Book Reviews

The American Oasis. The land and its uses. Edward Higbee. Knopf, New York, 1957. iv + 262 pp. + index. Illus. $5.

Edward Higbee gives us a very workmanlike, accurate, and well-composed book on American land use. The oasis (actual and potential) to which he refers in his article is the United States itself. A professional agronomist with practical experience in the Soil Conservation Service and now a member of the faculty of Clark University, he has traveled widely over the nation to prepare for writing his book and knows at first hand whereof he writes. While his present position enables him to speak with greater freedom than the civil servant usually has, he certainly respects the discipline of the trained scientific observer.

Three brief and lucid chapters on man, climate, and soil lay the groundwork for the ecological analysis that follows. Six regions—the arid lands, West Coast, the Plains, corn belt, East Coast (the old frontier), and the South (the new frontier)—are then discussed, while a final chapter of forecast concludes the work.

It happens that I have, within the past 15 months, been in each of these regions and have enjoyed excellent opportunities to observe land-use patterns and practices. If the author has made any slip in analysis or appraisal, I have failed to catch it. His skill in hitting essentials while recognizing diversities within each region is particularly noteworthy. So, too, is his recognition of the economic and other pressures which, impinging upon the individual and community, lead to practices that favor immediate advantage rather than the long-time national interest. His justification of agricultural subsidies is frank and ingenious, possibly sound, even though not wholly convincing to one who, like myself, has long been skeptical of this device.

Quite properly he points out the very constructive work being done through local cooperation with the technical personnel of the Soil Conservation Service. The potentials and limitations of irrigated land, the great advances in forest management by large corporations, the need for a balance between row crops (especially corn and legume meadows), the major importance of corn and livestock, and the growing importance of capital to the farmer are among the many topics discussed. Of especial interest is his promising forecast for the southern states, blessed as they are with a long growing season and ample moisture.

I hope the book will be widely read, not only by scientists, but by bankers, politicians, and businessmen as well as by the general run of citizens. In it they will find compact and convenient analysis of their own immediate locale as well as good presentation of the national picture.

The author's outlook for the future is one of qualified optimism. He seems resigned, however, to the explosive growth of population and what he very properly describes as the glacial expansion of industry and urban development into rich valley lands. That this, before long, will place a premium on better land-use practices cannot be doubted. The day of vast surpluses, as he points out, is nearing its close.

But I regret the taboo that keeps such a clear-sighted analyst from at least suggesting that, along with improving the productivity of our land, we ought to face squarely the problem of our own increase in numbers and massive urbanization. Shall science and technology be strained to the utmost merely to serve the needs of an unbridled reproduction and an ever-increasing drain upon resources? Or does human dignity and the quality of human living require an even broader approach to the problems of our future?

PAUL B. SEARS
Yale University

Methods of Biochemical Analysis. vol. 4. David Glick, Ed. Interscience, New York, 1957. ix + 362 pp. Illus. $8.50.

The objectives of this series are to review recently developed or improved methods used in biochemistry, to critically evaluate them, and to present the best methods available in enough detail to enable the individual to carry out the analyses. The authors represented in this volume have done commendable work in carrying out these objectives. In general, the discussion of the methods is clear and concise, and the recommended analytic procedures are very well presented.

The first half of this volume is devoted to the methods available for the analysis of a number of lipoid substances. These include bioassay techniques for vitamin A, spectrophotometric methods for carotene, alkaline isomerization methods for polyunsaturated fatty acids, and the phenylhydrazine-sulfuric acid method for 17,21-dihydroxy-20-ketosteroids.

The rest of the book is devoted to an excellent review on the application of the *p*H-stat to biochemical problems, the assay of a number of sulfatases, the determination of serum acid phosphatases in which the Fishman-Lerner method is described, the determination of succinic dehydrogenase activity with emphasis on the phenazine methosulfate method for the primary dehydrogenase, and the determination of amino acids by the use of bacterial amino acid decarboxylases.

In general, this volume maintains the high standards set by the other volumes of this series. It should be of great value as a reference book for biochemists who are interested in the subjects that are discussed.

JAMES R. GILLETTE
National Heart Institute,
National Institutes of Health

The Scientific Thought of Henry Adams. Henry Wasser. Henry Wasser, University of Salonika, Greece, 1956. 127 pp. $5.50.

Henry Wasser's monograph ably demonstrates that Henry Adams had an active and well-informed interest in the many scientific controversies and philosophies that flourished in his day, and that, throughout his literary career, his urge to assimilate the best scientific thought of his time in arriving at his own views of human life and society left its impress on his autobiographical, historical, and philosophic works.

Both in *The Education of Henry Adams* and in *Mont-Saint-Michel and Chartres*—the books which record, as it were, the intellectual autobiography of Henry Adams—he is revealed endeavoring to express his concepts in terms made familiar by scientists, such as Darwin, Wallace, Huxley, and Lyell, engaged in the debate over the ideas of biologic and geologic evolution. In dealing with the persistent philosophic problems of unity versus multiplicity, Adams earnestly sought to reconcile the concepts of theology and religion with those of exact science. Later, after the work of Clerk Maxwell, Gibbs, and Heisenberg, Adams optimistically hoped that the