planographed editions, and which it supplements, in that its serviceability is not dependent upon any one particular scheme of analysis. No matter what the analytical approach may be, these tables will be found useful not only to students of organic qualitative analysis, but also to all chemists concerned with the identification of unknown organic compounds. The publication appears opportunely, for many changes have occurred in such data since 1904, and a complete set of "Mulliken" has been unobtainable for many years.

Following an explanatory introduction (14 pp.), and a description of the Generic Tests of Order I (11 pp.), the succeeding chapters are devoted to Aldehydes (50 pp.); Carbohydrates (7 pp.); Acids (116 pp.); Phenols (71 pp.); Esters (75 pp.); Acid Anhydrides and Lactones (4 pp.); Ketones (43 pp.); Alcohols (83 pp.); Ethers, Hydrocarbons, etc. (120 pp.); Colored Compounds of Order I (Suborder II) (25 pp.); and 26 pp. of valuable Tables of Melting Points of Series of Derivatives of Compounds of Order I commonly used for identification purposes. An Index of Compounds according to Empirical Formula and a general Alphabetical Index of Compounds of Order I conclude the volume. In addition to these two indexes, seven of the nine genera comprising the book are immediately preceded by a separate alphabetical name index and an index of chemical types. As noted above, the "Tables of Melting Points of Series of Derivatives" constitute another index.

The introductory chapter sets forth the system used for the classification of compounds, a brief synopsis of the general procedure for identification of unknowns, the arrangement of the data on individual compounds and the nomenclature adopted. Extensive use is made of abbreviations, as is essential in a reference work of this character, to economize space and to keep down the cost.

One of the difficult problems in all discussions or tabulations of "selected" organic compounds is to decide which compounds to select from the hundreds of thousands already in the literature. In his choice of the 1,364 compounds described in the present volume, the author has restricted his list, in most cases, to compounds which are commercially available or which can be prepared readily from accessible materials.

In compiling the tables, the literature has been searched carefully and laboriously, particularly for the years 1920–1940, about 70 per cent. of the approximately 7,500 citations recorded falling within that period. Every compound described also carries its Beilstein reference.

The book is an indispensable adjunct to all laboratories where the identification of organic compounds is a matter of interest or importance. Paper, press work and binding are excellent.

*Micromethods of Quantitative Organic Elementary Analysis.* Second edition. By JOSEPH B. NIEDERL and VICTOR NIEDERL. xiii + 347 pp. New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd. 1942. $3.50.

THE scope of the original edition has been somewhat enlarged, while retaining the same mode of presentation. New developments, improvements and simplifications, as well as the latest important contributions, have been included. "Remarks" and "Literature" are deferred until the conclusion of the chapters, so as not to interrupt descriptions of the analytical procedures.

*Organic Syntheses. Collective Volume I.* Second revised edition. Edited by HENRY GILMAN. Revised by A. H. BLATT. xi + 580 pp. New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd. 1941. 6.00.

THIS follows exactly the plan of the first edition and, like it, includes all the preparations given in Volumes I to X inclusive of "Organic Syntheses." For a number of these preparations, new or improved procedures have been added. Errors have been corrected. The literature has been reviewed through *Chemical Abstracts* for 1940 (vol. 34), and to each preparation a sub-title has been supplied, giving the C. A. indexing name wherever that differs from the one used in the heading.

*An Introduction to Organic Chemistry.* Fourth edition. By ROGER J. WILLIAMS. xi + 628 pp. New York: D. Van Nostrand Co., Inc. June, 1941. $4.00.

SINCE the publication of the third edition of this excellent textbook in May, 1935, developments in the rapidly changing field with which it deals have necessitated this revision, to bring it up to date, while the general arrangement and method of treatment remain the same.

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## A BIBLIOGRAPHY OF PRIMATES

*Bibliographia Primatologica—A Classified Bibliography of Primates Other than Man.* By THEODORE C. RUCH. 241 + xxvii pages. Baltimore: Charles C Thomas. 1941. $8.50.

THIS is publication Number 4 of the historical laboratory of Yale Medical Library, and is Part I of a projected bibliography on primates. Part II will involve pathology and taxonomy. The headings used are embryology, general morphology, circulatory and

lymphatic systems, respiratory system, digestive system, the endocrine glands, urogenital system, osteology, arthrology and syndesmology, teeth, muscular system and integument, nervous system and sense organs. Physiology and pharmacology: blood and circulation—respiration, digestion nutrition and metabolism, kidney and water balance, endocrine glands, animal heat, reproduction and development, muscles and skin, nervous system and sense organs, pharmacology. Psychobiology: receptive capacities, the action system, maturation of behavior, motivation of behavior, modifiability of behavior, intelligence and behavior—insight—ideation, reproductive and social behavior, miscellaneous, observational psychobiology.

There are 4,630 entries, a list of miscellaneous bibliographies and an index of authors' names of 27 pages. The book is a beautifully prepared volume of double column format, with bold-faced headings to each entry, which makes it easy of consultation. Classification is largely by subject, with items arranged by author, but in the case of literature up to the nineteenth century it is chronological. Where an entry covers two subjects it is entered under the principal one and cross indexed under the other. The effort is always to make the bibliography practical. Thus under "Habits in Nature and Captivity" the classification is taxonomic, the author believing that "Whatever the initial zeal, the discomforts of Procrustean categories soon convinced us of the folly of attempting to divide a literature where definite lines of cleavage do not exist."

Separate publications are distinguished by having the titles printed in italics. The use of capital letters is reduced to a minimum. Total pagination is given in every case. In order to make the reference as exact as possible, a system of markings is adopted which indicates the extent to which an article presents primate material. As a further means to exact determination the character of the publication is indicated—abstract, review, lecture, etc. Finally the name of the animals treated is given in abbreviation.

C. E. McCLUNG

# SPECIAL ARTICLES

## OBSERVATIONS ON AN EPIDEMIC OF POLIOMYELITIS[1]

AN epidemic of poliomyelitis was observed in which the transmission of the disease seemed largely limited to the late incubation and early prodromal periods, and the spread from neighborhood to neighborhood and community to community greatly influenced by human travel. The place was Walker County (population 65,000), a mountainous and mining region in north central Alabama. The epidemic began in the last week in June, reached a peak early in August, and was virtually ended by the last week in September, 1941.

Along with controlled studies of certain age groups the families of 101 of the 121 reported cases of all ages were interviewed between August 8 and November 8 in a systematic manner by the same investigator, and in 91 instances most of the families of neighbors, friends and reported contacts of the case. Unreported cases of poliomyelitis were uncovered, and many acute febrile illnesses compatible in the broadest sense with abortive poliomyelitis. No epidemic of any disease except poliomyelitis was recognized in the areas between June 15 and September 15, and the isolated cases of mumps, measles, pertussis, etc., did not exceed 10 per cent. of the frank poliomyelitis cases observed. Of the 101 individuals studied 87 had paralytic and 13 abortive poliomyelitis with myelitic or meningitic signs, and one had an acute febrile illness compatible with abortive poliomyelitis (in a like twin whose brother had paralytic poliomyelitis); five died; 85 were under six years of age.[2]

Although the residences of many of the 101 patients were among the most isolated in the eastern United States, not one patient had been isolated during the month preceding the illness. Visits were generally among relatives or church workers (the contact was frequently at the premises of a neighbor of the family visited). Of the 101 patients 81 had experienced within 34 days of onset prolonged direct contact with a prior acute febrile illness compatible with poliomyelitis (in 67 instances it was frank poliomyelitis, 38 of which had been reported and 29 unreported; 5 of the remaining 14 children had in turn been exposed 4 to 18 days prior to onset to frank poliomyelitis, and 6 others resided in or had visited an epidemic neighborhood in the same period). In 72 of the 81 instances the children played together for more than an hour, the least interval being a child's "ten minutes"; in perhaps every instance a portion of the visit was in the daytime; in many it was limited to this period and to the premises outside of the house.

In 45 instances the contact with prior poliomyelitis

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[2] Valued assistance in the clinical study of this epidemic was received from Dr. A. M. Waldrop and staff of the Walker County Health Department; Dr. B. M. Beach, associate director of child hygiene, Alabama Department of Public Health; Dr. Earle Conwell and staff of the State Crippled Children's Bureau; Dr. A. G. Gilliam, U. S. Public Health Service; and Drs. J. D. Trask, J. R. Paul and H. A. Wenner, Yale University School of Medicine.