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 antimalariais by R. W. Mc Kee. 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 one 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 BUENING