cated, the histopathology of the various lesions. The 1,660 carefully selected illustrations, of which 78 are in color, are well labeled and described.

Dr. Thoma is unusually considerate in his use of synonyms, so that all readers may follow without continual reference to other sources. He presents not only his theories and views upon a particular subject but nearly always the work and thoughts of at least one other investigator. The book also contains a splendid chapter on periodontal disease. A simple, understandable classification based on clinical findings is well presented and described.

This text embraces recent investigation and research in oral pathology. It contains revised classifications of several disease processes and justifies their use. Of particular interest is the chapter on odontogenic tumors, which is essentially the same as that approved by members of the American Academy of Oral Pathology at their meeting in May 1950 at the Armed Forces Institute of Pathology.

A wealth of reference material is included in each chapter. Not only does it give Dr. Thoma authority for his work but it is also invaluable for those who wish to read further.

The author correlates this book with his two volumes on oral surgery, and he treats developmental pathology much more thoroughly than most authors. He also has an excellent chapter on abnormal occlusal relationship of the dentures. For this reason, and the fact that these entities are mentioned and discussed throughout the book, and in relation to other pathology, this book must be of particular value to the orthodontist as well as to the clinician, the oral pathologist, and the surgeon.

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Studies in Late Tertiary Paleobotany. Daniel I. Axelrod. Washington, D. C.: Carnegie Institution of Washington, 1950. 323 pp., 19 plates. $2.75 paper; $3.25 cloth.

This volume represents another milestone in Dr. Axelrod's studies of West Coast floras begun in the thirties. The first of the 6 papers, "Classification of the Madro-Tertiary Flora," presents a revision of these floral units. The author proposes to divide the major Tertiary floras (Madro-Tertiary, Arcto-Tertiary, etc.) into complexes, which, in turn, are divided into elements and components (two terms proposed by Chaney in 1944). Dr. Axelrod demonstrates the necessity for recognizing these units in studies of fossil floras.

The next 4 papers describe and interpret Pliocene floras from California. Three floras are described for the first time: the Napa from central California, and the Anaverde and Piru Gorge from southern California. The fourth paper presents the results of a restudy of the southern California Mount Eden flora first investigated by the author in 1934 and 1937. Six new species are described. All these papers illustrate the unique methods and principles of paleobotany, many of which were formulated earlier by Dr. Axelrod (1941, 1949).

The final study, "Evolution of Desert Vegetation," presents a different view of this problem. The author's thesis is that living desert species are derived from more mesic Tertiary communities which occupied the areas of present-day desert, and that the living species developed from these Tertiary communities by adapting themselves to a climate which was becoming progressively drier throughout Tertiary time. From paleobotanical evidence, the author argues convincingly that modern deserts are a product of Upper Pliocene and Pleistocene time. From paleobotanical evidence, distributional patterns, and modern floral associations, he points out that the remarkable similarities between the North and South American living floras apply to less than 1 per cent of the living flora of each of these continents, and that this phenomenon can be explained by differentiation from wider-ranging ancestors, and by long-distance migration at times of favorable environmental conditions.

This volume is eloquent proof of the statement that the fossil floras of the western United States are the best known in the world.

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Scientific Book Register

Physical Geography. Arthur N. Strahler. New York: Wiley; London: Chapman & Hall, 1951. 442 pp. $6.00.

An International Bibliography on Atomic Energy: Scientific Aspects, Vol. 2. New York: Atomic Energy Commission Group, United Nations, 1951. Distributed by Columbia Univ. Press, New York. 24,282 listings with introductory essays and appendices. $10.00.

Aircraft Jet Powerplants. Franklin P. Durham. New York: Prentice-Hall, 1951. 326 pp. $5.00.

The Integument of Arthropods: The Chemical Components and Their Properties, the Anatomy and Development, and the Permeability. A. Glenn Richards. Minneapolis: Univ. Minnesota Press, 1951. 411 pp. $6.00.

A Treatise on Heat. Including Kinetic Theory of Gases, Thermodynamics and Recent Advances in Statistical Thermodynamics. 3rd ed. M. N. Saha and B. N. Srivastava. Allahabad and Calcutta, India: Indian Press, 1950. 935 pp. Rs. 32/–.

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The Kidney: Medical and Surgical Diseases. Arthur C. Allen. New York: Grune & Stratton, 1951. 583 pp. $15.00.

Johannes Kepler: Life and Letters. Carola Baumgardt. New York: Philosophical Library, 1951. 209 pp. $3.75.

Servomechanisms and Regulating System Design, Vol. I. Harold Chestnut and Robert W. Mayer. New York: Wiley; London: Chapman & Hall, 1951. 505 pp. $7.75.