

REVIEWS

PHILOSOPHY OF GEOHISTORY: 1785-1970, edited by Claude C. Albritton, Jr. Published by Dowden, Hutchinson & Ross, Inc., Stroudsburg, Pennsylvania, 1975, xiv + 386 pp., illus., \$37.50

This is volume 13 of the distinguished series *Benchmark Papers in Geology* designed to make the rare and obscure foundation works in the literature of geology more readily and widely available. Though the literature on philosophical aspects of geological thought is vast and highly significant, this most essential element of geohistory has been neglected. No previous compilation of classic writings has been attempted, nor is there any standard work or text on the philosophy of geology. The present volume is a welcome and worthy effort to fill this gap for both the student and the experienced geoscientist.

Professor Albritton has chosen essays or excerpts from the writings of fifteen major contributors to geological thought, ranging from the early works of Hutton, Playfair, and Lyell, to Chamberlin and Gilbert in the late nineteenth century, Davis in the early twentieth century, and contemporary contributors such as Hubbert, Simpson, Hooykaas, and Kitts in the sixties and seventies. His selections are balanced and definitive and fulfill his intent quite well. This book should be read by everyone with a serious interest in the earth sciences.

NORTH AMERICAN GEOLOGY: EARLY WRITINGS, edited by Robert M. Hazen. Published by Dowden, Hutchinson & Ross, Inc., Stroudsburg, Pennsylvania, 1979, xx + 356 pp., 4 figs., index, \$35.50

This, the fifty-first volume in *Benchmark Papers in Geology*, comprises a selection of writings on geological subjects dating from the year 1820 and earlier decades in America. Works published with content relating to the earth sciences are little known and largely inaccessible to most geoscientists and historians of science. Their obscurity has led to neglect of their importance and influence on the exploration of and expansion of knowledge of the North American continent. Few early primary works have been reprinted and only one chapter (of

fifteen) in Merrill's *The First One Hundred Years of American Geology* was devoted to this early period (1785-1820). Other authors have treated the early history of American Geology in similar brief fashion.

This compilation, together with Hazen and Hazen's recently compiled *Bibliography of American-Published Geology* with nearly 2000 listings for the period 1699 to 1820 (which formed the basis for the present volume), fills the gap in our knowledge of the early geological literature most admirably. Historians of the geosciences will welcome this most important addition to our resources for research and teaching in geohistory.

THE ABYSS OF TIME: Changing Conceptions of the Earth's Antiquity after the Sixteenth Century, by Claude C. Albritton, Jr. Published by Freeman, Cooper & Company, San Francisco, 1980, 251 pp., illus., indexed, \$12.75

Professor Albritton predicts that "some day the concept of geological time will be acclaimed as one of the more wonderful contributions from natural science to general thought." In this magnificent work which provides compelling support to his view, he traces changing concepts of the Earth's Age through three centuries from Nicolaus Steno in the 1660's to Arthur Holmes in the 1960's. From the host of observers, he chose to include Steno, Hooke, Burnet, de Maillet, Buffon, Hutton, Smith, Lehmann, Werner, Cuvier, Lyell, Guetard, Desmarest, Agassiz, Darwin, Kelvin, Thomson, Huxley, Chamberlain, Joly, Rutherford, and Holmes, embellished with numerous portraits, illustrations, and quotations from their works and those of others. In the concluding chapter, Professor Albritton addresses the current efforts of "creationists" to overturn evolutionary theory, suggesting that some "recoiling from the fearsome prospect of time's abyss, have toppled backward into the abyss of ignorance." This delightfully and masterfully written book provides most welcome documentation for one of the most basic tenets of the geological sciences.

—H.C.S.