

disks. There are some critical remarks about using disks as a quantitative measure of activity.

Several new antibiotics are described: 'Porfiro-mycin' (4 papers), 'Mikomycin' (2 papers) and the semi-synthetic penicillins (3 papers) appear to be the more interesting. Work on 'Porfiromycin' is given in detail but toxicity figures are lacking, an omission remarked on in the discussion; that on 'Mikomycin' gives a wealth of clinical results without much detail. The enzymatic cleavage and resynthesis of penicillins, some laboratory work on 'Methicillin' and on lower alkyl and haloalkyl penicillins will be of interest to workers in this field. Two papers deal with 'Cephalosporin N' and two with a new sulpho-amide containing the isoxazolyl grouping.

In the clinical section of nineteen papers, five deal with the new penicillins, including the early American work on 'Methicillin', three with certain aspects of the use of 'Demethylchlortetracycline', the others with such matters as the action of antibiotics in the gastrointestinal tract, the clinical use of 'Vancomycin' and the treatment of such infections as Friedlander's pneumonia, pneumococcal and H. influenza type B meningitis, and ocular toxoplasmosis. The panel discussion is given over very largely to the treatment of the resistant staphylococcus.

The great interest in the antifungal agents is shown by some twelve papers on this subject and the need for more work is stressed.

Of the non-medical uses of antibiotics, the use of 'Tylosin' in chickens and turkeys to control infections in broilers and a paper summarizing non-medical uses of antibiotics in Great Britain with special reference to animal foods, food preservatives and plant disease control are of interest.

This book will be necessary for most reference libraries, but its price will probably restrict its purchase by many individuals. JOHN FARQUHARSON

## ANALYTICAL CHEMISTRY

### Comprehensive Analytical Chemistry

Edited by Prof. Cecil L. Wilson and David W. Wilson. Vol. 1C: Classical Analysis: Gravimetric and Titrimetric Determination of the Elements. Pp. xxx+728. (Amsterdam and London: Elsevier Publishing Company, 1962.) 140s.

THE publication of this book, part C of the first volume of *Comprehensive Analytical Chemistry*, has been awaited with considerable interest. Parts A and B have described the general techniques of classical analysis, and in this present book their application to individual chemical elements is further detailed. Previous parts of this series have attained a high standard of excellence, and if this present book is not quite of the quality of its precursors it is mainly because no single volume can possibly cover the wide range of problems associated with the classical analysis of the chemical elements.

The plan of this book is rational; each element is treated separately and a periodic system of classification is adopted which permits easy access to material. No space has been found in this present work for systematic schemes of analysis which form an integral part of classical gravimetric analysis, but it is to be hoped that this omission is to be remedied in a future volume.

The editors' intention of providing a working manual as well as a reference work has been met in

many sections by some excellent and authoritative contributions. Their authors describe, giving full practical instructions, all stages of a chemical analysis from the pre-treatment and solution of the starting materials to the separation of the interfering elements, leading to the consequent determination of an element by a preferred method. This treatment is supplemented by ample references to the literature. However, not all contributors have adopted such a useful approach and give us instead a general treatment, in the main confining their attention to the actual chemical determinations, which are often only a small part of an analyst's task.

As befits a book of this type, the binding is stout, and the typography clear; this should be an important addition to an analyst's bookshelf. A. D. WILSON

## REVIEW OF INFECTIOUS DISEASES

### Natural History of Infectious Diseases

By Sir MacFarlane Burnet. Pp. x+377. (Cambridge, The University Press, 1962, third edition.) 30s.

IT is a pleasure to review this, the third edition, of such a well-known work, which now presents an up-to-date account of the ramifications of an important subject, and as such it is welcome to doctors of medicine as well as to students of applied biology alike.

Throughout it adopts a Darwinian attitude, often overstepping the realms of human pathology into all kinds of unexpected avenues, as the result of wide knowledge and extensive reading. In its ambit it presents a picture of the ravages by bacteria, protozoa and viruses. Much of the information under the last-named heading is culled from the author's own original investigations. The philosophical considerations, as regards the origins of these viruses and their relationship to abstruse biochemistry, and even to the creation of life itself, are unique in their clear and delicious presentation. The processes of defence against disease are somewhat gingerly handled, because what was once considered as a simple explanation has now become an involved, intricate and contentious affair till we find ourselves in a globulin-infested land guided by the light of paper electrophoresis. Under mass prophylaxis, on which subject the author uses wise words, he discredits the practical value of antityphoid inoculation and would rather attribute the favourable results obtained to military sanitation.

As an introduction to the study of the zoonoses the student could do worse than read the condensed account of what is pure tropical medicine. Moreover, the reader will find here important information about such diverse subjects as myxomatosis in rabbits, the common cold, plague, German measles, poliomyelitis, the sweating sickness of the Middle Ages and Q. fever (from personal experience). The latter part of the book deals in detail with some important infectious diseases.

An epilogue on new diseases and the rather bleak outlook for the future finds the author in a gloomy mood in an appraisal of bacteriological warfare: but he is more optimistic about the eradication of tuberculosis, which he believes will be complete in due season.

The only criticism which can be offered is on a certain amount of repetition, which is possibly unavoidable in a book of this nature.

PHILIP MANSON-BAHR