

REVIEWS

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FATHER OF TEXAS GEOLOGY, Robert T. Hill, by Nancy Alexander. Published by the Southern Methodist University Press, Dallas, Texas, 1976, xii + 317 pp., illus., \$12.50

Robert T. Hill, pioneer Texas geologist, discoverer of the Comanche Series (Lower Cretaceous), and lifelong student of the structure and stratigraphy of the Texas Cretaceous, is one of the most significant figures in the development of American geology in the late nineteenth century and the early part of the twentieth century. He was the first to recognize the two-fold subdivision of the Cretaceous System, and the names which he introduced, Comanchean and Gulfian, are now applied throughout the Gulf Coast area. His subdivision of the Lower Cretaceous strata into groups and formations is the standard for stratigraphic nomenclature in the western Gulf Coast region. Near the turn of the century, he conducted studies in the West Indies and the Isthmus of Panamá, areas he considered fundamental to understanding the geological evolution of North America. In 1902, following the eruption of Mont Pelée, Hill joined the relief expedition to Martinique that sailed on the U.S.S. *Dixie*. He mapped the destruction area and wrote the first account of the Peléan cloud, the *nuée ardente*, previously unknown to vulcanologists. In his last years, Robert T. Hill lived in Dallas and devoted much of his time to research on Texas history and to writing popular articles for the *Dallas Morning News*. Dr. Alexander's biography of Hill is scholarly, capable, and a most welcome addition to the history of American geology.

THE PERIGLACIAL ENVIRONMENT, by Hugh M. French. Published by Longman Group Limited, London, and Longman Inc., New York, 1976, x + 309 pp., illus., \$20.00

In this work, Dr. French, evaluates the nature of geomorphic processes and landforms in high latitude periglacial environments to provide a guide to recognition and interpretation of periglacial features in glaciated regions of North America and Europe. The book is divided into three sections. In the first, the extent of the periglacial domain and the variety of periglacial climates are considered. In the second part, there is a systematic treatment of the various geomorphic processes presently operating in periglacial environments. When possible, the relationship between geomorphic features and processes is explained. In part three, Pleistocene periglacial environments are considered. Here, the emphasis is on landforms rather than processes and the interpretation of these forms in terms of our understanding of contemporary periglacial environments and processes. The regional scope and emphasis of the book are correlated with the areas where the author has personal field experience. Thus, the overall treatment is more concerned with lowland rather than alpine periglacial environments. This volume should be of interest to both geographers and geomorphologists.

LANDFORMS AND LANDSCAPES, by Sherwood D. Tuttle. Published by Wm. C. Brown Company, Dubuque, Iowa, 1975, second edition, viii + 152 pp., illus., paperbound.

This volume is intended to introduce geomorphology to nonscience majors. Following the introduction, weathering and mass wasting, stream growth and valley development, stream-eroded landscapes, glaciers and glaciated landscapes, and the effects of wind, waves, ground water, and volcanism are among the subjects treated. A chapter on geomorphic systems, their theory and philosophy, is included.