

alcoholic content of alcoholic liquids in general. No note was made concerning liquids containing volatile acids.

Under the Quantitative Determination of Sugars, volumetric, gravimetric and polarimetric, we note absence of any practical handling of the polariscope. Possibly the authors left this to the class room. Next we find sections devoted to Partial Analyses of Tea, Tanning Materials and Soap. The latter is excellent.

Section XII.—Examination of Oils, Fats and Waxes, 25 pages with typical examples worked out. An admirable piece of work.

Section XIII.—Part V.

Determinations of Carbon, Hydrogen, Nitrogen and other Elements. The 27 pages cover the subject in a thorough and exhaustive manner and as far as possible, made comprehensive to the student—quite an art.

Section XIV. Determination of Molecular Weights.

Within the space of ten pages, this very important chapter in physical chemistry has been curtailed to general descriptions.

PART VI—VOLUMETRIC ESTIMATION OF GASES AND VAPORS.

Section XV.—The calculation of Volume of Gases under various conditions. Calibration of Measuring Tubes with water and mercury. Errors of Meniscus. Splendid practice and well executed.

Section XVI.—Explanation and handling of the Hempel apparatus with necessary reagents. Collecting, gases—determinations—then Gas analyses with examples covering 15 pages.

PART VI. SECTION XVII.—THE LUNGE NITROMETER.

Covers a variety of determinations made by this instrument. This is followed by Gas Determinations by Absorption and Titration according to Pettenkofer.

Section XVIII.—Vapor Density Determinations.

We note on page previous the expression—"Estimation" of Gas then "Determination of CO₂," then again—"Process of Estimation." Would suggest more uniformity in dropping 'estimation,'—a term too vague, especially in this connection.

The methods of Victor Meyer and Dumas are clearly described and adapted as adjunct to class demonstrations.

PART VII—TABLES FOR REFERENCE.

These cover a great variety of topics dealing with the subject matter, especially noteworthy,

an excellent list of Books for Reference on all subjects treated.

An Index to Separations as well as General Index show careful work. So many authors try to save in printers' bills on their index, much to the annoyance and sometimes disgust of the reader.

The text, which is systematically arranged, is presented in a clear, concise and direct manner which recommends itself for the pharmacy as well as the chemistry student and professional chemists.

The press-work cannot be improved.

V. COBLENTZ.

Die Chemische und Mikroskopische Untersuchung des Harns. Ein Handbuch zum Gebrauch fuer Aerzte, Apotheker, Chemiker und Studierende. Bearbeitet von Prof. Dr. Edward Spaeth, Direktor der Staatl. Untersuchungsanstalt und der Universität Erlangen. 5 Auflage mit 111 Abbildungen, 2 farbigen Tafeln und einer Spektraltafel. Lcx. 726 pp. 1924. Goldm. 26=.

The first edition of this masterwork appeared in 1897 and the present, fifth edition, is just off the press, a true proof of its popularity and usefulness.

The Chemical and Microscopical Analysis of Urine which is the title of the book before us, is becoming more and more important to physician, pharmacist and chemist. The author, a recognized authority on this subject, is professor at the University of Erlangen, Bavaria, and also director of the Laboratory of the State. It is to his credit that he wrote a book on the analysis of urine, both chemical and microscopical which is so thorough and detailed that it forms 726 pages. Verily a masterwork!

The following headings indicate the scope of the book:

I. General Part: Properties, Reagents and Methods of Analysis.

II. Chemical Analysis: Inorganic (cations and anions), Organic (divided into 44 chapters) and Odd Constituents (inorganic and organic).

III. Microscopical Analysis: General, Organized and Non-organized Sediments, Concrements.

IV. Concise, Practical Method of Urine Analysis.

How thoroughly and painstaking the author has compiled this work can be observed from the following examples.

In the determination of sulphur and sulphuric acid, seven pages have been written,

and qualitative and quantitative, gravimetric and volumetric methods are given.

The chapter on acetone comprises 18 pages giving 8 quantitative and 7 qualitative methods.

Almost 100 pages are devoted to the Carbohydrates which are cleverly divided into Pentose, Glucose, Levulose, Saccharose, Lactose, Maltose, Dextrins and Glycogen.

Each chapter gives the history and origin of the substance in the urine, the causes, properties and effects. Tests and other matters of minor importance are in smaller type and the important facts and cautions are in heavy type. In each case the author frankly states his own opinion or that of other authorities as to the value of the test and at the end of the chapter he recommends the one most reliable.

The numerous illustrations and the colored tables, works of art, help to elucidate the text and can be highly appreciated, especially by the student.

The book abounds in bibliographic references and footnotes, as many as 18 on one page, and is therefore extremely valuable to the research worker.

The author has most certainly achieved a real success, as he has collected in one volume a great amount of material hitherto inaccessible except in the extensive literature on the chemistry and microscopy of urine.

Analytisches Diagnostikum. Die chemischen, mikroskopischen und bakteriologischen Untersuchungs-methoden von Harn, Auswurf, Magensaft, Blut, Kot, etc. Von Dr. Ernst Kraft, Besitzer des bakteriologisch-chemischen Laboratoriums in Bad Kissingen. 3. Auflage mit 147 Abbildungen im Text und 5 farbigen Tafeln. Octavo 480 pp. Gold Mark 14.

"From the practice for the practice" is the motto of this book written by a German apothecary who conducts a clinical laboratory at that fashionable spa Kissingen, made famous by Bismarck. The seven parts of the work treat the analysis of Urine, Secretion of the Sexual Organs, Puncture Liquids, Sputum, Stomach Contents, Feces and Blood.

The chapter on Albumin comprises 25 pages and contains 5 quantitative and 7 qualitative methods. As the most sensitive

one Kraft recommends the "Sulphosalicylic Acid" test, which the referee can fully endorse having used same for over 20 years. At the end of the part on urine analysis, sample copies of reports are given in German, French, English, Italian, Polish and Russian.

The part on Blood is very thorough and comprises 75 pages. It is subdivided in General Properties and Spectroscopy, Chemical, Microscopical, and Bacteriological Analysis and Pathological Blood.

On p. 459 in the Appendix the printer's devil produced *Obermeyer* (same as in U. S. P. IX, p. 630). It was Fr. *Obermayer* who first published his Indican Reaction in *Wiener Klinische Wochenschrift* 1890, p. 176.

The 5 colored plates in the book contain respectively five, five, two, two and twenty-three excellent illustrations, real works of art.

In view of the prominent place which clinical pathology occupies to-day, and rightly so, in the diagnosis and treatment of disease, the book before us is highly important. It is a practical hand and reference book which we can highly recommend to laboratory workers and pharmacists in particular. Let us hope that it will also become better known outside of the "Vaterland."

OTTO RAUBENHEIMER, Ph.M.

PROCEEDINGS OF THE NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION IN CLEVELAND.

The 1923 *Proceedings of the National Wholesale Druggists' Association* containing the complete stenographic report of the convention at Cleveland in October, has been distributed to members. The volume consists of 688 pages and contains in addition to the convention proceedings, portraits of the officers and directors and a complete roster of active and associate members indexed alphabetically and by states and cities.

The N. W. D. A. Year Books, of prior conventions, have been reviewed in these columns a number of times. The general outline of the proceedings is not very different from other years and, as those of other editions, the reports of various committees are valuable documents, not only for the members but for all associated with the drug industries.

DEATH OF MRS. L. E. SAYRE.

Just before completion of this issue of the *JOURNAL* word was received of the death of Mrs. L. E. Sayre. Members of the Association express sympathy to Ex-president Sayre and family in their bereavement. The deceased had been in poor health for more than a year.