

The first half of the book will appeal to many because of its simplicity of presentation. The language, homologous series, and simpler reactions of the organic chemist are logically and lucidly introduced in rapid manner. However, students who must leave organic chemistry with only such a survey of the field will take with them an impression of "frozen simplicity" that is very unrealistic.

Paper, presswork, and binding in the edition are first class.

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**Cohort Fertility.** Native white women in the United States. Pascal K. Whelpton. Princeton Univ. Press, Princeton, N.J., 1954. xxv + 492 pp. Illus. \$6.

This volume of statistics deals with the cumulative fertility of groups of women as they live through the childbearing period. It covers the period from 1920 and is based upon official census and vital statistics data. These were examined especially with respect to order of birth in relation to maternal age. On the basis of the data, fertility tables were constructed for hypothetical groups of women for each year since 1920. The official figures were adjusted to allow for non-registered births and for other factors, such as understatements regarding birth order and the number of children ever born.

The author is an authority in his field. The volume is well documented and contains an excellent table of contents that obviates the need for an index. Summaries appear at the ends of the chapters. The graphs are well drawn and the book is printed in large offset type. It is recommended to students interested in population trends.

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**Methods in Medical Research.** vol. 6. J. Murray Steele, Ed. Year Book Publ., Chicago, 1954. xiii + 271 pp. Illus. \$7.

Volume VI, like its predecessors, is a useful and authoritative collection of articles dealing with various aspects of methodology applicable to the vast field of medical research. It contains four sections representing the collaborative efforts of 12 authors.

Section I, "Some methods of studying human genetics," by C. C. Li, deals with analytic techniques, tracing pedigrees chiefly through observation of clinical cases. Although at times the treatment becomes too mathematical to be appreciated by the average reader, especially the article on "Segregation of recessive offspring," nevertheless the author has given a clear presentation of recent developments.

The second section is a discussion of "Methods in environmental medical research," which covers a number of aspects, written by several authors (R. L. Pratt and A. Henschel; L. D. Carlson; A. T. Miller, Jr.; J. D. Hardy and Alice M. Stoll; and S. Robinson and

Aline H. Robinson). They examine the applicability of the physical methods to physiological research that are most common to all studies of the effects of climatic conditions.

Section III is an extensive article on "Statistics in medical research," by D. Mainland and L. Herrera. It includes various phases of statistical analysis. In his introduction to this chapter, D. Mainland expresses the opinion that "what most medical research workers need is not, primarily, more knowledge of statistical tests but a realization of what modern biological statistics implies throughout the conduct of any type of medical investigation." It can be said that the authors have succeeded in fulfilling their objective in presenting the subject from a broad and dynamic point of view. This chapter should prove very useful for anyone doing medical research requiring statistical interpretation.

Section IV is entitled "Designs and construction of metabolic cages," by A. Lazarow. Cage design for the common laboratory animals—namely rat, mouse, dog, and monkey—is discussed. Here Lazarow has gathered together the literature concerning design of equipment for metabolic study of these animals, especially the rat. The discussion is of a practical nature and can be consulted profitably by anyone trying to build such equipment.

A surprisingly large amount of information has been compressed within the pages of a rather small book. The material has been skillfully and clearly presented and should prove very helpful to research workers in the field of medicine.

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## *Books Reviewed in* **THE SCIENTIFIC MONTHLY**

### **October**

**Principles of Biology**, W. G. Whaley, O. P. Breland, C. Heimsch, A. Phelps, and G. S. Rabideau (Harper). Reviewed by Robert B. Gordon.

**Plague**, R. Pollitzer (World Health Organization; Columbia Univ. Press). Reviewed by K. F. Meyer.

**The Magic of Electronics**, E. J. Bukstein (Ungar). Reviewed by R. C. Retherford.

**Physics Principles**, S. S. Ballard, E. P. Slack, and E. Hausmann (Van Nostrand). Reviewed by R. F. Paton.

**Introduction to College Physics**, R. D. Rusk (Appleton-Century-Crofts). Reviewed by W. Paul Gilbert.

**First Year College Physics**, C. E. Bennett (Ronald). Reviewed by R. F. Paton.

**An Introduction to Bacterial Physiology**, E. L. Oginsky and W. W. Umbreit (Freeman). Reviewed by Philipp Gerhardt.

**A French-English Dictionary for Chemists**, A. M. Patterson (Wiley and Chapman & Hall, ed. 2). Reviewed by William C. Boyd.



- General Chemistry**, E. G. Rochow and M. K. Wilson (Wiley; Chapman & Hall). Reviewed by Frank D. Martin.
- Introduction to Chemistry**, R. T. Sanderson (Wiley; Chapman & Hall). Reviewed by Robert B. Fischer.
- Principles of Polymer Chemistry**, P. J. Flory (Cornell Univ. Press). Reviewed by H. Mark.
- Representative Chordates**, C. K. Weichert (McGraw-Hill). Reviewed by J. Wendell Burger.
- Manual of Child Psychology**, L. Charnichael, Ed. (Wiley and Chapman & Hall, ed. 2). Reviewed by H. E. Weaver.
- Methods of Research: Educational, Psychological, Sociological**, C. V. Good and D. E. Scates (Appleton-Century-Crofts). Reviewed by Frank W. Hubbard.
- Introductory College Mathematics**, A. Leonhardy (Wiley; Chapman & Hall); **Introductory College Mathematics**, C. G. Jaeger and H. M. Bacon (Harper). Reviewed by H. S. Pollard.
- Inorganic Quantitative Analysis**, C. W. Griffin (Blakiston, ed. 2). Reviewed by Jay A. Young.
- Rocks and Mineral Deposits**, P. Niggli, trans. by R. L. Parker (Freeman). Reviewed by Howard A. Meyerhoff.
- Petrography: An Introduction to the Study of Rocks in Thin Sections**, H. Williams, F. J. Turner, and C. M. Gilbert (Freeman). Reviewed by J. Robert Berg.
- Physical Geology**, L. D. Leet and S. Judson (Prentice-Hall). Reviewed by J. R. Macdonald.
- The Juvenile in Delinquent Society**, M. L. Barron (Knopf). Reviewed by James L. McCartney.
- Treatise on Invertebrate Paleontology**, R. C. Moore, Ed., pt. G, Bryozoa, R. S. Bassler (Univ. of Kansas Press). Reviewed by John Imbrie.
- Manual of the Plants of Colorado**, H. D. Harrington (Sage). Reviewed by Harriet G. Barclay.
- College Botany**, H. J. Fuller and O. Tippo (Holt, rev. ed.). Reviewed by Howard E. McMinn.
- Vertebrate Dissection**, W. F. Walker, Jr. (Saunders). Reviewed by Harvey I. Fisher.

## New Books

- Chemical Pathways of Metabolism**, vol. II. David M. Greenberg, Ed. Academic Press, New York, 1954. vii + 383 pp. Illus. \$9.50.
- Qualitative Analysis Using Semimicro Methods**, Esmarch S. Gilreath. McGraw-Hill, New York, 1954. viii + 287 pp. Illus. \$4.25.
- Le Magnétisme des Corps Célestes**, A. Dauvillier. vol. 1, *Magnétisme Solaire et Stellaire Couronne Solaire et Lumière Zodiacale*. 171 pp. Illus. + plates. Paper, F. 1600. vol. 2, *Variations et Origine du Géomagnétisme*. 161 pp. Illus. + plates. Paper, F. 1500. Hermann, Paris, 1954.
- Highway Engineering**, Laurence I. Hewes and Clarkson H. Oglesby. Wiley, New York; Chapman & Hall, London, 1954. xi + 628 pp. Illus. \$8.
- Dictionary of Linguistics**, Mario A. Pei and Frank Gaynor. Philosophical Library, New York, 1954. 238 pp. \$6.
- Successful Commercial Chemical Development**, H. M. Corley, Ed. Wiley, New York; Chapman & Hall, London, 1954. xxv + 374 pp. \$7.75.
- Indians of the Plains**, American Museum of Natural History Anthropological Handbook No. 1. Robert H. Lowie. McGraw-Hill, New York, 1954. xiii + 222 pp. Illus. \$4.75.
- Amphibians and Reptiles of Western North America**. Robert C. Stebbins. McGraw-Hill, New York, 1954. xxii + 528 pp. Illus. + plates. \$8.50.
- God and Space-Time**, Deity in the philosophy of Samuel Alexander. Alfred P. Stiernotte. Philosophical Library, New York, 1954. xxvii + 455 pp. \$5.
- Protozoology**, Richard R. Kudo. Charles C. Thomas, Springfield, Ill., ed. 4, 1954. xi + 966 pp. Illus. \$10.75.
- Mathematical Puzzles and Pastimes**, Aaron Bakst. Van Nostrand, New York-Toronto; Macmillan, London, 1954. vi + 206 pp. Illus. \$3.75.
- The Vitamins: Chemistry, Physiology, Pathology**, vol. II. W. H. Sebrell, Jr., and Robert S. Harris, Eds. Academic Press, New York, 1954. xiii + 766 pp. Illus. \$16.50.
- Diagrams in Punched Card Computing**, Fred Gruenberger. Univ. of Wisconsin Press, Madison, 1954. ix + 108 pp. Illus. Paper, \$3.75.
- Metabolic Interrelations**. With special reference to calcium. Trans. of the Fifth Conference, 5-6 Jan. 1953. Edward C. Reifstein, Jr., Ed. Josiah Macy, Jr. Foundation, New York, 1954. 386 pp. Illus. \$5.
- A Devotion to Nutrition**, Frederick Hoelzel. Vantage Press, New York, 1954. 88 pp. \$2.50.
- Elements of Food Engineering**, vol. 3, Unit Operations, pt. 2. Milton E. Parker; with the collaboration of Ellery H. Harvey and E. S. Stateler. Reinhold, New York, 1954. 241 pp. Illus. \$6.75.
- The Rise and Fall of Maya Civilization**, J. Eric S. Thompson. Univ. of Oklahoma Press, Norman, 1954. xii + 287 pp. Illus. + plates. \$5.
- Fiberglas Reinforced Plastics**, Ralph H. Sonneborn; with chapters by Albert G. H. Dietz and Alton S. Heyser. Reinhold, New York, 1954. xii + 244 pp. Illus. \$4.50.

## Miscellaneous Publications

- Beiträge zur Kenntnis der Rotliegendflora Thüringens**, pt. 2 Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin, Klasse für Mathematik und allgemeine Naturwissenschaften, Jahrgang 1953, No. 3. Winfried Remy. 20 pp. Illus. + plates. DM. 2.50. **Statistische Thermodynamik des Vertikalen Temperaturgradienten der Atmosphäre**, No. 4. Hans Ertel. 14 pp. DM. 1. Akademie-Verlag, Berlin, 1954.
- The All-India Teak Seed Origin Sample Plots**, Indian Forest Bull. No. 177. G. S. Mathauda. Manager of Publications, Delhi, 1954. 14 p. Illus.
- Growing With the Years**, New York State Joint Legislative Committee on Problems of the Aging, Newburgh, N.Y., 1954. 159 pp. Illus. Gratis.
- Reducing Tool and Tool Service Costs with a Tool Loan Receipt System**, Bull., Engineering Expt. Sta. Ser., No. 93. C. A. Horst. Virginia Polytechnic Inst., Blacksburg, 1954. 31 pp. Illus. 25¢.
- Proceedings and Papers of the Twenty-Second Annual Conference of the California Mosquito Control Association**, 2-4 Dec 1953. Harold Farnsworth Gray, Ed. The Association, Turlock, Calif., 1954. 107 pp. Illus.
- Two New Species of the Genus Graptomys**, Tulane Studies in Zoology, vol. 1, No. 11. Fred R. Cagle. Tulane Univ., New Orleans, 1954. 20 pp. Illus. 75¢.
- Systematics and Zoogeography of Philippine Amphibia**, Philippine zoological expedition, 1946-47. Fieldiana: Zoology, vol. 33, No. 4. Robert F. Inger. Chicago Natural History Museum, Chicago, 1954. 348 pp. Illus. \$6.