

Evolution of a Scientific View of the Universe in the Physics of the Seventeenth and Eighteenth Centuries

By B. G. Kuznetsov. (In Russian.) Pp. 344. (Moscow: Academia Nauk U.S.S.R., 1955.) 12 roubles, 25 kopecks.

THIS is the first of three volumes, published in the U.S.S.R., dealing with the emergence under the impact of science of a rational attitude in interpreting the universe. The present volume covers the age of Galileo and Newton. It is the result of careful studies of original writings: scientists of all nations are considered, and the story of their life and work is told with painstaking objectivity.

Unfortunately, the book is not so much concerned with the growth of scientific as distinct from pre-scientific thought as it is concerned with the political implications of this growth. The philosophical views of scientists are given undue prominence; they are placed side by side with the views of philosophers and other non-scientific writers and given good or bad marks by the way of appropriate quotations from Marxist authorities. All this is embedded in lengthy and incoherent narratives of political events and economic developments, submerging every finer and more subtle feature of scientific thought. The author, presumably an expert in historical documentation, seems to have only second-hand knowledge of science and is given to modes of pre-scientific thinking.

Science is presented in this book as a pitifully dull assemblage of trivial facts and outmoded speculations; unfortunately, this approach is not confined to Communist countries or to writers with Communist leanings. It is repellent to most scientists, who are in any event wary of history. Soviet scientists are not likely to take a more friendly view of a book of this kind than their Western colleagues. The present work could not even be recommended as a history of the social relations of science, although this is its main subject.

R. EISENSCHITZ

Rufiji

By R. de la Bere Barker. Pp. 157+13 plates. (London: Robert Hale, Ltd., 1956.) 15s. net.

THIS is a simple and unpretentious account of life in the wilds of East Africa, with special reference to the birds and beasts, from hyenas scavenging around the native villages to the elephants that also come occasionally as unwanted visitors.

"One day," writes the author, "while I was resting in the shade of the high bank beside a water-hole from which we had drawn water for our tea, four elephants in file came striding up a path in the dry river bed of the Matandu River. They had a mighty thirst, and those who have experienced the scorching sun of the dry season in that land can sympathize with them. The tall elephants came right up close before they saw me and then they all made the neatest right-about-turn in complete silence. Off they went, one behind the other, just as they had come, perhaps reflecting gloomily to themselves that all the best places were being spoilt by trippers these days."

The illustrations are from most excellent photographs; for example, the plate facing p. 129, which is an aerial snapshot of a packed mass of hippopotami at rest on a mud bank. Such pictures bring home to one some idea of the teeming wild life of Africa, a wild life growing rapidly less before the advance of white settlements. Mr. R. de la Bere

Barker is to be envied his long years among the creatures of this Rufiji area; the fish in the river, the snakes and other reptiles, the teeming insect throng, the innumerable birds, the many mammals, including the natives, are all described with a simple vividness that brings them to life on the printed page.

FRANCES PITT

Organic Chemistry

By Prof. Lewis F. Hatch. Pp. vii+324. (London: McGraw-Hill Publishing Company, Ltd., 1955.) 34s.

THIS very readable text-book is written for those, such as agriculturists and nurses, to whose main studies organic chemistry is ancillary. Prof. L. F. Hatch devotes thirteen of his twenty chapters to the more formal aspects of the science. He considers the simpler classes of compounds, the preparation of some prominent ones, and the behaviour of functional groups. His descriptions are clear and thorough, and he uses up-to-date reactions. Conforming to his plan, he does not account for chemical behaviour by the electronic theory or bring in quantitative work. His later chapters deal with such subjects as detergents, dyes, elastomers, enzymes, fats, fibres, medicinals, pharmaceuticals, and proteins. Each chapter ends with students' exercises and suggestions for further reading.

As is to be expected, much emphasis is laid on the economic and industrial application of the compounds. Whether he is discoursing on aspirin, rodenticides, or on chemicals to keep bread fresh, Prof. Hatch always makes his subject one of absorbing interest. His brightly written book, with its well-selected half-tone plates, is to be recommended to the class for whom it has been written. Moreover, the up-to-date reactions and the coverage of subjects such as petroleum and agriculture make this a suitable volume for a school science library.

G. FOWLES

Bibliography on Hearing

Prepared by the Psycho-Acoustic Laboratory, Harvard University. (S. S. Stevens, Director; J. G. C. Loring, Compiler; Dorothy Cohen, Technical Editor.) Pp. vi+599. (Cambridge, Mass.: Harvard University Press; London: Oxford University Press, 1955.) 55s. net.

THIS remarkable compilation of more than ten thousand titles of publications on hearing up to the year 1952 inclusive represents a second edition of an earlier less ambitious "Bibliography on Audition", which was published in mimeographed form in 1950. In the first part of the work, titles are arranged alphabetically under the name of the first author, with cross-references in the case of multiple authorship. There is also a list of anonymous publications. Unabbreviated titles are listed in their original language, and are followed, if necessary, by a translation into English. The references are given in the abbreviations laid down in the "World List of Scientific Periodicals" (Oxford, 1934).

A classification of the subject under 315 headings is appended. The usefulness of this list is naturally limited, and its accuracy rather doubtful, as, in the majority of cases, the judgment of the compiler rests on titles only.

A glossary of abbreviations used in the references and definitions of relatively unfamiliar words, mostly from the Slavic languages, form a useful addition to a book which every worker in the field of hearing is bound to welcome as a guide to an alarmingly voluminous and widely dispersed literature.