

SUMMARY

A color test has been described which employs gold chloride solution for identifying different varieties of aloes and for dif-

ferentiating barbaloin and isobarbaloin. The test is simple in application and seems preferable to others which have appeared in the literature.

REFERENCES

- (1) Gardner, J. H., and Joseph, L., *JOUR. A. PH. A.*, 26 (1937), 794.
- (2) Ware, A. H., *Analyst*, 50 (1925), 384; *Pharm. J.*, 124 (1930), 596.
- (3) Lèger, M. E., *Ann. chim.*, [9] 6 (1916), 341.
- (4) Lenz, W., *Z. anal. Chem.*, 21 (1882), 228.
- (5) Beal, G. D., and Okey, R., *J. Am. Chem. Soc.*, 39 (1917) 716.
- (6) Wirth, E. H., Maher, F. T., and Lindblade, V., *Bull. Natl. Formulary Committee*, 8 (1939), 54.

Book Reviews

An Introduction to Materia Medica and Pharmacology, by HUGH ALISTER MCGUIGAN, Ph.D., M.D., and ELSIE E. KRUG, B.S., R.N. The C. V. Mosby Company, St. Louis, 1942. X + 779 pp., 83 figs., 14 x 22 cm. Price, \$3.50.

A Textbook of Materia Medica, Pharmacology and Therapeutics, by HAROLD N. WRIGHT, M.S., Ph.D., and MILDRED MONTAG, R.N., M.A. W. B. Saunders Company, Philadelphia, 1942. 2nd Edition xvi + 647 pp., 93 figs., 13 x 19.5 cm. Price \$3.00.

As sources of pharmacological information for pharmacists, both of these texts suffer from a paucity of detail concerning drug action. Because these volumes are intended for use as texts in Schools of Nursing, they present the material from the viewpoint of hospital routine and it is this feature that makes both books helpful to practitioners of Institutional Pharmacy. It is advantageous for any pharmacist to be conversant with hospital therapeutic practices and many pharmacists will wish to equip their professional libraries with these excellent compendia.

The McGuigan-Krug text represents the classical interpretation of pharmacology in a substantial manner and is essentially factual. There are times, however, when one wonders if the student of limited background in physiology is capable of interpreting the sketchy pharmacological reasoning. The discussion of the mode of action of atropine is a case in point. To one already familiar with the subject, the summary of proofs for the site of action of this drug is appreciated for its conciseness, but to the novice, the fact that under the influence of atropine, the eye is placed in autonomic imbalance in favor of the sympathetic system is not forcefully stated.

The documentation could have been materially improved by the addition of more primary source material, especially of the review type. The typography of the text is excellent and the use of tinted paper of the finest quality should be appreciated by the reader.

The fresh outlook of the Wright-Montag text is

an achievement. Many teachers of pharmacology will wish to see this text for its exemplary pedagogy which more than compensates for its lack of detail. The authors see clearly the needs of the student of drug action as far as nursing is concerned and they have written with a consistent consciousness of that need. It is unfortunate that more elementary texts do not get away from the encyclopedic approach.

The many photographic illustrations are well conceived and splendidly executed. The schematic material expresses a viewpoint different from that ordinarily seen and all illustrative material is functional in character, tying in well with the text. The fact that the illustrative material is original contributes to the harmony between text and figure and is a welcome relief from the hackneyed illustrations that have been accompanying pharmacology texts for decades.

Teachers of pharmacy and pharmaceutical arithmetic can learn some excellent teaching methods in these fields from this text. The treatment of common fractions is well developed; and, although many will decry the childish presentation, a realist appreciates the necessity of clarifying a grade-school subject which is none too well understood by many college students.

This textbook is well documented with current literature and the typography is of the finest quality.—M. W. GREEN.

First Aid, Surgical and Medical, by WARREN H. COLE, M.D., F.A.C.S., and CHARLES B. PUESTOW, B.S., M.S., M.D., Ph.D., F.A.C.S. D. Appleton Century Company, Inc., New York, 1942. xxiii + 351 pp., 92 figs., 14 x 22 cm. Price \$3.00.

As a result of the war, colleges of pharmacy have recently laid increased stress upon the teaching of first aid and many teachers will be interested in new books in this field. The text by Cole and Puestow, although designed primarily for medical use, is quite adaptable to the needs of the pharmacy curriculum.

As one should expect, the greater portion of this text is given over to discussions of war casualties, but nevertheless considerable attention is paid to

civilian accidents. The terminology employed is technical without being so narrowly so that it cannot be understood by students with a limited background in the medical sciences. Sufficient anatomy and physiology are woven into the text to give a solid basis for the first aid measures employed. Wounds, burns, hemorrhage and shock are discussed in sufficient detail without becoming controversial, a factor which is highly important in the teaching of a subject as practical as first aid.

The chapter on "Gas and Bomb Raids" was written by Major H. C. Lueth and is based upon army information coupled with the experiences of the British. The discussions of aerial bombardment and bomb shock are especially noteworthy. Although the section on war gases is thorough, it suffers from a common fault of discussions of gas attack, *i. e.*, too much attention is given to the identification and treatment of individual gases at the expense of emphasis on the general principles of gas treatment and prevention. To the reviewer, it appears to be more logical to know a few simple, general directions for behavior during a gas attack than to be able to distinguish between Lewisite and mustard gas by their odors.

The collaborators are to be congratulated for the superb quality of the many line drawings which add much of practical value to the treatise.—M. W. GREEN.

Experiments in Organic Chemistry, by E. WERTHEIM.

The Blakiston Company, Philadelphia, Pa., 1942. 221 pp., appendix, 23 x 16 cm. Price, \$1.35.

This manual is designed to accompany the text, "Introductory Organic Chemistry," by the same author and to be used by students interested only in a short course in organic chemistry. The experiments are primarily of the "properties and tests" type. The more difficult preparations, especially those requiring less common apparatus and large quantities of chemicals and also time-consuming experiments, have not been included. It is well suited for classes where chemicals and apparatus are limited. The average time necessary to perform each experiment is given. Directions are fully and clearly given and figures and illustrations of apparatus assemblies and manipulations are exceptionally good. The manual contains 62 numbered experiments, is well indexed, and contains an appendix in which are included a table of the essential atomic weights, directions for emergency treatments, necessary chemicals listed by experiments, and directions for preparing special reagents. Questions are occasionally included in the text of the experiments and lists of questions are also appended. The craftsmanship is excellent for this type of book.—E. B. STARKEY.

Identification of Pure Organic Compounds, by ERNEST HAMLIN HUNTRESS, Ph.D., Assoc. Prof. of Organic Chemistry, Mass. Inst. of Tech., and SAMUEL PARSONS MULLIKEN, Ph.D., Late Prof.

of Organic Chemistry, Mass. Inst. of Tech. John Wiley and Sons, Inc., New York, 1941. 691 pp., 15 x 23 cm. Price, \$7.50.

The scope of this volume is limited to 1364 organic compounds selected from the large group of substances containing carbon and hydrogen or carbon, hydrogen and oxygen. Gases and compounds which do not have a melting point or definite boiling point, or are of a syrupy consistency, are excluded. A comparison of this volume with Mulliken's original "Identification of Pure Organic Compounds" shows the deletion of many compounds of lesser importance and the inclusion of many substances now well known and commercially available which were formerly merely laboratory curiosities.

This edition introduces two new features. An index of chemical type has been placed at the opening of each chapter to facilitate rapid location of chemical compounds. An index containing tables of melting points of compounds and their derivatives arranged in a sequence of increasing temperature is given in Chapter XIII. All of the melting points found in the body of the book are classified and summarized in this chapter.

Compounds are classified by a method based upon chemical rather than physical properties and amply described in the first chapter. Each compound for which data are given has an arbitrary number consisting of a digit representing the order, followed by a colon and an arbitrary four digit number indicating the specific compound. Thus, all compounds of this book have the number "one" for the single digit. The system is analogous to a telephone number in which the single digit corresponds to the exchange and the four digits, the individual line. All compounds in the general index of the book are located by this number system rather than by the customary page reference.

Chapter II describes the common generic tests for the nine genres: (1) aldehydes, (2) carbohydrates, (3) acids, (4) phenolic compounds, (5) esters, (6) anhydrides and lactones, (7) ketones, (8) alcohols, (9) hydrocarbons, ethers, etc. Each genus is separately described in succeeding chapters in such a way that the qualitative identity of an "unknown" is easily established. The pertinent facts regarding each compound listed are: the name or names of the compound, structural formula, empirical formula, Beilstein number, physical properties, general information and properties and reactions, preliminary tests, derivatives, and literature references. All of the reactions cited have actually been carried out by the author, a valuable and almost unique contribution.

The reviewer has had numerous occasions to refer to this volume and can attest its applicability. Any library will be enriched by the possession of this book of general reference. For classroom use, it presents a technique for identifying organic compounds in a systematic manner, teaching the student a methodic approach to qualitative organic