proper subject for historical research only after it is too late to do it properly? Lacking such a careful job, many will have to rely on Jungk's book for one version of the exciting and important story. But—*caveat emptor.*

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Negroes and Medicine. Dietrich C. Reitzes. Published for the Commonwealth Fund by Harvard University Press, Cambridge, Mass., 1958. xxxi + 400 pp. $7.

This book is the result of a research project conducted under the auspices of the department of sociology of the University of Chicago, through a grant from the Rockefeller Foundation. Reitzes directed the project and edited the findings.

The study is a systematic one, divided into two parts. The first part analyzes the enrollment patterns of Negroes in the nation's medical schools and compares the performance of Negroes on the Medical College Aptitude Test with that of white students and of applicants who were rejected. It points out the undergraduate origin of Negroes in the medical schools and indicates the changing pattern toward integration in the study of medicine.

Part I presents evidence which reveals that Negroes compare unfavorably with white medical applicants in Medical College Aptitude Test scores; that the rejected applicants of predominantly white schools compare well with applicants accepted in medical colleges whose primary orientation is toward Negroes; and that Negroes who are graduates of predominantly white premedical colleges are more readily accepted by white medical colleges than are those applicants who are graduates of schools oriented primarily toward Negroes.

Moreover, the median scores of students accepted at Meharry Medical College on the regional support plan are generally lower than the median scores of noncompact students who succeed in gaining admission. Despite the lower scores, the Negroes admitted to white as well as to Negro medical schools usually complete their studies and qualify for practice. The scores on aptitude tests reflect cultural differences between the two groups which stem from dualism.

The study indicates that a larger number of Negroes are being admitted to integrated medical colleges than in the past, but that the population is increasing faster than the rate of admissions, so that the critical plight of Negroes with respect to medical services is not being alleviated.

Contributing the largest number of the students who are admitted to Meharry Medical College, and also heading the list of Negro colleges in terms of its contribution of Negro students to white medical schools, is the small college of Morehouse. It ranks third in the total number of graduates accepted for the study of medicine at Howard University. It would appear that the climate and emphasis at Morehouse College might well be the key to a more general remedial measure in correcting the critical shortages in medicine.

The second part of the book is concerned with patterns of behavior in sampled communities in regard to hospital practices for internships, residencies, and staff affiliations. It also samples practices in regard to integration in medical societies and relationships in the area of specialization in medicine. It indicates improvement in professional opportunities for Negroes in internships, residencies, and staff affiliations. At the lower level of medical training and practices, the barriers are not as great as they are at the upper levels.

In communities which lack approved quasi-integrated hospitals, Negroes have not qualified in large numbers for board specialties. Where these hospitals have been late in developing, as in Atlanta, status and lack of intern training opportunities have postponed, if they have not entirely blocked, improvement of the qualifications of the Negro doctor.

This book will serve as a useful source of data for observing patterns of changes affecting the study and practice of medicine in various types of communities as well as on a nationwide basis. It presents these data lucidly and authoritatively and is therefore a valuable reference for persons interested in the field of race relations.

SAMUEL M. NABRIT
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A Field Guide to Reptiles and Amphibians of Eastern North America. Roger Conant. Houghton Mifflin, Boston, 1958. xv + 365 pp. Illus. $3.95.

The appearance of another—the twelfth—in the "Peterson Field Guide Series" is always a happy event for outdoor naturalists. This one covers 505 species and subspecies, of which 320-odd are reptiles. All but one—the rare leatherback turtle—have been illustrated from life, with drawings made from photographs by Isabelle Hunt Conant. More than 400 of these are in color, also from life.

Since the use of color for identification of "herptiles" is made tricky by the ability of some of them to change color from minute to minute, and since the field guide is like others in the series in relying heavily upon illustrations, special care has been given to pointing out similar species. Forty pages of distribution maps will help, too, in locating the right name and corresponding information for a specimen in hand.

Conant shows particular concern with handling specimens in such a way as neither to hurt the "herptile" nor endanger the holder. Yet he realizes that most specimens will be identified at far closer range than any bird, and that many a field naturalist will wish to keep specimens alive in captivity for further observation. For these reasons he includes short sections on the capture and care of specimens and on the treatment of snake bite.

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Quantitative Plant Ecology. P. Grieg-Smith. Academic Press, New York; Butterworths, London, 1957. x + 198 pp. Illus. $6.

Ecologists are attempting to describe communities and organism-environment relationships in more quantitative terms in order to meet the demands of ecosystem analysis and to place more of ecological investigation on an experimental basis. This book is an up-to-date survey of problems encountered in the quantitative approaches to plant ecology. The discussions in the book will be of interest to all biologists concerned with organism-environment relationships, especially to those working with organisms in noncontrolled environments.

This book has a balance of viewpoints that keeps the discussion in terms that are meaningful to ecologists. Appreciation for the service role of mathematical tools is complemented by an awareness of the large number of variables and their complex relationships in all problems relating to communities of organisms. The author recognizes the need for the fullest possible knowledge of the biology of individual species, and also for continued use of empirical approaches and approximate methods in poorly understood areas of investigation. Although the discussion focuses on problems with plants, the author draws upon much of the pertinent work in animal ecology.

The survey begins with examination of quantitative descriptions of vegetation, problems of sampling, and compar-

ison of results of different groups of observations. It then moves on to tests of association between species and theoretical approaches to the ecological concept of associations. Correlation of vegetation with habitat factors is treated according to different combinations of quantitative and qualitative data relating to plant and environmental factors. Floristic composition, species-area relationships, and other features of plant communities are considered in a separate chapter on quantitative aspects of phytosociology. The final chapter is a well-presented summary of the author's views on the quantitative approach to plant ecology, including interesting observations on the meaning of pattern as elucidated in quantitative studies.

All ecologists are more or less concerned with the quantitative approach as it is discussed in this book. Many will find the book a useful guide to recent progress and a thought-provoking critique of major problems in quantitative aspects of plant ecology.

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Methods of Biochemical Analysis. vols. 5 and 6. David Glick, Ed. Interscience, New York, 1957; 1958. ix + 502 pp. $9.50; ix + 358 pp. $8.50.

This series constitutes a valuable contribution to biochemistry. Its objectives are to discuss the recent developments in biochemical methodology, to evaluate critically the available procedures, and to give detailed instructions for the method or methods of choice. For the most part, the editors and the contributors should be commended for their success in carrying out these objectives.

These two volumes are worthy additions to this series. Volume 5 should be of particular value to biochemists interested in the microanalysis of metallic ions, since it contains a chapter on "The micro determination of cobalt in biological materials," with emphasis on the spectrographic procedures; an excellent review of "Activation analysis and its application in biochemistry"; and a discussion of "Contamination in trace element analysis and its control." This volume also contains chapters on "Assay methods for cholinesterases," "Biological standards in biochemical analysis," "α-Keto acid determinations," "Chemical determination of estrogens in human urine," and "Infrared analysis of vitamins, hormones and coenzymes." Volume 6 should be of particular interest to purine and pyrimidine biochemists, since it includes chapters on the "Chemical determination of nucleic acids," "Microbiological assay of nucleic acids and their derivatives," and "New methods for purification and separation of purines." The other chapters are "Determination of formaldehyde and serine in biological systems," "Assay of serotonin and related metabolites," "Determination of transaminase," "Determination of thiamine," "Glycolipid Determination," "Determination of hexosamines," and "Electrophoresis in density gradients combined with *p*H and/or conductivity gradients."

The reviews are logically organized, well documented, and clearly written. These two volumes should be valuable to the research biochemist as reference books. As an aid to their use, each volume has a subject index, an author index, and a cumulative title index. However, no cumulative subject index has been included.

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New Books

Angler's Guide to the Salt Water Game Fishes, Atlantic and Pacific. Edward C. Migdalski. Rondla, New York, 1958. 516 pp. $7.50.

Atlas of Microorganisms, The Penicillia. Shigeo Abe. Kin-Ichiro Sakaguchi, Ed. Kanehara Shuppan Co., Tokyo, Japan, 1957 (order from Matthews Book Co., St. Louis 4, Mo.). 336 pp. $20.

Brave New World Revisited. Aldous Huxley. Harper, New York, 1958. 147 pp. $3.

Catalogue of the Type Specimens of Microlepidoptera in the British Museum (Natural History) described by Edward Meyrick. Tortricidae, Olethreutidae, Noctuidae. J. F. Gates Clarke. British Museum (Natural History), London, 1958. 600 pp. £6.

Catalysis. vol. 6, *Alkylation, Isomerization, Polymerization, Cracking and Hydroreforming.* Paul H. Emmett, Ed. Reinhold, New York; Chapman & Hall, London, 1958. 712 pp. $19.50. Contents: "Catalytic alkylation of paraffins with olefins" (Robert M. Kennedy), "Catalytic isomerization of hydrocarbons" (F. E. Condon), "Mechanisms of polymer formation and decomposition" (R. Simha and Leo A. Wall), "Polymerization of olefins" (A. G. Oblad, G. A. Mills, Heinz Heinemann), "Catalytic cracking" (Hervey H. Voge), and "Catalytic reforming of pure hydrocarbons and petroleum naphthas" F. G. Ciapetts, R. M. Dobres, R. W. Baker).

The Chemical Prevention of Cardiac Necroses. Hans Selye. Ronald, New York, 1958. 244 pp. $7.50.

Collecting, Preserving and Studying Insects. Harold Oldroyd. Macmillan, New York, 1958. 327 pp. $5.

Electronic Aviation Engineering. Peter C. Sandretto. International Telephone and Telegraph Corp., New York, 1958. 781 pp. $9.50.

Elementary Matrix Algebra. Franz E. Hohn. Macmillan, New York, 1958. 316 pp. $10.

Emergency War Surgery. U.S. Armed Forces issue of *NATO Handbook* prepared for use by the medical services of NATO nations. U.S. Department of Defense, Washington, 1958 (order from Supt. of Documents, GPO, Washington 25). 422 pp. $2.25. This handbook was developed by a committee of three surgical consultants representing the military medical services of France, the United Kingdom, and the United States, assisted by observers and the written recommendations from other NATO countries. The material used was obtained from authors and publications of many NATO countries.

Experiments in General Chemistry. Joseph B. Nordmann and Ernest S. Kuljian. Burgess, Minneapolis, Minn., 1958. 162 pp.

The Fossil Book. A record of prehistoric life. Carroll Lane Fenton and Mildred Adams Fenton. Doubleday, New York, 1958. 495 pp. $12.50. *The Fossil Book* relates the story of life during the past 2 billion years. It is a collector's guide that tells what fossils are and where to find them.

Geology of the Great Lakes. Jack L. Hough. Univ. of Illinois Press, Urbana, 1958. 331 pp. $8.50.

The Health of a Nation. Harvey W. Wiley and the fight for pure food. Univ. of Chicago Press, Chicago, Ill., 1958. 342 pp. $6.

The Illustrated Library of the Natural Sciences. vols. 1–4. Simon and Schuster, New York, 1958. 3042 pp. $19.95 until 25 Dec.; $25. This four-volume survey of the world of nature—over a million words and more than 3000 pictures—covers every field of natural science. From the first entry, Aardvark, to the last, Zebra, the alphabetically arranged volumes provide entertainment and information. Among the outstanding contributors are Marston Bates, William Beebe, Alfred Emerson, Homer E. Newell, Jr., and George Gaylord Simpson.

Immunology and Development. Mac V. Edds, Jr. Univ. of Chicago Press, Chicago, Ill., 1958. 69 pp. $2.50.

Internal Conversion Coefficients. M. E. Rose. North-Holland, Amsterdam; Interscience, New York, 1958. 182 pp. $6.25.

Introduction to the Theory of Sound Transmission. With application to the ocean. C. B. Officer. McGraw-Hill, New York, 1958. 292 pp. $10.

Linear Operators. pt. I, *General Theory.* Nelson Dunford and Jacob T. Schwartz. Interscience, New York, 1958. 872 pp. $23.

Living Birds of the World. E. Thomas Gilliard. Doubleday, New York, 1958. 400 pp. $12.50. Gilliard, associate curator of birds at the American Museum of Natural History, discusses all the known bird families and subfamilies and almost 1500 species.