BOOK REVIEWS

The Pathology of Tumours of the Nervous System.

By Dorothy S. Russell and L. J. Rubinstein. (Pp. 318; 286 figures. 70s.) London: Edward Arnold. 1959.

Just before the last war a number of colleagues of the late Dr. J. G. Greenfield were encouraging him to write a textbook on cerebral tumours as well as on neuropathology. He wrote the latter, which has recently been published. Dr. Greenfield felt unable to accomplish the former and so passed this onerous task to Professor Russell. She and Dr. Rubinstein have drawn upon their very wide experience, together with an all-embracing survey of the literature, and have given to pathologists a volume that will surely remain the standard work on the pathology of cerebral tumours for very many years to come. Almost every pathologist at some time has the task of reporting on the histological nature of intracranial or intraspinal tumours, and all will be indebted to these two authors for their extremely lucid description of all varieties of such tumours.

The chapters deal with the varying types of tumour that may be found, ranging from those of a maldevelopmental nature, the retina, and peripheral tumours of the neurone series, including phaeochromocytomas. In addition to the more common types of tumour, such as the glioma and meningioma, there is of course a chapter on pineal tumours, upon which the senior author has done so much work. Methods of classification of the glioma group are discussed, and the authors support the more conservative opinion of continuing the use of the terms "glioblastoma multiforme" and "malignant astrocytoma."

The authors have included one chapter by Professor C. E. Lumsden on tissue culture in relation to tumours, and this is excellent.

It seems a little hard for this reviewer to criticize, even though he has imbibed Greenfield's thoughts, having been a close colleague, but it would have helped pathologists in general if a chapter could have been added on pituitary tumours. These have been deliberately omitted, as is explained in the introduction.

Other minor comments that one can make are that it might have been easier to have arranged the order of Figs. 34 to 37 to correspond to the order of the description in the text of the various types of meningioma (not that they are numbered incorrectly); to maintain uniformity in the spelling of the word neurone; and to use the modern way for the spelling of such words as "criticize." Otherwise, no praise can be too high for this volume. It will have to be on every pathologist's bookshelf, and the authors have placed us all permanently in their debt, not only for their descriptive ability but also for the beauty of their illustrations.

J. N. CUMINGS.

Antibiotics in Medicine [*British Medical Bulletin*]. (Pp. 88; 4 art plates. 20s.) London: British Council. January, 1960.

An edition of the *British Medical Bulletin* devoted to antibiotics in medicine under the scientific editorship of Professor Garrod is a welcome event. With the large and ever-increasing number of antibiotics, which, as Professor Garrod points out in the introduction, are quite literally being unearthed from soil samples all over the world, the subject is inevitably confusing, and what makes "confusion worse confounded" is that each masquerades under a variety of trade names.

In this issue of the *British Medical Bulletin* some attempt is made at classification on two fronts, namely chemistry and antibacterial activity. The former is attempted in an admirably clear article by E. P. Abraham and G. C. F. Newton, and it is no reflection on their contribution to say that to the simple-minded clinical bacteriologist it is rather disappointing to see antibiotics with such widely divergent activity as cycloserine, penicillins, chloramphenicol, bacitracins, and polymyxins classified together.

Since antibiotics are derived from living organisms they inevitably display selective toxicity. This aspect is discussed by E. F. Gale, with special reference to the mode of action of penicillin, surface-active antibiotics, and chloramphenicol. The outstanding nature of Gale's own contribution to this subject is well known and this article needs no further commendation. In his conclusion Gale points out that studies of this nature have not so far helped very much in providing a rational approach to the design of chemotherapeutic agents. Nevertheless these studies have already done much to elucidate some of the mechanisms of bacterial metabolism, as well as the biochemistry of protein synthesis, so that their fundamental importance cannot be over-emphasized.

The next contribution, by M. R. Pollock, is concerned with the scientific basis of drug resistance and points out possible lines of prevention. The clinical problems connected with this subject are discussed generally by E. J. L. Lowbury, and from the point of view of the treatment of tuberculosis by John Crofton. All three contributions are worthy of close study.

The "Principles of Therapeutic Use" are described by L. P. Garrod and E. F. Scowen. As might be expected from the authors, the contribution is full of wisdom, perhaps not least in its opening sentence, which is as follows: "The first decision to be made when antibiotic treatment is contemplated is whether it is necessary at all." The rest of the article outlines the basis of "well-directed treatment limited to cases really requiring it" and includes a useful table of the comparative sensitivities of the common pathogens to the principal antibiotics.

Other contributions deal with the pharmacology of antibiotics, their preventive use in medicine and

surgery, combined therapy, the treatment of bacterial endocarditis, the dangers of antibiotic treatment, the laboratory control and uses of antibiotics, and finally the search for new ones. Space precludes individual mention of all of the contributions, but it is hoped that enough has been said to whet the reader's appetite for a most valuable collection of essays.

MARY BARBER.

Textbook of Microbiology, 17th ed. By William Burrows; with the collaboration of Richard Janvier Porter and James William Moulder. (Pp. xxiii+954; 301 figures. 98s.) Philadelphia and London: Saunders. 1959.

The 17th edition of Burrows' textbook maintains the high standard of its predecessors both in production and in the excellent survey it gives of every aspect of a rapidly advancing field. In many respects it can be compared only with two other American publications of the past two years, namely Zinsser's *Bacteriology*, 11th edition, 1957, and Dubos's *Bacterial and Mycotic Infections of Man*, 3rd edition, 1958. With the others it attempts, and very largely succeeds, in condensing into less than 1,000 pages all the most important work, beginning with cytology, thence through metabolism and immunity, to a study of the microbes themselves and their special role as disease agents. Especially useful are the clear and very readable accounts of bacterial metabolism, chemotherapeutic drugs and of variation and resistance, all of which have become increasingly important to bacteriologists.

Because of their size and the vast amount of detailed information given, books such as that under review must rank as reference works, indispensable to the laboratory worker but useful both to the teacher and student for the invaluable summaries which they contain. This textbook is too comprehensive for the medical student, unless he wishes to make microbiology his special study, and the same is true for clinical workers. One feels that in places the needs of the latter have been neglected, as in the following example. Staphylococcal cross-infection in hospitals is now a widespread and serious problem everywhere. The control of such infections and a study of their epidemiology by such measures as phage-typing are of immense importance to the clinical worker, yet the matter is hardly mentioned in the volume reviewed, a very serious omission which should be remedied in this and all other textbooks which hope to be of help and interest to the clinical pathologist.

(Late) E. S. DUTHIE.

Bacteriology for Students of Dental Surgery, 2nd ed. By R. B. Lucas and Ivor R. H. Kramer. (Pp. viii+288; 1 colour plate and 58 figures. 27s. 6d.) J. and A. Churchill. London. 1959.

This excellent little book contains all the information needed by the dental student on microbiology. The subject is approached from the medical rather than a narrow dental point of view, and there is an

accurate, though necessarily brief, description of the major pathogens. One feels that the condemnation of the now discredited focal sepsis theory could be more outspoken, particularly as it is going to be read by future dental surgeons. The section on subacute endocarditis stresses the importance of dental hygiene in the evolution of this malady, but omits to suggest that antibiotic administration before and after dental treatment in patients with valvular disease might reduce the dangers of this serious condition. The book is nicely produced and illustrated, and the authors deserve praise for a fine piece of work.

S. D. ELEK.

Clinical Chemical Pathology, 2nd ed. By C. H. Gray. (Pp. viii+160; 28 figures. 14s.) London: Edward Arnold. 1959.

Professor Gray has revised and improved his popular little book on chemical pathology for its second edition. He has deleted many out-of-date methods of investigation (an example which could be followed by other textbook writers) and could still have deleted more. The U.M.I. of Heilmeyer and the Takata-Ara reaction have had their day, and the augmented histamine test should be standard practice. The information is sound, recent, and well presented, and the book is extremely lucid and readable, which would make it especially welcome for students. Pathologists will find it particularly useful in the selection of appropriate biochemical tests, and for support in advising clinical colleagues on the lack of value of rarely performed complex investigations. The guides to further reading can be commended.

The sections on diabetes and on liver function are particularly good; indeed, this contributes to the only real criticism of the book, namely a lack of balance. If Professor Gray had written other sections to the same scale as these, then he would have given us a textbook which could have been unreservedly recommended; but he would then have had to expand. Protein seems particularly neglected, and the electrophoretic patterns (p. 136) are not typical; where are the usually low albumin of myelomatosis, and the high α_2 globulin and low γ -globulin of the nephrotic syndrome? I also would not agree that analysis of serum potassium is of no value in investigating potassium depletion. Some of the terminology could be changed for the next edition, e.g., g. not gm.; proteinuria not albuminuria; not pint as equivalent to 500 ml.

Misprints are very few (I noticed 1 instead of 10 in the normal range of transaminases), and the book is cheap, well produced, and easy to handle. It should find a place in many a white-coat pocket.

D. N. BARON.

Protides of the Biological Fluids, 6th Colloquium 1958. Edited by H. Peeters. (Pp. ix+330; 171 figures, 60 tables. 45s.) London: D. Van Nostrand. 1959.

Every year since 1953 a conference has been held in Bruges and is concerned with proteins and electro-