

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.

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Traité de Paléontologie. vol. V, *Amphibiens, Reptiles, Oiseaux*. La sortie des eaux, naissance de la tétrapodie, l'exubérance de la vie végétative, 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 Laparent, 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.

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New Books

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

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