

the black-and-white photographs are unnumbered and no reference is made to them. This shortcoming, however, is partly compensated for by placement of each illustration at or close to the part of the text to which it relates. Some of the illustrations show prominent geologic features not mentioned in the captions—for example, the picture (p. 139) of shoreline cliffs. No reference is made in the caption to the beautiful development of sea arches and stacks that are shown in this photograph.

The illustrations for the chapter on groundwater are almost exclusively of cave interiors and deposits made by hot springs. A few photographs of karst topography, especially aerial views, would have contributed greater variety and made the coverage more nearly complete.

The arrangement of the 15 chapters is patterned pretty much after that of several well-known general geology texts. The first three chapters set the stage for the remainder of the book, which deals largely with the sculpting of the landscape by the various geological processes.

Chapter 1, "Getting acquainted with the earth," briefly introduces the obvious external and internal forces that shape the landscape. Chapter 2, "The earth in time and space," sets forth the relation of the earth to the galaxy and solar system and describes the interior of the earth. Chapter 3, "The rocks at the earth's surface," discusses the materials—igneous, sedimentary, and metamorphic rocks—on which the geologic processes act. The next 11 chapters run the gamut from weathering through wind action, streams, shore processes, glaciers, groundwater, mass movements, volcanism, and earthquakes to the making of mountains. In these chapters Mather frequently emphasizes the effect that geologic processes and features have on man. In a final chapter, "Man and the earth," he deals with the effect that man has on the earth—the impact of agriculture on erosion, alteration of the landscape by dams and reservoirs, reshaping the shore, reclaiming submerged land, and so on.

Chapter 5, "Where the winds blow," chapter 11, "Landslides, avalanches, and mudflows," chapter 12, "In the realm of Vulcan," and chapter 13, "When the earth trembles," will evoke strong interest because they provide vivid accounts of spectacular natural events.

At a time when many a great aqueduct brings water hundreds of miles over and through mountain ranges and across the plains to thirsty acres and cities, when tourism is one of the most important industries in many states and countries, and when we and other peoples are casting about for remaining bits of nature's handiwork to preserve and protect, an intelligent layman can hardly afford not to read this book.

And it is quite possible that a number of geologists, when they see the book, will say, "I wish that I had done something like this."

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Biochemistry and Disease

Biochemical Disorders in Human Disease. R. H. S. Thompson and E. J. King, Eds. Academic Press, New York, ed. 2, 1964. xx + 1066 pp. Illus. \$22.

The first edition of this book (1957) filled a substantial need for an up-to-date work on those disease entities that exhibit significant biochemical aspects. Since then other books have appeared, particularly books that deal with inherited metabolic diseases. However, the explosive growth of knowledge in this field makes most welcome this second edition of *Biochemical Disorders in Human Disease*, edited by R. H. S. Thompson and the late E. J. King. It is gratifying to report that the excellent coverage of the subjects considered in the first edition has been maintained. In addition four new chapters have been introduced: (i) on the chemical anatomy of the human body (by R. Passmore and M. H. Draper); (ii) on the pancreas (by Henry T. Howat); (iii) on atherosclerosis (by G. S. Boyd); and (iv) on protein anomalies of the lymphoreticular system (by N. H. Martin). Our knowledge of this latter subject has been significantly enhanced by the application of modern physicochemical techniques, and inclusion of the chapter is most appropriate.

Although a certain amount of material on fundamental biochemical concepts must be incorporated in a book so closely related to intermediary metabolism, there is the danger that material readily available in standard

textbooks will nonetheless be included in presentations which should be confined largely to the biochemical applications to disease. In this second edition, it appears that only the essential and normal biochemical concepts are treated, with emphasis on those newly discovered pathways which have been elucidated in the last several years. There has also been an effort to confine the discussion of a given topic to the most recent advances. For example, in the chapter on nutritional disorders, a detailed account of the classical vitamin-deficiency diseases has been omitted in favor of the more timely topics, insofar as current research is concerned, of obesity and kwashiorkor and recent studies on starvation and appetite.

In each chapter, one gets the distinct impression that revision has been extensive and that the coverage of each topic is thorough and in accord with the modern literature. Repetitious coverage, so frequently an irritation in books to which several authors have contributed, is commendably rare. All of this has not been accomplished without increasing the size of the book (by roughly 200 pages). Nonetheless, it is a noteworthy achievement, and this work should serve as a most satisfying reference source for the reader who seeks an authoritative review and bibliography of any of the topics that are treated.

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Informal Lectures

Real Numbers. Stefan Drobot. Prentice-Hall, Englewood Cliffs, N.J., 1964. x + 102 pp. Illus. \$3.95.

This book is based on a series of "rather informal talks on real numbers" given by Drobot to high school teachers attending summer institutes at the University of Notre Dame. The range of topics covered in less than 100 pages of text is indicated by the four chapter headings: "The concept of real numbers"; "Digital representations of real numbers"; "Approximations of real numbers by rationals"; and "Cardinality and measure."

The author has been remarkably successful in presenting a development of some of the most important aspects of the real numbers in a self-contained