tistics. More appendixes, an extensive index, and a really first-rate 33-page bibliography (up to date to 1954) with nearly 1100 entries occupy the rest of the book. The book is well cross-indexed.

The 17 chapters on the nucleus are divided into nine on properties of nuclei (Z, R, M, moments, parity, statistics, isotopic abundance, binding energy, and nuclear systematics), five on nuclear forces, models, and reactions, and three on α and β decay. However, the static and dynamic properties of nuclei are not separated into watertight compartments, for a very pleasant feature of the book is the arrangement of the sequence of topics dictated by the author's pedagogic experience in accordance with the principles of "minimum regret" and "varied reiteration" enunciated in the preface.

The book is written from the point of view of an experimental physicist, but it includes good summaries of the principal theoretical results required to interpret the experimental data. A feeling for the historical development has been successfully cultivated.

All in all this is probably the best reference textbook of its kind available on the subject today.

G. M. VOLKOFF
Department of Physics,
University of British Columbia

Traité de Paléontologie. vol. V, *Amphibiens, Reptiles, Oiseaux.* La sortie des eaux, naissance de la tétrapodie, l'exubérance de la vie vegetative, la conquête de l'air. Masson, Paris, 1955. 1113 pp. Illus. F. 12,800.

The *Traité de Paléontologie,* now being published in Paris under the direction of Jean Piveteau as a series of seven large volumes, is a truly monumental work that will present, when it is completed, a comprehensive survey of the animal life of the past. Volume V of the series deals with the amphibians, most of the reptiles, and the birds. An impressive array of European paleontologists contribute to this volume—namely, Piveteau, Jarvik, Dechaseaux, Lehman, Nielsen, Saint-Seine, Peyer, Kuhn-Schnyder, Bergounioux, Hoffstetter, Kälin, de Lapparent, and Lavocat. The result is an authoritative, handsome, and well-illustrated book.

The work is more than a routine compendium of our present knowledge about amphibians, reptiles, and birds of past ages; volume V of the *Traité* is a well-written and carefully integrated text, in which the various groups of "lower" tetrapods are described and discussed from different points of view. Although the general organization of the work is necessarily systematic, which means that the orders and lesser taxonomic divisions of these vertebrates, down to significant genera, are considered in their proper sequence and relationships, the particular value of the work is in the many discussions of general and special adaptations, evolutionary trends, classification, environmental and ecological factors, and many other topics. All this makes for an extraordinarily useful and readable volume, of inestimable value to the paleontologist and zoologist.

It is impossible here to attempt any remarks in detail on a book as large and as extensive in subject matter as this one. Perhaps it is enough to say that the volume can be used with a feeling of confidence, for the text represents the best judgment of outstanding experts in their several fields and has been prepared with attention to the accuracy of details as well as to the interest of its more general discussions. The omission of the synapsid reptiles from the volume (presumably they will be included in volume VI of the series) will be regretted by many who would find it logical and helpful to have all of the reptiles together in one book. But there is compensation for this omission by reason of the full treatment given to all of the other lower tetrapods. Errors are too trifling to deserve mention here. Indeed, Piveteau and his colleagues are to be congratulated on a major achievement.

It is unfortunate that the book is so very expensive; the price will keep many students who ought to have it from purchasing it.

EDWIN H. COLBERT
American Museum of Natural History
and *Columbia University*

New Books

The Meaning of Relativity. Albert Einstein. Princeton University Press, Princeton, N.J., ed. 5, 1955. 166 pp. $3.75.

Language, Thought, and Reality. Selected writings of Benjamin Lee Whorf. John B. Carroll, Ed. Technology Press, Massachusetts Institute of Technology, Cambridge, Mass.; Wiley, New York; and Chapman & Hall, London, 1956. 278 pp. $7.

Protoplasmatologia. Handbuch der Protoplasmaforschung. vol. VIII, *Active Transport through Animal Cell Membranes.* Paul G. Lefevre. 123 pp. $9. vol. X, *Red Cell Structure and Its Breakdown.* Eric Ponder. $9.50. Springer, Vienna, 1955.

Electrons, Waves and Messages. John R. Pierce. Hanover, New York, 1956. 318 pp. $5.

American Council of Independent Laboratories, Inc., Directory. A guide to the leading independent laboratories of America. American Council of Independent Laboratories, Washington, ed. 6, 1956. 67 pp.

Colloque sur les Questions de Réalité en Géométrie. Tenu à Liège du 23–26 Mai 1955. Centre Belge de Recherches Mathématiques. Thone, Liege, Belgium; Masson, Paris, 1956. 190 pp. F. 1900.

Shock and Circulatory Homeostasis. Transactions of the fourth conference 6–8 Dec. 1954, Princeton, N.J. Harold D. Green, Ed. Josiah Macy, Jr., Foundation, New York, 1955. 291 pp. $5.

The Theory of Photons and Electrons. The relativistic quantum field theory of charged particles with spin one-half. J. M. Jauch and F. Rohrlich. Addison-Wesley, Cambridge, Mass., 1955. 488 pp. $10.

A Short Dictionary of Weaving. Including some spinning, dyeing, and textile terms and a beginner's guide to weaving and dyeing. M. E. Pritchard. Philosophical Library, New York, 1956. 196 pp. $6.

Physical Properties of Chemical Compounds. Advances in Chemistry Series, No. 15. Edited by the staff of *Industrial and Engineering Chemistry.* American Chemical Society, Washington, 1955. 536 pp. $5.85.

Topological Dynamics. American Mathematical Society Colloquium Publ., vol. XXXVI. Walter Helbig Gottschalk and Gustav Arnold Hedlund. American Mathematical Society, Providence, R.I., 1955. 151 pp. $5.10.

Geometry of Four Dimensions. Henry Parker Manning. Dover, New York (unabridged and unaltered republication of ed. 1, Macmillan, 1914), 1956. 348 pp. Cloth, $3.95; paper, $1.95.

The Analytical Theory of Heat. Joseph Fourier. Alexander Freeman, trans. Dover, New York 19 (unabridged republication of the English translation first published 1878), 1955. 466 pp. Paper, $1.95.

The Number-System. H. A. Thurston. Interscience, New York, 1956. 134 pp. $2.50.

The Mechanical Properties of Textile Fibres. R. Meredith, Ed. vol. 7 of *Deformation and Flow.* North-Holland, Amsterdam; Interscience, New York, 1956. 333 pp. $8.75.

The Magic Background of Modern Anti-Semitism. An analysis of the German-Jewish relationship. Adolf Leschnitzer. International Universities Press, New York, 1956. 236 pp. $4.

General Chemistry for Colleges. B. Smith Hopkins and John C. Bailar, Jr. Heath, Boston, ed. 5, 1956. 701 pp. $6.

Plastics Progress, 1955. Papers and discussions at the British Plastics Convention, 1955. Phillip Morgan, Ed. Iliffe, London; Philosophical Library, New York, 1956. 432 pp. $17.50.

Cancérisation par les Substances Chimiques et Structure Moléculaire. Alberte Pullman and Bernard Pullman. Masson, Paris, 1955. 306 pp. Paper, F. 2800.

Einführung in die Geometrie der Waben. vol. IV of *Elemente der Mathematik vom Höheren Standpunkt aus.* Wilhelm Blaschke. Birkhäuser, Basel–Stuttgart, 1955. 108 pp. Paper, DM. 15.25.

Jenaer Jahrbuch 1955. Wissenschaftliche Veröffentlichungen des Zeisswerkes. pt. 1. Gustav Fischer, Jena, Germany, 1955. 148 pp. DM. 14.