

in Manufacturing Pharmacy and Dispensing.

Part XVII is a glossary of uncommon pharmaceutical and technical names, terms or substances.

There seems to be no question but that the hope of the authors of this edition as expressed in the preface will be fulfilled, namely, "that it will serve its day and meet the needs of this generation as fully as did the first volume when presented by its illustrious author, Joseph P. Remington, in 1885."—F. W. NITARDY.

The Akademische Verlagsgesellschaft, Murkgartenstr. 4 Leipzig, well-known publishers of scientific works, submitted the 3 following books for review:

Theorie und Praxis der Massanalyse. Von Alexander Classen, under Mitwirkung von H. Cloeren. Octavo. 772 pp. Cloth. Mk. 15.

The French pharmacist Louis Nicolas Vauquelin, director of the École Supérieure de Pharmacie in Paris from its foundation in 1803 until his death in 1829, is generally named as the originator of Volumetric Analysis. Besides, Gay-Lussac deserves credit for having thoroughly tried out and introduced many volumetric methods, thereby replacing gravimetric analysis to some extent. However, it remained for the German Apotheker, Carl Friedrich Mohr (1806-1879) in Coblenz on the Rhine to become the real father of Volumetric Analysis by his many improvements that bear his name and the publication of his "Lehrbuch der chemisch-analytischen Titriermethode," Braunschweig 1855, 1862 and 1877.

The volume before us from the pen of an authority on this subject, Prof. Dr. Alexander Classen is a true successor to the older Mohr. Its division is as follows: General Principles, Indicators, Apparatus, Titration, Determinations by Neutralization, Alkalimetry and Acidimetry; Determinations by Oxidation and Reduction; Determination by Precipitation. These chapters are followed by a supplement and numerous tables occupying pp. 728 to 750. The Table of Contents is very complete and forms 23 pages in double columns. The work is indeed a real contribution to this field of chemistry. The treatment is modern throughout and everything is presented in such a manner so as to be readily understood. It is a great book, by a great man, on a great subject. Let us hope that the "Classen" will become better known on this side of the Atlantic

Vorlesungen über die Geschichte der Chemie. Von Prof. Dr. Richard Meyer. Lex. 467 pp. Cloth. Mk. 15.

As a motto to the book the author uses a quotation from a letter by Emil Fischer to him, which freely translated and abbreviated reads: "Science is but a product of human work, closely associated with the life of the workmen." The author, a brother of the late Victor Meyer, is professor of History of Chemistry at the Technical High School in Braunschweig, and herewith publishes his lectures in book form. The following few chapter headings which the referee has selected will give an idea of the thoroughness of the work.

Early Chemistry to the Birth of Alchemy; The Age of Alchemy; The Age of Iatro-Chemistry; The Age of the Phlogiston Theory; Period of Lavoisier; Dalton and his Atomic Theory; Development of Organic Chemistry; the Benzol Theory; the Periodic System; Stereochemistry; Important Discoveries in the second half of the 19th Century; The Rare Gases; Radioactivity; Relation between Chemical Constitution and Physical Properties; Progress of Organic Chemistry; the Chemical Industries in the 19th and 20th Centuries.

The Author herewith presents a real History of Chemistry for the earliest time to our present period, including the growth of chemical knowledge during recent times. Richard Meyer's *Vorlesungen* fully deserves a place next to Hermann Kopp's and Ernst von Meyer's "Geschichte der Chemie."

Die Methoden der Theoretischen Physik. Von Felix Auerbach. Lex. 436 pp. Mit 150 Figuren. Cloth. Mk. 15.

Within the last three centuries, physics and quite especially theoretical physics has made great strides, so as to make it a distinct science. The well-known author, an authority on this subject has laid down in 119 chapters everything pertaining to Theoretical Physics. The object of physics is the study of the phenomena presented to us by bodies. In early times the question was "What happens?" In the next period the question arose, "Why does this happen?" At the present time the question is "Why does not the opposite happen?" Auerbach in his clear logical style, which never leaves the reader in doubt as to his meaning, has written a book, which should be appreciated by every student of theoretical physics. The 150 illustrations help to visualize at a glance the sometimes complicated subject.

This feature of the work is very valuable to both student and teacher. The index comprises four double-column pages.

We wish the book the best of success.—
OTTO RAUBENHEIMER, Ph.M.

U. S. Dispensatory, 21st edition has been published by J. B. Lippincott Company. The editors are Dr. H. C. Wood, Jr., Professor of Pharmacology and Therapeutics at the University of Pennsylvania; Dean C. H. La Wall, of the Philadelphia College of Pharmacy and Science; and H. W. Youngken, Professor of Botany, Pharmacognosy and Materia Medica at the Massachusetts College of Pharmacy. Special contributors include Dr. John F. Anderson and Prof. Ivor Griffith. The price, bound in buckram, is \$15.

A review will appear in next issue of the JOURNAL.

Short Tests for Sets of Laboratory Weights. By A. T. Pienkowsky, Associate Physicist, Bureau of Standards, Department of Commerce. Issued as Scientific papers of the Bureau of Standards Number 527. Single copies, 10 cents each.

Three kinds of tests are outlined: First, rough checks for gross errors such as can be detected by simply checking duplicate weights against each other or by comparing a few weights with the sum of those smaller weights whose sum equals the larger weight; second, the comparison with each other of just enough weights and combinations of weights so that the value of each weight can be computed from a standard weight the size of the largest weight in the test; third, the comparison of a sufficient number of weights or combinations so that the agreement of various results will serve as a check against any serious mistake in the observations.

If no standards are available, "relative" values may be found with practically no change in the procedure. The effect of inequality of the arms of the balance beam is eliminated by the method of combining the weighings. Therefore, ordinary "direct" methods of weighing may be used.

All multipliers and divisors have been reduced to one figure, and the numbers used in the computations need seldom be larger than three significant figures. Numerical examples illustrate the computations. Every detail of the computations is indicated in full, even though this adds somewhat to the apparent complexity.

An accuracy sufficient for most work can be obtained without detailed corrections for the buoyant effect of the air by attention to the notes given on this subject.

Statistics of Universities, Colleges and Professional Schools: 1923-24. Prepared in the Statistical Division, Bureau of Education, Department of the Interior, and issued as Bulletin, 1925, Number 45, being advance sheets from the Biennial Survey of Education in the United States, 1922-1924. 160 pages.

For the school year 1923 to 1924 reports were received from 144 universities, colleges and professional schools under public control, 769 under private control, and 150 independent professional schools. Among these there were 63 schools of pharmacy, 80 schools of medicine, 12 schools of veterinary medicine and 43 schools of dentistry. The total number of students enrolled in the schools of pharmacy during the years given numbered 9951; those of the schools of medicine, 18,900; schools of veterinary medicine 511 and schools of dentistry, 12,947.

A Pathological Survey of the Para Rubber Tree (Hevea Brasiliensis) in the Amazon Valley. By James R. Weir, Pathologist of the Expedition of the United States Departments of Agriculture and Commerce to Investigate the Sources of Crude Rubber in the Amazon Valley and Pathologist in Charge of the Pathological Collections of the Bureau of Plant Industry, Department of Agriculture. Issued as Department Bulletin Number 1380. 130 pages.

A study of the diseases of *Hevea Brasiliensis* and related species, the numberless fungi and the range of hosts of the wood-destroying species. Due to the fact that most tropical crops receive little if any care after planting, the field, pathologically speaking, is new, and with the "exception of a few collections made by early botanists, very little mycological and no constructive pathological work has been done heretofore." Many of the problems of the rubber grower are those of the fungous agents of disease; a solution of those problems will have immeasurable effect upon the quantitative and qualitative production of crude rubber.

The Pharmacy Headquarters will soon be a realization—see that it and its departments are adequately endowed.