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.

ERNST CLOOS

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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

frank intent of arousing the interest of the student and of maintaining it throughout." This is done in several ways: (1) Many of the illustrative examples are chosen from human genetics; (2) the diagrams are striking and the photographs unusually eye-catching; (3) most chapters begin with an anecdote, a bit of folklore, or a human interest story calculated to entice the reader on to the general principle that follows; (4) as far as possible, the book is written in the language of the layman.

There is a rather full account of genetics history, unique in that it includes some of the remarkable doings of Maupertuis. The order of presentation is such that a description of chromosome behavior, including mitosis, meiosis, alternation of generations, and double fertilization in higher plants, precedes, and provides a background for, the discussion of Mendelism. Some of the best human-interest writing is in the chapters on sex determinations, sex differentiation, and sex-related inheritance. (However, the author himself performs the most striking sex reversal when he refers to V. R. Phelps as "he.") I like the three chapters on mutations and the effects of radiations, patterned somewhat after the writings of H. J. Muller. The student is made to realize the importance of environment in conditioning the expression of genetic characters, and has his attention called to the currently popular fields of biochemical genetics, cytoplasmic heredity, and the genetics of microorganisms. The book ends with a survey of human hereditary traits and a moderately full discussion of eugenics.

To me the weakest points are the discussions of quantitative characters, population genetics, biometry, and agricultural applications. The Hardy-Weinberg rule is put in rather as an afterthought late in the book, and there is no quantitative discussion of selection and inbreeding. These may limit the utility of the book for genetics courses in agricultural colleges. I would prefer to have the Fisher theory of Rh factor inheritance at least mentioned along with Wiener's. There are a few minor slips and misprints, of which the most glaring is a diagram on page 178 which implies crossing over in both sexes in *Drosophila*.

The book seems to me to be oversimplified, but that is for the student readers to decide. It will leave many questions unanswered for the serious student, and unfortunately there is no system of references to direct him to more information on those points where his curiosity has been so effectively aroused. The book is not written for the serious student, however. Furthermore, it sets a new standard in interest appeal in a textbook, and as such should be a real contribution to the effective teaching of genetics.

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Association Affairs

New Prize in Sociology

THE AAAS announces a prize competition for essays reporting upon inquiry into theoretical sociology. Amount, $1,000.

CONDITIONS OF THE COMPETITION

A. It is expected that the essays submitted will strive toward a scientific account of the behaviors of human beings, psychologically and sociologically, in their global setting.

B. Contestants should avoid the descriptions of sociological events in terms of conventional and fictional components derived from everyday speech.

C. To be avoided also are statements derived from traditional philosophies which represent only self-created descriptions projected into the social life of people in the guise of objective interpretations.

D. Since it is the goal of the competition to further the comprehension of the psychological and cultural behavior of persons in current society, it is desirable that the descriptions and interpretations be derived from actual sociological situations. Established knowledge bodily transferred from even the nearest and best oriented sciences cannot substitute for sociologically interpreted findings.

E. As concrete suggestions for the study, it is hoped that entrants will aim at sociological constructs to parallel those that have proved so useful in the biological and physical sciences—for example, particles and waves in physics, blood "milieu" in physiology, genes in genetics.

Manuscripts, which will be judged by a committee of three persons selected from those interested in the field, should be sent to Howard A. Meyerhoff, Administrative Secretary, American Association for the Advancement of Science, 1515 Massachusetts Ave., Washington 5, D. C. In order that the judges may be impartial, the name of the author should be omitted from the typed copy.

The committee reserves the right to withhold the prize if no worthy essay is submitted.

The donor is willing to offer the prize in 1951 and to continue it on an annual basis for three more years. This year, in view of the lateness of the date, consideration will be given to articles published during the year, provided they meet the conditions stated above. Ordinarily, preference will be given to unpublished manuscripts. To qualify for the 1951 prize, manuscript material should be in the hands of Howard A. Meyerhoff not later than *Dec. 3*.