
California Geology

This book is an attempt to interpret and make interesting for the general reader the technical knowledge of the complex geology of California.

The first three chapters are introductory, the author going to even greater lengths than a Chamber of Commerce in extolling the wonders of the Golden State. In the next four chapters the reader is oriented by following an 800-mile bee-line the length of the state, by considering the general behavior of rivers and the geologist's time-scale concept, and by having a "panoramic review" of the major events and processes in California's geologic history. Twelve more chapters deal each with a particular area. Three additional chapters consider petroleum, gold, and agriculture. The final chapter is 87 pages long. It conducts the reader along eight different automobile tours selected so as to completely cover the state. Geological phenomena to be seen along each tour are described. There are 108 illustrations, mostly photographs. All the photographs are excellent. Good maps of several of the areas discussed are provided, but this reviewer made considerable use of a large scale map showing the whole state. Such a map, marked so as to supplement the text and folded into a pocket in the rear cover, would have been a decided asset to the book. A glossary with 100 terms and a bibliography with 76 entries are compiled.

Three errors of fact were noted: (1) The lowest point in the continental United States is not—296 feet in elevation with respect to sea level as stated in four places in the book, but is—280 feet as stated on page 1; (2) The San Gabriel Range is *lower* than the San Bernadino Range (page 229); (3) Bumpas' Hell and Chaos Crags lie at the foot of *Mt. Lassen*, not *Mt. Shasta* (page 321).

The book is quite wordy and often objectionably repetitious. However, a vast store of technical information has been presented in non-technical style. The book should be of exceeding interest to those who enjoy understanding the out of doors, especially those who have had the opportunity to travel in California. It will be of great value to those unfortunates who are still merely planning such travel.—*E. F. Paddock.*

Adventures in Scenery, by Daniel E. Willard. The Jaques Cattell Press, Lancaster, Pa., 1942, 438 pp. \$3.75.

Chemistry of Insecticides and Fungicides

Because of rapid progress in the chemical control of insects, it is important to keep abreast of new developments as well as to have a grasp of previous work on the subject. Since such information is usually found in widely scattered publications it is always a great help to fellow workers in a field to have such information assembled into one volume. The author of the book does this in an authoritative manner, because he has taught a graduate course on the subject for several years and the volume is an outgrowth of his notes used in that course. It is the most up-to-date book on the subject and is exceptionally complete in details on the various topics.

The contents by chapters are as follows: Introduction; The Arsenicals; Lead Arsenate; Fluorine Compounds and Miscellaneous Stomach Poisons; Nicotine and Pyrethrum; Rotenone and Miscellaneous Contact Poisons; Sulfur and Inorganic Sulfur Compounds; Oils, Fumigants; Copper Compounds; Mercury Compounds and Miscellaneous Fungicides; Wetting, Spreading, and Emulsifying Agents; Spray Residue Removal; Macro Methods; Micro Methods.

Except for the chapters dealing with macro and micro analytical procedures, the discussions of each chemical compound or group of chemicals is in regard to its sources, toxicity, manufacture, reactions with other insecticide and fungicide mixtures, action to plants and possible corrective measures. A selected list of references is included at the end of each chapter. A subject and author index are appended.

The book is a very worthwhile contribution and wide acceptance appears assured, not only by entomologists and plant pathologists, but also by horticulturists, and teachers and research workers in closely allied fields of science.—*Ralph H. Davidson.*

Chemistry of Insecticides and Fungicides, by Donald E. H. Frear. 300 pages. D. Van Nostrand Company. New York, 1942. \$4.00.