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THIRD EDITION

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PREFACE TO THE THIRD EDITION

APART from the war, this edition has been prepared under the shadow of a double misfortune. Early in 1941, Professor Topley accepted the post of Secretary of the Agricultural Research Council, and thereby took a step that rendered his further participation in this book impossible. To replace him, I was fortunate in enlisting the co-operation of our former colleague, Professor Miles. Together we began the arduous task of revision. Our work, however, had not progressed far before the second blow fell. Quite suddenly in January, 1944, Topley died. The effect of this second misfortune was almost as serious as the first. Although Topley could have made no direct contribution to the text, his criticism and advice would have been constantly available, and he would have helped us to maintain that uniformity of presentation for which he and I had always striven. On Miles, in particular, the burden weighed heavily, since, in taking over those parts of the book for which Topley had previously been responsible, he was deprived of counsel that would doubtless have proved invaluable to him.

There is no call to write a long preface. We have endeavoured not merely to bring the book up to date, but to present the new additions to our knowledge in a manner worthy of their importance. One chapter—that on Soil Microbiology—has been deleted, but two new chapters, on Chemotherapy and on the Bacteriology of Air, have been added. For the sake of convenience we have divided the previous *Bacterium* chapter into three, giving separate recognition to the genera *Shigella* and *Salmonella*. We have also removed the psittacosis-lymphogranuloma group of diseases from the other filtrable virus diseases with which they were associated and awarded them a chapter of their own. Except for these alterations, the form of the book remains unchanged. In the first two editions we tried to ensure that scientific literature from all parts of the world was fairly represented, but in the present edition we have suffered under a handicap imposed by the war, which has seriously curtailed the inflow of journals from many parts of Europe as well as, of course, from Japan. This gap we shall look forward to filling in the future. Partly because of the necessarily one-sided picture we have been obliged to paint, we have thought it wise to present our evidence in greater detail than might otherwise have been necessary, and to be perhaps unduly cautious in drawing our conclusions. The bibliography has been much expanded, so as to cater for the needs of those who use the book more as a work of reference than as a textbook. For the increased length of the new edition we tender our apologies. The war

has not been conducive to careful leisurely recapitulation, and our plea must be the paradoxical excuse that we have not had time to be more concise.

To those who have assisted us in various ways, we would express our thanks. We are particularly grateful to Dr. N. W. Pirie for his help with some chapters in Part I, to Professor A. Bradford Hill for his advice on Chapter 43, and to Professor S. P. Bedson, Lt.-Col. R. F. Bridges, Dr. A. Q. Wells, Dr. Joan Taylor, Dr. A. W. Stableforth, Dr. R. Lovell, Miss Nancy Hayward, and many of our former helpers for information on particular problems. To Dr. Stuart Mudd and his American colleagues, to Professor A. D. Gardner, Dr. C. F. Robinow, Dr. S. T. Cowan, Dr. N. G. Heatley, Dr. A. Pijper and the publishers of "Endeavour" we are indebted for a number of electron micrographs and photographs; to Professor J. R. Marrack for Fig. 32; to H.M. Stationery Office for permission to reproduce Figures 32, 34, 77, 79, 80 and 81; and to Miss Margaret Rees for the preparation of some new diagrams. We should also like to pay our tribute to the library staffs of the London School of Hygiene and Tropical Medicine, the Bureau of Hygiene, University College Hospital Medical School, and the Radcliffe Science Library, Oxford, for their unfailing courtesy and help in the tracing of numerous references.

G. S. W.

June, 1945.

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All organisms are listed under the generic names given in the Classificatory Chart on p. 319. Since many rod-shaped organisms have in the past been known under the generic name of *Bacillus*, irrespective of whether or not they belonged to this genus, we have for the convenience of the reader included most of them under the heading *Bacillus* (non-italicized). This heading should therefore be consulted by those who are doubtful to what genus a given organism belongs.

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