A Bibliography of Dr. Robert Hooke. Sir Geoffrey Keynes. Oxford University Press, New York, 1960. xix + 115 pp. Illus. \$8.

Robert Hooke (1635-1703) has the distinction of having been the first lowly man to earn his living as a research scientist. Having worked his way through school and college, he started as a teen-age laboratory assistant, first to an Oxford physician, then to Robert Boyle, and last to the newly formed Royal Society where he became "curator of experiments" in 1662. Many before (and since) had dreamed of an idealized research institute where men of learning could cogitate and muse and have their tests and trials and experiments of light performed for them by a paid hack. In an age when all science was on the boil, Hooke was the Godsent hack of those mid-17th century amateurs of science; and hack he was in name only, but not in deed. Though much of his work was forgotten within a generation or so of his death, and though he was remembered only as a misshapen and cantankerous minor character on the stage, his discoveries and writings are now seen to class him among the major actors in that age of genius.

The last 30 years have seen many critical studies of Hooke and appreciations of his experimental work and publications. These studies are now taken to a new level of excellence by this definitive bibliography compiled by Sir Geoffrey Keynes, doyen of British bibliography. The handsome volume, produced in the style which one has come to expect of Sir Geoffrey and of Oxford, has all the scholarly apparatus needed for its task, though one could wish that the quintessential introductory essay of the preface had been expanded by the factor of ten, which we all know the author could easily do. To make up for this, however, we are given gratis, as appendix 4, a most interesting transcript of Sir Isaac Newton's holograph notes on Hooke's Micrographia.

One of the most interesting puzzles set by the new bibliography is that of Hooke's fourth (or second) publication in 1661 of a tract entitled "A discourse of a new instrument to make more accurate observations in astronomy, than ever were yet made." No copy of this publication has yet been traced, but from the title, one might hazard a guess that this was an account of the eyepiece

micrometer similar to that of Gascoigne, improved by Townley, and noted later by Hooke.

Like Fulton's bibliography of Robert Boyle, with which this bibliography has so much in common, both in content and in spirit, this new work will stand for many years as an aid to historians, collectors, and librarians, and as a point of departure for many essays in scholarship. We are most grateful to the author for his exemplary and meticulous execution of a most useful task.

Derek J. De Solla Price Department of the History of Science and Medicine, Yale University

Antarctica. Emil Schulthess. Simon and Schuster, New York, 1960. Approximately 215 pp. Illus. \$15.

Following the preface, in which Sir Raymond Priestley recounts his voyages to Antarctica (in 1908, 1910, 1956, and 1958) and tells of the changes made there during the interval, and Rear Admiral Dufek's account of Operation Deep Freeze IV, Emil Schulthess presents a photographic documentation of the antarctic continent. He begins with a view of the antarctic coast of Victoria Land, which was "seen for the first time in 1840 by Sir James Clark Ross," and shows the equipment, ranging from Super-Constellations to Sno-Cats, used by those who work at the antarctic bases. In over 170 photographs, many of them in color and covering a full page or more, he shows such things as 'a natural laboratory" (an 85-foot crevasse), men and their equipment silhouetted against a "halo in the sky," Sastrugi (wave-like ridges of hard snow), and the animal and plant life of the region.

Henry M. Dater gives a brief account of science in Antarctica.

Albert Jan Kluyver. His life and work. A. F. Kamp, J. W. M. La Rivière, and W. Verhoeven, Eds. North-Holland, Amsterdam; Interscience, New York, 1959. xv + 567 pp. Illus. \$11.

This volume, a memorial to Jan Kluyver (1888–1956), is divided into three parts. In the first, friends and former associates present a biography of Kluyver and a survey of his work; in the survey, C. B. van Niel combines

admiration with amiable criticism. Part 2 consists of 14 selections from Kluyver's papers; they range from the inaugural address (1922) made when he succeeded M. W. Beijerinck to the chair of microbiology at the Technical University of Delft to the last general lecture that he made before the academy of sciences in Amsterdam (1955). An extensive bibliography and addenda are included.

Kluyver, who studied chemistry under J. Böeseken and miscroscopic anatomy under G. van Iterson, always emphasized the value of combining biochemistry with morphology; on this basis he proposed (in 1936) a "natural system" for classifying bacteria. This specialist, who discovered that diacetyl was the flavoring agent of butter [with van Niel and H. G. Derx (1929)] and who originated the method of submerged culture [with L. H. C. Perquin (1933)] was also deeply interested in the great problems of the scientific knowledge of life. He sought "unity in the wild variety of nature," and when he realized that his "unitary theory" (1924) was deficient, he began to see "the possibility of an even greater simplification and unification" of our views on metabolism. This quotation is from his lectures given at Harvard University (1954).

This book, about the man who said "There is but one enemy of homo sapiens . . . homo ignorans," will be of great interest to biochemists and microbiologists.

EDUARD FARBER

4530 Brandywine Street, NW, Washington, D.C.

Louisiana Birds. George H. Lowery, Jr. Published for the Louisiana Wild Life and Fisheries Commission by Louisiana State University Press. Baton Rouge, ed. 2, 1960. xxix + 567 pp. Illus. \$7.50.

Birds of Hawaii. George C. Munro. Bridgeway Press, 1944; Tuttle, Rutland, Vt., 1961. 189 pp. Illus. \$4.50.

Louisiana Birds is a revised edition of a volume published in 1955. The fact that the original printing was exhausted and a revision was necessary in such a short time (5 years) indicated the stimulus given by the book to the study of ornithology in Louisiana. No less than ten species have been added to the state list since 1955; not only are they de-