

as giving a very fair and accurate picture of these mental states in as short a compass as possible.

GENERAL SYSTEMATIC BACTERIOLOGY.—By **R. E. Buchanan, Ph.D.** Baltimore: **Williams & Wilkins, 1925.** English Agents, Messrs. **Bailliere, Tindall & Cox: London.** Pp. 597. Price 30s. net.

THE present volume is the first of a proposed series of monographs in the general field of systematic bacteriology. Systematic bacteriology has two principal aims or functions which are of importance to the teacher and the investigator. The first of these aims is the presentation in graphic form of our present conception of the phylogeny and of the relationship of various groups of bacteria. The second is to give a greater degree of stability to names used for particular groups of organisms and to prevent unnecessary nomenclatural confusion in the literature.

Bacteriologists can be divided into at least two classes; each views the subject from his own particular angle. On the one hand the interest of the botanist centres on the organism itself, its life phenomena and its pedigree, whereas the pathologist, the agricultural chemist, etc., view it from the point of view of the changes which it produces in tissues and other media. Each demands a classification which fits in with his own particular point of view.

The first chapter of the present volume gives a short account of various classifications of bacteria that have from time to time been adopted; from Mueller's classification of the Vermes (1773), which included the bacteria, down to the classification according to Bergey (1923). One cannot help being struck by the absence of the great names familiar to the medical bacteriologist from the headings of these classifications.

The second chapter discusses various codes of nomenclature and the suitability of their application to bacteriological nomenclature, and is concluded with a report of the suggestions and recommendations of the Society of American Bacteriologists with regard to classification and nomenclature.

Chapter III, which constitutes more than two-thirds of the volume is an alphabetical list of the names which have been applied by various authors to designate sub-genera, genera or higher groups of bacteria. One wonders how many volumes would have been occupied had the author treated in the same way the various names applied to species.

The book will prove valuable both to the potential offender and to the unfortunate sufferer in the matter of bacteriological nomenclature; the former will do well to study Chapter II, carefully so that he may not add to the confusion, the existence of which Chapters I and III demonstrate; the latter will find Chapter III extremely useful when he wishes to discover what is really meant by any of the loosely-applied generic names with which the literature abounds.

This volume forms a useful addition to the library of any medical bacteriologist and is almost indispensable to the systematic bacteriologist who wishes to be up to date in the matter of nomenclature.

PATHOGENIC MICRO-ORGANISMS.—By **William Hallock Park, M.D., Anna Wessels Williams, M.D., and Charles Krumwiede, M.D.** Eighth Edition. London: **Bailliere, Tindall & Cox, 1925.** Pp. x plus 811. Plates 9. Figs. 211. Price 30s. net.

THIS well-known book has been thoroughly revised and brought up-to-date; it is now in its eighth edition. The writers have succeeded in producing a manual which is not merely a collection of facts but is a well-balanced and readable book in which the student and practitioner will find all that is of importance in the science and practice of bacteriology. One says bacteriology, because, although the scope of the book includes the allied sciences,—protozoology and mycology,—it is written by bacteriologists and hygienists mainly for the use of the medical bacteriologist and the health officer.

However, the more important protozoa and yeasts have not been neglected.

The book is divided into three parts; the first part deals with the classification and general description of the various groups of pathogenic organisms, with practical laboratory methods and with immunology; the second part, which constitutes about half the book, deals with the known pathogenic organisms; and finally the third part, which is headed "Applied Microbiology," deals with the practical application of the science and includes chapters on such subjects as vaccine and serum therapy, examination of water disinfectants and so forth.

It is in every way an excellent book and one that we can thoroughly recommend both to the laboratory worker and the practitioner; it is also extremely useful as a text-book for the student. The book is printed in large, clear type, on good paper and is freely illustrated with very well reproduced photographs and diagrams.

Annual Reports.

NOTES ON VACCINATION IN THE CENTRAL PROVINCES AND BERAR FOR THE YEAR 1923-24. BY **LT.-COL. T. G. N. STOKES, M.B., I.M.S. NAGPUR: GOVERNMENT PRESS, 1924.** PRICE RE. 1.

THERE were 37 assistant superintendents of vaccination and 301 vaccinators on duty during the year in this province; the total number of vaccinations performed being 5,01,398 as against 4,29,291 in the previous year. Colonel Stokes notes, however, that large numbers of unprotected children are still to be found both in municipal towns and villages, and that the number of operations performed by individual vaccinators is still, in general, far below the standard. Now that the district councils and local boards have shouldered the responsibility for the work, matters may improve. The number of re-vaccinations was unsatisfactory, and in spite of a government press communiqué and in face of a considerable amount of small-pox, the state of affairs with reference to re-vaccination is bad. A villager assaulted a vaccinator in one district but was acquitted on trial, principally because vaccination is not compulsory under the law. Two other vaccinators were recently assaulted whilst in the execution of their duty, and one such case is still on trial. Colonel Stokes comments that if vaccinators can be obstructed in the performance of their important duties with impunity, matters are not likely to improve. The civil surgeon of Amraoti reports that in the village of Sirasgaon not one child was vaccinated during the year, but fails to give the reason for this. Report after report emphasises the necessity for compulsory vaccination, and proposals for the introduction of compulsory vaccination in rural areas are now under the consideration of government.

The cost of the department during the year was Rs. 1,96,210, the average cost of each successful vaccination being Rs. 0-6-10. The glycerinated lymph issued from the institute at Nagpur continued to be satisfactory; 185 calves were operated on during the year and 6,450 grammes of lymph obtained equivalent to 5,60,480 doses. In primary vaccinations the insertion success rate is reported to have been 92 per cent. as against a figure of 48 per cent. for re-vaccination. The number of deaths recorded from small-pox during the year was 420, but Colonel Stokes considers that this does not represent the true state of affairs, since several reports state that the disease has made serious havoc in different districts. "It will be seen" he writes, "that vaccination work is being neglected both in municipal towns and rural areas, mainly owing to the apathy and indifference