

protoberberine alkaloids (and berberine), with a strong botanical slant. With the aporphine and proto-pine types (both by Manske), more complex systems are introduced. The chapter on phthalideisoquinolines, by J. Stanek (Prague) and Manske, brings little new to the picture of this well-known group, mainly narco-tine, hydrastine, and their conversion products.

Marshall Kulka (chap. 33) gives an excellent review of the complicated *bis*-benzylisoquinoline alka-loids, which includes the important curare group.

The concluding sections comprise the less-known ularine and alpha-naphthaphenanthrindine groups (Manske), the Erythrophleum alkaloids (G. Dalma, Buenos Aires), and a difficult section on the Aconitum and Delphinium alkaloids (E.S. Stern, McFarlan Co., Edinburgh).

There are a few inconsistencies. In some places, physical properties of important derivatives are miss-ing, in others detailed instructions are given for the extraction of roots or leaves. These minor details do not detract from the value of the book to alkaloid chemists.

LYNDON F. SMALL

National Institutes of Health

Organic Analysis. vols. I and II. John Mitchell, Jr., I. M. Kolthoff, E. S. Proskauer, and A. Weissber-ger, Eds. Interscience, New York-London. vol. I (1953), viii + 473 pp. Illus. \$8.50; vol. II (1954), viii + 372 pp. Illus. \$8.50.

This new series is directed to the increasingly im-portant field of organic analysis by functional groups. Each volume consists of a collection of nine mono-graphs on selected topics, which fall into two cate-gories. The first includes chapters devoted to the de-termination of specific functional groups. The first volume has eight chapters on the determination of hydroxyl, alkoxyl, alpha-epoxy, active hydrogen (two chapters), carbonyl, acetal, and sulfur groups. In the second volume are chapters on the determination of carboxyl; ester; nitro, nitroso, and nitrate; and ac-tive hydrogen and some oxygen groups by lithium aluminum hydride. Each chapter in this category gives an up-to-date review of the literature and explicit laboratory directions for selected procedures. The pro-cedures have the added value of being the methods of preference selected from the now considerable litera-ture by experts for use in their own laboratories.

The second group of chapters comprises discussions of newer instrumental and physical methods of or-ganic analysis. In the first volume is a chapter on the use of spectroscopic methods for functional groups found in petroleum products. In the second volume are five chapters on coulometric methods, polarogra-phy, reaction-rate methods, phase-solubility analysis, and countercurrent distribution. The last two are suf-ficiently detailed to permit at least elementary appli-cation of the methods without further instruction. The other chapters in this category are more or less gen-

eral reviews. They are stimulating and suggestive but would need to be supplemented by a study of the references in order to put the methods to practical use.

The work is well produced. There are a few incon-sequential typographical errors. Although there is a difference in style among the various authors, the presentations on the whole are lucid. Where ambigu-ities occur they can generally be cleared up by fur-ther study of the text. There are good indexes, and volume 2 has a cumulative index for both volumes.

LYMAN CHALKLEY

5320 Middleton Lane, Washington 22, D.C.

Books Reviewed in THE SCIENTIFIC MONTHLY

May

Tobatí: Paraguayan Town, Elman R. Service and Helen S. Service (Univ. of Chicago Press). Reviewed by D. Bidney.

The Mathematical Practitioners of Tudor and Stuart England, E. G. R. Taylor (Cambridge Univ. Press). Reviewed by S. H. Gould.

Fresh Water from the Ocean, Cecil B. Ellis (Ronald Press). Reviewed by M. Telkes.

Archaeology in the Field, O. G. S. Crawford (Praeger). **Archaeology from the Earth**, Mortimer Wheeler (Ox-ford Univ. Press). Reviewed by J. B. Griffin.

Archaeopteryx lithographica, Gavin de Beer (British Museum). Reviewed by E. H. Colbert.

General Education: Explorations in Evaluation, Paul L. Dressel, Director (American Council on Education). Reviewed by W. C. Fels.

Motivation and Personality, A. H. Maslow (Harper). Reviewed by R. H. Knapp.

Time Distortion in Hypnosis, Linn F. Cooper and Milton H. Erickson (Williams & Wilkins). Reviewed by A. Kuhner.

A Treatise on Electricity and Magnetism, vols. I and II, James Clerk Maxwell (Dover). Reviewed by P. G. Bergmann.

The Deaf and Their Problems, Kenneth W. Hodgson (Philosophical Library). Reviewed by S. R. Silverman.

Sex in Microorganisms, D. H. Wenrich, Ivey F. Lewis, and John R. Raper, Ed. Committee (AAAS). Re-viewed by T. M. Sonneborn.

The Hidden Life of Flowers, J. M. Guilcher (Philosophi-cal Library). Reviewed by H. G. Barclay.

The Human Animal, Weston LaBarre (Univ. of Chi-cago Press). Reviewed by F. L. K. Hsu.

Henri Poincaré: Critic of Crisis, Tobias Dantzig (Scrib-ner's). Reviewed by P. Frank.

Asia, East by South, J. E. Spencer (Wiley; Chapman & Hall). Reviewed by G. B. Cressey.

Classification of Insects, Charles T. Brues, A. L. Me-lander, and Frank M. Carpenter (Harvard Univ. Press). Reviewed by W. M. Mann.

American Game Birds of Field and Forest, Frank C. Edminster (Scribner's). Reviewed by C. H. Rogers.

The Wilderness World of John Muir, Edwin Way Teale (Houghton Mifflin). Reviewed by P. B. Sears.