

N. W. 1, Eng., as soon as possible. Every such comment should be clearly marked with the commission's file number as given in the present notice.

4. If received in sufficient time before the commencement by the International Commission of voting on the applications in question, comments received in response to the present notice will be published in the *Bulletin of Zoological Nomenclature*; applications received too late to be so published will be brought to the attention of the International Commission at the time of the commencement of voting on the application in question.

5. Under the decision by the International Congress of Zoology specified in paragraph 2 above, the period within which comments on the applications covered by the present notice are receivable is a period

of 6 calendar months calculated from the date of publication of the relevant part of the *Bulletin of Zoological Nomenclature*. The four parts now in question were published on May 4, 1951. In consequence, any comments on the applications published in those parts should reach the Secretariat of the International Commission at latest by November 4, 1951.

FRANCIS HEMMING
*Secretary to the International Commission
on Zoological Nomenclature*

Erratum

WE HAVE been informed that reference 14 in the article by Eugene L. Hess (*Science*, 113, 709 [1951]) is to the new journal *Arkiv för Kemi* and not to *Arkiv Kemi, Mineral., Geol.*—EDITORS.

Book Reviews

The Wealth of India: A Dictionary of Indian Raw Materials and Industrial Products; Raw Materials, Vol. II, and *Industrial Products*, Part II, covering letter "C." B. N. Sastri, Ed. New Delhi, India: Council of Scientific & Industrial Research, 1950, 1951. Vol. II, 427 pp., Rs. 25, or about \$5.25; Part II, 251 pp., Rs. 15, or about \$3.15.

This is the second volume in the continuing series dealing with the raw materials and industrial products of India. It consists of two books, in which are described all subjects starting with the letter "C." Volume I, published in December 1948, covers subjects starting with the letters "A" and "B." It is understood that the series will cover over 4,000 subjects, about 90 per cent of which will relate to plant products, and the remainder to mineral products, mineral resources, and industries.

The work is an encyclopedia with subjects arranged in alphabetical order, and appears to be the result of a painstaking review of the literature and compilation of statistics. The information is presented in a manner understandable and useful to both layman and scientist. The text is well illustrated with line drawings, graphs, charts, colored plates, and half tones. The printing on heavy glossy paper is large and clear. However, because of the weight of the book it is doubtful if the binding will stand much hard usage. A vast variety of subjects, such as cotton, copper, cosmetics, chrysanthemum, cutlery, coal carbonization, ceramics, canvas, crocus, etc., is covered, and general, specific, and scientific information is given on each. The description of "Chromite," for example, occupies 9 pages and includes sections entitled "Occurrence," "Distribution," "Mining and Dressing," "Grading and Marketing," "Industrial Uses," "Scope for Expansion;" that of "Camellia" (from the leaves of which tea is made) covers 24 pages and includes a descrip-

tion of various species and sections on "Cultivation," "Manufacture," "Composition," "Production and Trade." The description of each subject generally begins with its scientific name, including related species, followed by its physical and chemical characteristics. Brief mention is made of the most important world occurrences and then a detailed description of where and how the subject is found in India and how it is used industrially. Numerous references are given throughout the text.

Undoubtedly one of the prime purposes of the Indian government in going to the great cost and effort of compiling this encyclopedia is to provide accurate and concise information about the natural resources of the country in order to encourage their development. The Council of Scientific and Industrial Research maintains an Informational Bureau of Natural Resources to answer inquiries from India and abroad regarding the scientific aspects, production, uses, sources of supply, and trade statistics of Indian raw materials and industry.

The books are excellent for reference, general reading, and teaching and should be in all libraries, universities, and other scientific institutions. They would be valuable also for commercial firms doing business in India.

A. F. BANFIELD

New York City

Oral Pathology. 3rd ed. Kurt H. Thoma. St. Louis: Mosby, 1950. 1,592 pp. \$17.50.

In this revised and enlarged third edition of his well-known textbook, the author presents the pathogenesis, diagnosis, histopathology, and treatment of anomalies, diseases, and tumors of the mouth and jaws. The volume covers in most instances the clinical symptoms, x-ray studies, treatment, and, where indi-

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.

JOSEPH L. BERNIER, Col. (DC), USA
Dental and Oral Pathology Section
Armed Forces Institute of Pathology

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.

ARTHUR A. MEYERHOFF

Palo Alto, California

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/—.

Technique of Organic Chemistry: Adsorption and Chromatography, Vol. V. Harold Gomes Cassidy; Arnold Weissberger, Ed. New York-London: Interscience, 1951. 360 pp. \$7.00.

The Kidney: Structure and Function in Health and Disease. Homer W. Smith. New York: Oxford Univ. Press, 1951. 1,049 pp. \$12.50.

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.