the material planned for the new Syllabus. The points to be considered are whether any course is included which should be omitted and whether others should be added. The mimeograph represents a great deal of work and deserves thanks and appreciation. The Syllabus work has been prepared for not less than 3000 hours of which scientific subjects show over 70%, cultural and basic subjects 20% and business subjects 10%. Chairman Beard is asking for an expression of frank criticism of the work thus far compiled. There are still to be included a manual for examiners by Dr. R. P. Fischelis and an outline of public health for which an author is being sought.

The divisions are: Principles of Accounting, by Roy C. Koster; Arithmetic in Pharmacy, by Theodore J. Bradley; Botany, by Henry Roland Totten; Bacteriology, by M. H. Soule; General Chemistry, by E. V. Lynn; Outline of Qualitative Analysis, by C. B. Jordan; Outline of Quantitative Analysis, by C. B. Jordan; Organic Chemistry, by E. V. Lynn; General Economics, by S. Howard Patterson and Karl W. H. Scholz; English, by Baldwin Maxwell; French, by Lewis Edgar Winfrey; German, by F. W. Bradley; Mathematics, by J. W. Lasley and E. T. Browne; Merchandising, Advertising and Salesmanship, by Paul C. Olsen; Pharmaceutical Latin, by Hugh C. Muldoon; Insecticides, Fungicides, Parasiticides and Rodenticides, by Lloyd E. Harris; Pharmacognosy, by Bernard Victor Christensen; Outline of Pharmacology, by A. Richard Bliss; Pharmaceutical Chemistry, by Glenn L. Jenkins; Bio-Chemistry, by Lloyd K. Riggs; History of Pharmacy, by Edward Kremers; Outline of Syllabus on Pharmaceutical Technique, Operative Pharmacy and Theory of Pharmacy by Charles H. LaWall, Henry V. Arny, Wm. J. Husa; Dispensing Pharmacy, by W. G. Crockett, E. Fullerton Cook, P. H. Dirstine; Pharmacy Jurisprudence, by James H. Beal; Physics, by Carl H. Fussler; Physiology, by R. A. Lyman; Toxicology, by M. R. Thompson.

## PUBLICATIONS RECEIVED.

The AMERICAN PHARMACEUTICAL ASSOCIA-TION has received the following from the Smithsonian Institution for which grateful acknowledgment is made:

"Report of the United States National Museum, 1930." The following bulletins: No. 146, "Life Histories of North American Shore Birds;" No. 147, "Archeological and Historical Investigations in Samana Dominican Republic;" No. 148, "Collections of Objects of Religious Ceremonial in the United States National Museum;" No. 149, "Composition and Structure of Meteorites;" No. 150, "Revision of the Fishes of the Family Liparidæ;" No. 151, "East African Reptiles and Amphibians in the United States National Museum;" No. 152, "The Cancroid Crabs of America of the Families Euryalidæ, Portunidæ, Atelecyclidæ, Cancridæ and Xanthidæ;" No. 153, "Birds Collected by the Childs Frick Expedition to Ethiopia and Kenya Colony;" No. 154, "A Study of the Teiid Lizards of the Genus Cnemidophorus with Special Reference to Their Phylogenetic Relationships;" No. 156, "The Birds of Haiti and the Dominican Republic."

Contributions from the U. S. National Herbarium, Volume 28, Part 1, "The North American Species of Paspalum, by Agnes Chase;" from the U. S. National Herbarium, Volume 26, Part 5, "Notes on Certain Type Specimens of American Asteraceæ in European Herbaria," by S. F. Blake; from the U. S. National Herbarium, Volume 27, "Flora of the Panama Canal Zone," Paul C. Standley; from the U.S. National Herbarium, Volume 26, Part 1, "The Lecythidaceæ of Central America," by H. Pittier; from the U. S National Herbarium, Volume 26, Part 2, "The Piperaceæ of Panama," by William Trelease; from the U.S. National Herbarium, Volume 26, Part 3, "Costa Rican Mosses," collected by Paul C. Standley in 1924-1926, by Edwin B. Bartram; from the U. S. National Herbarium, Volume 26, Part 4, "The Piperaceaæ of Costa Rica," by William Trelease: from the U.S. National Herbarium, Volume 26, Part 6, "Asiatic Pteridophyta," collected by Joseph F. Rock, 1920-1924, by Carl Christensen; from the U.S. National Herbarium, Volume 25, "Flora of Utah and Nevada," by Ivar Tidestrom; "Die Land-Versuchs-Stationen," wirtschaftlichen by Prof. Dr. G. Fingerling (110 and 111 Band).

National Association of Boards of Pharmacy. Proceedings of the twenty-seventh annual convention; also proceedings of the joint meeting with the American Association of Colleges of Pharmacy, held at Baltimore, Md., 1930. Published by the National Association of Boards of Pharmacy.

As stated in the above transcript of the title page, this volume contains the proceedings of the meeting of the Association held last year in Baltimore, a roster of officers, past and present, the membership of the various committees, and a list of the state boards holding membership in the Association, including the boards of the District of Columbia and Alaska.

Besides the address of the retiring president, John A. J. Funk, the volume contains several valuable and interesting reports of the meeting relating to various phases of the Association's activities and those of closely related organizations. Among the papers which appear are "Suggestions Regarding Reciprocity," by Robert P. Fischelis, and "Pharmacy in the Navy," by Lt. Com. Lewis H. Roddis, U. S. N. The proceedings are full of information which every pharmacist should have, at least every board member and teachers in pharmacy schools.

Bulletin of the University of Wisconsin, serial number 1732, general series number 1506, relates to phytochemistry by Edward Kremers and co-laborers. This has recently been issued. The prefatory remarks contrast biochemistry and phytochemistry. The comments and objects are discussed nd a historical survey follows. A synopsis concludes the Bulletin.

Dr. Francisco Cignoli, member of the International Pharmaceutical Federation, discusses an International Pharmacopœia. The *Bulletin* contains more than thirty pages and has many references to what others have written on the subject, besides the author.

A reprint received from the *Pharmazeutische* Zeitung gives a historical account of the German Apotheke by George Urdang.

The JOURNAL OF THE A. PH. A. has received *Abstracts* of scientific literature having a relation to the official products of the U. S. P. from journals of medicine, pharmacy, chemistry, biochemistry. It is for the year 1930. This is the supplement to the U. S. P. circulars contributed by E. R. Squibb & Sons through the courtesy of F. W. Nitardy, abstracted by the staff of the Brooklyn Plant Library of which Mrs. Pickering is the director. The abstracts have been published under the auspices of the U. S. P. Board of Trustees.

We are in receipt of *British Chemical Abstracts* issued by the Bureau of Chemical Abstracts, Index for 1930. The Index contains over 700 pages double column.

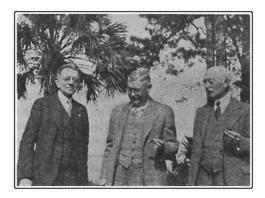
Acknowledgment is made of the receipt of a reprint from annals of medical history on Louis Lewin, by Dr. David I. Macht.

Fourth Supplement to Bulletin No. 2 of the biographical series of Mellon Institute of Industrial Research contains list of books, bulletins, Journal contributions and by members of the Mellon Institute of Industrial Research during the year 1930. It has been complied by Lois Heaton Pugsley.

Reprint is acknowledged from proceedings of tercentenary celebration of cinchona on "Pharmaceutical Preparations of Cinchona," by Wilbur L. Scoville.

We are in receipt of reprints of an article by Dr. John C. Krantz, Jr., and C. Jeleff Carr on "Glycogen Storage in the White Rat When Fed the Roots of Arctium Lappa" published in the Journal of Pharmacology and Experimental Therapeutics for January 1931. Also reprint of an address by Dr. John C. Krantz, Jr., on "Heralds of Progress," delivered at the Philadelphia College of Pharmacy and Science, at Founders Day exercises, February 1931.

Laboratory Book for those engaged in the industries related to perfumes and other odoriferous products, by Dr. Oscar Simon, revised by Dr. H. K. Thomas. The volume is illustrated, contains about 100 pages and is published by Wilhelm Knapp, of Halle.



A. PH. A. Members in Florida. Left to right— S. L. Hilton, J. H. Beal, Julius A. Koch.