

Stoll and B. Becker; and "Some Recent Developments in the Chemistry of Antibodies," by J. W. Williams.

The authors give bird's-eye views of these subjects, in which each is an active and well-known worker. The chapters are replete with interesting facts and generalizations. Many excellent suggestions for future work are to be found here. For this reason, these volumes are particularly recommended to the young academic researcher who has not yet selected his particular field of investigation within the vast domain of organic chemistry. Literally thousands of references help to introduce the reader to the original literature.

This reviewer can only congratulate the editor upon being able to persuade busy men to devote so much time to make it easier for the rest of us to catch glimpses of fascinating researches outside the areas of our own efforts. These books are not light reading, but they are very rewarding.

H. B. HASS

General Aniline & Film Corporation

Structural Geology of North America. A. J. Eardley. New York: Harper, 1951. 624 pp. \$12.50.

"The purpose of the book is to describe the structural evolution of the North American continent in post-Proterozoic time." The author thus defines scope and aim and faithfully adheres to his purpose. The book is less a structural geology than a post-pre-Cambrian tectonic history and regional geology of North America. The only other recent regional geology of the continent (Bornträger, Berlin) has become a war casualty. This book fills a large gap and, being the work of one author, has all the advantages of single authorship. Disadvantages are well compensated by frequent use of the literature and the many unaltered original illustrations.

The book begins with a brief chapter on definitions of those terms that the author felt needed clarification. There follows a brief summary of the tectonic and paleogeographic history, vividly illustrated by 16 color plates outlining the distribution of orogenic belts, areas of erosion, ocean basins, and areas covered by thin sediments or shallow sedimentation. Lands rise and subside, oceans recede and transgress, and the instability of the earth's crust is reflected in sedimentation and folding of zones at the margin of an otherwise little-changed continent.

From page 24 on the author takes up the structural provinces in 31 chapters, each dealing with an area or tectonic unit. The delineation of units may be debatable but does follow generally accepted lines; it is structural where units are recognizable—for instance, the "Idaho batholith"—or geographical where the units are less defined—for instance, "Alaska." It would seem more desirable to use tectonic units only.

In each chapter the stratigraphy is summarized rather thoroughly, and the structures are discussed in terms of the tectonic history, thus providing a geologic picture of the area. The book is much more than the outline and description of the tectonic evolution of

North America. Since it is profusely illustrated (343 figures!), and the illustrations are largely copies of original drawings, it provides the most illuminating document on a theme that one might well entitle: "Geologists at work in North America." It is easy to see how the various authors try to communicate their ideas and conclusions to the fraternity. Easily recognized are professional drawings of draftsmen of the U. S. Geological Survey, too similar to reveal the author's originality. Outstanding are the artistic masterpieces of Phil King, Robert Balk, or the famous block diagrams of Johnson. Some of Raisz's and Lobeck's illustrations appear like antique etchings, but much is left to the lettering set and draftsman where the author should have done the drawing himself. But pictures express ideas. Some of these are conservative and meticulously supported by evidence, others sweeping and with little basis in fact or entirely hypothetical. All follow one another and convey the impression of a busy group of productive scientists.

The text is, of course, entirely the author's, but the ideas and skill as they appear in the illustrations tell the story in a much more lively and authentic fashion—as if the illustrations had lost their identity in the process of publication.

The book is large—624 double-sized pages, and represents an enormous amount of hard work. It is useful as a source book and will be so used by most geologists. For the teacher it will pave the way to many a lecture without search through a library. It will stimulate teaching of regional geology, which is too rarely listed in university catalogues.

It could be expected that not all regions would be equally well handled and that those the author knows fare better than others. For geologists there is no substitute for personal acquaintance in the field.

After receiving the gift of the author's many years of labor, it seems ungrateful to criticize it and to ask for more and greater efforts, but the complete omission of the basement structures on which the continent is built, and on which the author's work rests, is like building a monumental structure without a foundation. Could it be that this omission reflects lack of information on the basement and possibly lacking interest of the fraternity in crystalline rocks generally?

The outer form of the book is elaborate; the printing and illustrations are first-class and could scarcely be improved.

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Genetics: A Survey of the Principles of Heredity. A. M. Winchester; Bentley Glass, Ed. Boston: Houghton Mifflin, 1951. 371 pp. \$5.00.

The great majority of students in an elementary genetics course have no special aptitude or interest in the subject and have no intention of going further in it. This book is written for such a group. In his preface the author states: "The material is presented with the