

binaries. This discusses the statistics of formation and disruption of binary systems without, however, mentioning Chandrasekhar's work in this field.

Next is a polemic between Woronsow-Weljaminow and Ambarzumjan (*Astr. Zhur.* 27, 211, 228 [1950]) on the question of whether or not hot giants occur in so-called associations—which play such an important role in recent Russian cosmogonical theories.

The longest paper of the volume is one by Ambarzumjan (*Soob. Bjurakónskoj Obs.* 6, 3 [1951]) which summarizes his work and that of his group on fluctuations and their importance for apparent star distributions on the celestial sphere.

After an article by Hetmanzew and Ginsburg (*Zhur. Eksp. Teoret. Fiz.* 20, 347 [1950]) on the possibility of localizing radio sources by studying the diffraction of radio waves by the moon, the volume closes with an article by Woronsow-Weljaminow (*Astr. Zhur.* 27, 285 [1950]) on planetary nebulae.

D. TER HAAR

*St. Salvador's College, The University,
St. Andrews, Scotland*

The Manual of Antibiotics, 1954–1955. Henry Welch, Ed. Medical Encyclopedia, New York, 1954. (Order from American Pharmaceutical Assoc., 2215 Constitution Ave., N.W., Washington). 87 pp. \$2.50.

This book presents for the first time in one source a ready reference to antibiotics and their preparation. It lists the preparations, therapeutics index, trade and generic names, and the names and addresses of producers and manufacturers of all existing antibiotics and their preparations commercially produced and on markets at the time of publication.

It should prove valuable as a reference, because of the multiplicity of trade names for the same antibiotic, to members of the health profession, especially the physician, dentist, veterinarian, pharmacist, and others engaged in the use of these drugs.

The antibiotics and their preparations are alphabetically tabulated by their generic terms. The trade names given these products by each manufacturer are listed side by side with the generic equivalent. Under each of the generic terms is found the indication for each drug and preparation. The antibiotic preparations also, for ease of use, are alphabetically tabulated, both by trade and generic terms in separate indexes and in an index of all manufacturers with their addresses.

It is necessary to check only the trade-name index to identify a trade-name product. Opposite the trade name in question is the page number on which is the generic term, along with the active ingredients and indications for the preparation, in addition to all other trade names assigned to the products.

The author states that periodic revision of this manual is planned to keep up to date the ever-increasing list of antibiotics and their preparations.

HURD M. JONES, JR.

School of Pharmacy, Texas Southern University

Formation des Continents et Progression de la Vie. H. Termier and G. Termier. Masson, Paris, 1954. 135 pp. Illus. + plates. Paper, Fr. 750.

Orogenesis and tectonics, stratigraphy and paleontology are carefully used to introduce the reader to the initial appearance and subsequent expansion of life on the earth. Little credence is put in phantom continents, or those that have had only a legendary existence, and the authors work toward an over-all synthesis that precludes acceptance of the continental drift theories of Wegener and Argand. The Termiers make a distinct contribution by giving present-day examples of phases of the geologic process, illustrated, for instance, by the photo of a group of starving hippopotamuses wallowing in a diminutive mud-hole left by the drying up of Lake Rukwa in Tanganyika in 1950. These huge mammals were unable to escape catastrophe by migrating in time to a more humid area.

Even the spectacular geologic phenomena obey regular laws, but a disconformity was experienced in the evolutionary process with the appearance of man who is capable of thought processes. The lack of specialization of his hands and the possession of a brain gave him superiority over all other animals. The authors regard as significant the fact that up to about 100,000 years ago man lived only in the hot and subtropical zones. During the first three glacial epochs man migrated equatorward with the other fauna. By the time of the fourth period of glaciation he could clothe and warm himself and was able to adjust to climatic extremes. Modern man has proved to be a powerful geologic agent, in such activities as mining coal, damming streams, reclaiming land from the desert and from the sea, and so on.

This succinct, well-written work is recommended to the general reader.

RAYMOND E. CRIST

Department of Geography, University of Florida

Pigment Cell Growth. Proc. of the Third Conference on the Biology of Normal and Atypical Pigment Cell Growth. Myron Gordon, Ed. Academic Press, New York, 1953. 365 pp. Illus. + plates. \$7.

It may be questioned whether or not the study of pigment cell growth is developing rapidly enough to justify publication of comprehensive reports every few years. Nevertheless, for anyone who wants to become familiar with current work and find a guide to that of the past, this volume forms an adequate introduction.

The papers consist for the most part of more or less extensive reviews of recent investigations in pigmentation. To a biologist, the coverage will seem to be narrow—that is, to be weighted on the side of human and mammalian pigment cells. Two papers are concerned with structure of melanins and melanin synthesis, three with lower vertebrates (fish, frog, axolotl), two with the chicken, five with the mouse, and ten with man. The emphasis is also heavy on disease: