

:f /j/Q/94

March 14, 1955

TEXTBOOK of MICROBIOLOGY, Sixteenth Edition.

by William Burrows, with the collaboration of Francis B. Gordon,  
Richard J. Porter, and James W. Moulder, xix + 824 pp; ill.  
Saunders, Phila., 1954.

This volume is the successor to the fifteenth edition of Jordan- Burrows Textbook of Bacteriology which appeared in 1949. There have been a number of changes in detail and up-dating, but the authorship and general plan remains the same. The book will doubtless retain the same popularity for the teaching of bacteriology in the medical schools as was enjoyed by its predecessors.

It is becoming increasingly difficult for any single person to enjoy competent authoritativeness in so broad a field as "microbiology". The contributions of the junior authors are an important concession to this realization in the fields of virology, parasitology and biochemistry, respectively. The principal author must still retain the responsibility for an authoritative presentation in such diverse fields as taxonomy, infectious disease and immunity, genetics, biophysics and radiobiology, cytology, epidemiology, chemotherapy, pathology and public health. In exchange for the certain advantages of a text with a uniform standard of presentation, a treatment such as this must necessarily lose in precision over some of the diverse fields mentioned. Perhaps this will account for such startling bits of incomprehension as the "lethal dose" of ionizing radiation for *Escherichia coli* being so many roentgens, and a similar treatment for thermal disinfection (though happily not for chemicals). More pertinent for medical students is some confusion in the treatment of Vi antigen, perhaps because of the separation of typhoid and other *Salmonellas* in distinct chapters. At one point, Vi is heat stable, at another it is heat labile in the presence of water, and the author's views on its role in immunity are no less divided.

To insist that "the efficacy of typhoid immunization is undoubted" is to pass over one of the most vehement and engaging of controversies currently raging among students of infectious disease.

A text of this scope, in a rapidly expanding field, is bound to contain any number of such variances of interpretation. Unfortunately, students in the medical schools are not always encouraged to adopt a skeptical attitude towards their texts; perhaps a few more obvious blemishes would be all to the good. By and large, the authors have done a serviceable job that warrants the confidence already proven by the widespread adoption of the text. They are particularly to be commended for their adherence to the stated emphasis of the interrelationships of microbes in their fundamental structure, as well as their ecology, with other forms of life.

J. Lederberg