A short 10-page section on chemotherapy devoted largely to antibiotics has been added. The scope of the book does not permit more space for this subject. The authors, however, recognized its importance and have included a short paragraph on chemotherapy for each disease.

In a satisfactory manner some changes of classification and nomenclature have been made. The authors have not entirely adhered to the classification in Bergey’s “Manual of Determinative Bacteriology.” As in the first edition, the second contains reasons for retaining the older terminology in several instances. To some there appears justification for the position taken by the authors in certain instances. The newer classification, however, is referred to in most cases, and the users of the textbook will have it available. In presenting the viruses the text shows no attempt to classify them but instead, as in the first edition, the groups adopted by Topley and Wilson, which are more or less based on tropism, are used.

The table of contents shows the extent of the subject matter treated in the seven parts into which the book is divided: 1. Mechanism of Infection and Resistance; 2. Chemotherapy; 3. Pathogenic Bacteria (and here these are mostly arranged in groups); 4. Bacteria-like Pathogenic Organisms of uncertain classification which include: (a) Spirochaetes, (b) Borrelia, (c) The Bartonella group, (d) The Rickettsiae, (e) The Pleuropneumonia group; 5. Pathogenic Fungi; 6. Pathogenic Protozoa; 7. The Viruses.

In general, in presenting each group of infectious agents there are one or more paragraphs on general statement (which contains a reasonable amount of history including the names of some of the workers associated with the group of organisms); synonyms; morphology and staining reactions; cultural features; resistance; pathogenicity for various domestic and experimental animals and man (here excellent photographs of the pathology are included in a limited and proper proportion). There are paragraphs on diagnosis including bacteriological, serological, hypersensitivity and other tests; immunity covering natural and artificial. These are comprehensive but briefly presented, and in no instance are details of methods or techniques included. Finally, the chapters are concluded with paragraphs on chemotherapy and control measures.

There are, of course, some minor and for the most part insignificant disagreements one can have with the authors. For instance, it might be pointed out that the detail of giving the initials of the reporters in the list of references is omitted.

The Infectious Diseases of Domestic Animals by Hagan and Bruner is highly recommended for students as a text and reference book in microbiology of infectious diseases of animals, and to others interested in various phases of these diseases. It is also a useful and ready reference for those interested and concerned with human infectious diseases, especially those transmitted from animals.

J. Traum


The nickname, “Ashbarrel” Smith, conferred by medical students, gives some indication of the salty character of the man, who won eminence as a military surgeon, pioneer practitioner, medical teacher and politician in Texas. In this little volume is republished his interesting contemporary account of a sharp outbreak of yellow fever in Galveston in the autumn of 1839. A graduate in medicine of Yale, Ashbel Smith had gone to Paris for the best available postgraduate training in clinical medicine and pathology. His skill in these branches of medicine is revealed by the careful clinical descriptions of yellow fever cases
and the detailed notes on postmortem examinations reported. His observations during this epidemic convinced him that yellow fever is not contagious, but he got no idea of the true epidemiology of the disease.

Most of the account is devoted to clinical observations, to detailed descriptions of gross pathology, and to a discussion of therapy. At first his treatment was simple, but drastic. "I bled and prescribed calomel." The unfortunate results of this regime quickly made him adopt a milder course of treatment which proved more satisfactory.

Dr. Leake has performed a useful service in making this account available and in calling attention in his biographical introduction to the interesting career of Ashbel Smith. The final section of this volume, devoted to notes by various authors on "The Men Who Conquered Yellow Fever," is too sketchy and incomplete to be really satisfactory. The inclusion of this section detracts from the main purpose of the volume.

Hugh H. Smith


In contrast to vertebrates and to bacteria, relatively few investigations have been carried out on the metabolism and the nutrition of Protozoa. Such information is scattered widely throughout the zoological, parasitological, microbiological, physiological and biochemical literature. Therefore, the recent book on the biochemistry and physiology of protozoa, edited by A. Lwoff, is to be welcomed because it summarizes and reviews the present status of our knowledge in this field. Also, it undoubtedly will stimulate further much needed research on these problems. As stated by A. Lwoff in his introduction, some biochemists who had been "forced during World War II to cooperate with parasitologists in the study of parasitic protozoa were anxious to return to studies on muscle or yeast. For the future development of protozoan biochemistry, it seems of utmost importance that an atmosphere develop in which more biochemists may feel, without external pressure, that many problems of biochemistry of Protozoa are now ripe for further investigations" and are "quite ready to respond to their love and interest." The authors of each chapter are experts whose original and frequently pioneering investigations are responsible to a large extent for the advances in the particular field reviewed by them. Of particular interest to the parasitologist are the monographs on the metabolism of trypanosomes by T. Von Brand, on the nutrition of parasitic flagellates and of amebae by M. Lwoff and on the biochemistry of plasmodia and the influence of antimalaria by R. W. McKee. These sections of the book reveal certain common patterns in the nutrition and biochemistry of the parasite with their hosts and with other forms of life. On the other hand, the reader is impressed equally by the great number of qualitative and quantitative differences in the metabolic reactions and in the nutritional requirements not only between the mammalian host and the parasite, but also among the various species of parasitic Protozoa. Such and other as yet unexplored differences could explain readily the differential toxicities of chemotherapeutic agents to the host and the parasite, as well as the great variations in drug sensitivity from one parasitic species to another. Continued investigations based on the information contained in this book might reveal a greater number of metabolic reactions which are essential for survival and reproduction of the parasite but which play no role or only a minor role in the host. In this manner more opportunities would become available for inhibiting such reactions by compounds of low mammalian toxicity and for the rational development of chemotherapeutic agents against parasitic diseases.

Ernest Bueding