Hemophilia and Hemophilioid Diseases

International Symposium. Edited by Prof. Kenneth M. Brinkhous. Pp. xxii+265. (Chapel Hill, N.C.: University of North Carolina Press; London: Oxford University Press, 1957.) 60s. net.

IN August 1956 a symposium, sponsored by the National Hemophilia Foundation of the United States, was held in New York. About 125 persons attended, and among the 62 who read papers or contributed to the discussion were included a high proportion of the scientists and clinicians of the present day who have contributed most to the study of hæmophilia and allied disorders. The present book is a record of this meeting, consisting of 29 papers divided into seven main sections and verbatim reports on subsequent discussions. Most of the papers are illustrated by figures and most of them include adequate lists of references.

The papers are inevitably of uneven quality; some are short general summaries, others describe experiments in detail. One of the most interesting and controversial subjects discussed inconclusively at the symposium was the frequency with which anticoagulants or inhibitors are found in the plasma of hæmophiliacs and their importance in the pathogenesis of bleeding. The discussion at the end of each group of papers makes interesting reading, even if the questions asked and statements made often pose more questions than they answer.

A good example of a tantalizing statement is to be found at the foot of p. 62. In it R. J. Carroll states that hemophiliacs are graded 1, 2, 3 and 4 on the basis of the anticoagulant content of their plasma and that the grade is constant for a particular patient. It need perhaps scarcely be added that there is still no uniformity of opinion as to whether anticoagulants really exist in hemophilic plasma except on rare occasions.

This is a book for those who have a special interest in the hæmorrhagic disorders, whether they be physicians, clinical pathologists or medical scientists. It does not seem likely to have much appeal to workers outside this field.

J. V. Dacie

Biological Aspects of the Transmission of Disease Edited by C. Horton-Smith. (Reports of Symposia of the Institute of Biology.) Pp. ix+184. (Edinburgh and London: Oliver and Boyd, Ltd., 1957. Published for the Institute of Biology.) 21s. net.

"BIOLOGICAL Aspects of the Transmission of Disease" is the title of the proceedings of symposia organized by the Institute of Biology. It covers such a wide range of subjects that few reviewers would feel competent to do it justice. With the increasing specialization in all aspects of biology, it is very refreshing and most instructive to read accounts of problems of transmission of disease in fields or media totally different from those known to the reader.

As is inevitable in asking experts to write briefly on very complex subjects, one can find minor errors and ambiguity in places, but this does not really detract from the value of this kind of book in widening the field of interest and, one hopes, whetting the appetite of the reader to pursue further many original papers by the eminent contributors.

Unfortunately, it is a small book for a guinea.

C. W. DIXON

The Astronomer's Universe

By Prof. Bart J. Bok. Pp. xi+107+16 plates. (Melbourne: University of Melbourne Press; London: Cambridge University Press, 1958.) 21s. net.

HE author of this book, who was formerly on the staff of the Harvard Observatory, is now director of the Commonwealth Observatory and professor of astronomy in the Australian National Observatory. The book is based on four lectures delivered in Canberra, in which some account was given of the more important developments that have been made in recent years in our knowledge of the universe. The first of these lectures deals with some problems of the solar system, including the atmospheres of the planets, the origin of the system, and the Sun's corona. The second is concerned with some of the properties of stars as individuals and describes the two types of stellar populations found, respectively, in the spiral arms of galaxies, and in stellar clusters and galactic nuclei. The third lecture is concerned with the Milky Way system and summarizes the evidence for the existence of spiral arms from optical and radio observations. The final lecture is somewhat more speculative in charactor, discussing matters, such as the cosmic time-scale. stellar evolution, and the birth of stars, on which much evidence has been obtained in the past decade.

The book avoids technicalities and is well written. It will interest all who wish to know how astronomical ideas are tending in many important problems which still await definite solutions. The book, which was printed in Melbourne, is well produced and has reproductions of a number of stellar photographs, several of which were obtained at the Commonwealth Observatory.

H. Spencer Jones

Physical Acoustics and the Properties of Solids By Dr. Warren P. Mason. (The Bell Telephone Laboratories Series.) Pp. xii+402. (Princeton, N.J.: D. Van Nostrand Company, Inc.; London: D. Van Nostrand Company, Ltd., 1958.) 67s. 6d.

WORKERS in acoustics look forward eagerly to a new book from the pen of Dr. W. P. Mason, who brings to his writings the authority and experience of many years on the research staff of the Bell Telephone Laboratories. As head of mechanics research he is writing of his own work and that of his associates in the main, though with frequent comparison of the Bell methods with those of other laboratories. The title of the book is possibly a little misleading since the words "physical acoustics" are evidently to be taken in conjunction with the words that follow—the introduction gives, in fact, the basic theory only in reference to the propagation of sound waves in solids.

The experimental portion covers in four chapters the sources (mostly ultrasonic) which can be used for transmitting longitudinal or shear waves in bars, the method of determining the velocity and attenuation of the signals launched into them, together with industrial applications of these experiments, like the ultrasonic flaw detector and the soldering iron, for which British firms have gained credit.

Part 2 of the book will have most appeal to physicists, since it discusses the theory of transmission of these waves in terms of dislocations, grain boundary losses, and lattice vibrations with their relaxations. The general reader can, in fact, appreciate from this authoritative account the important part which acoustics is playing to-day in solid state physics.

E. G. RICHARDSON