antimicrobial drugs and a warning about over-reliance on reports of *in vitro* tests. The reports themselves come under scrutiny.

The rest of the book comprises chapters on metramidazole—an old drug with new applications; urinary tract infections; the role of complement; enteric viruses; and chlamydia infections. It is very readable and the discussions reported at the end of each chapter are instructive and critical.

BERYL JAMESON

A Dictionary of Microbial Taxonomy. By the late S. T. Cowan. Edited by L. R. Hill. (Pp. xii + 285; £12.50.) Cambridge: Cambridge University Press. 1978.

In the words of the late author, this dictionary 'deals particularly with the problems of names as these are applied to micro-organisms, but it does not consider the names themselves'. The purpose of a scientific name is to label unambiguously, and precise advice on how this should be done is given plainly and simply. Four short explanatory chapters, written in 'true heretical spirit', cover different codes of microbial nomenclature, source material for taxonomy—including practical precepts enunciated to raise the standard of the art, the philosophy of classification, and its early history as well as a short but select list of key references.

The dictionary itself is intended not only for taxonomists but for those whose work brings them into contact with taxonomy, however reluctantly. It includes words that may be met by general readers or by those seeking the usage of a word outside their own disciplines. Going through the alphabet, there are pithy answers to almost any query related to microbial classification—from clumpers and lumpers to splitters; from 'hypothetical mean strains'—complete with algebraic equations—to 'identcards' for the real ones. J, K, and Y, we are told, do not occur in classical latin, but we are delightfully regaled with 'lapsus calami'—a slip of the pen. We have macro- and micro- but, alas, not mini-biology or taxonomy; new-fangled SI micrometers replace obsolete microns; Operational Taxonomic Units and 'peek-a-boo' systems, even race relations, Superfamilies, and 1984 are all mentioned. Under Symbolic Notation it is intriguing to

learn that Scotsmen 'often used other symbols'. Perhaps as a sign of the times, X is devoted entirely to dry writing and a certain commercial interest in photocopying. One entry, however, is notably missing—that of Samuel Tertius Cowan himself; it is to be hoped that this will be remedied in future editions—editor please note.

Taxonomy may mean 'all things to all men' but this dictionary provides such an accurate guide to taxonomic microbial practice that we hope it will come to mean 'the same thing to all men'. It will indeed be a standard work for reference. Despite its price, it is thoroughly recommended to young and old alike, at home and abroad, as a book to have and to hold, to keep and to cherish—both to use and amuse.

G. I. BARROW

Major Problems in Pathology. Volume 7. Pathology in the Placenta. By Harold Fox (with a contribution by C. W. Elston). (Pp. xvii + 491; illustrated; £17.50.) London, Philadelphia, Toronto: W. B. Saunders. 1978.

The placenta is not an organ that appeals to the pathologist. Any ill effects of pathological lesions within it are usually manifest in the baby whose birth it accompanies so that placental examination may be regarded as a relatively academic exercise.

Dr Fox is one of the few pathologists who has studied the placenta in detail, and his book on the subject is thus a welcome arrival. The subject matter covers all aspects of the placenta relevant to its pathology, including development and structure, physiology, abnormalities of implantation, multiple pregnancy, and immunopathology. There is a separate chapter on trophoblastic tumours by Dr C. W. Elston.

Dr Fox explains many of the problem areas of placental pathology very clearly and has referenced each chapter exhaustively to both English and continental literature. The book is well illustrated throughout with line diagrams and half-tone plates.

Some readers may be irritated by Dr Fox's didactic style of writing, and most pathologists will find points of disagreement. For those who believe that most significant placental abnormalities can be recognised at a macroscopic level,

dogmatic statements on the banality of macroscopic placental lesions and the appendix and on the uselessness of routine placental weighing seem dangerous half-truths since they discourage the development of simple observational skills.

These are minor criticisms, and the book in general will prove a most useful addition to the personal library of any pathologist who is faced with studying the placenta.

J. S. WIGGLESWORTH

Fundamentals of Oncology. By Henry C. Pitot. (Pp. vii + 192; illustrated; Sw. fr. 26.00.) New York: Marcel Dekker. 1978.

The study of cancer is the study of abnormal biology. Dr Henry Pitot, eminent as a tumour biochemist, has written this concise account of the biology of the malignant process for the outsider and, in doing so, he fills a gap in the cancer literature. Based on a course for students of the biological sciences, it will be of value to medical and non-medical graduates working (or thinking of working) in cancer research.

The two cultures of oncology, clinical medicine and basic research, will find common ground in this book which is a concise account of fundamentals. The author deals with such topics as epidemiology, mechanisms of carcinogenesis, the *in vivo* natural history of cancer, *in vitro* cell transformation, and various aspects of host-tumour interactions. Specialists in these topics will, if they look closely, find much to quibble with. Painted with broad brush strokes the fine details of this account are necessarily (and rightly) obscured.

An epilogue on future prospects is disappointing but forgivably so. A cautious and objective scientist, the author avoids the sort of optimistic speculation that could have ended the book on a higher note. Nevertheless, as a simple introduction to the biology of cancer, it has few rivals and will doubtless succeed.

G. A. CURRIE

Medicolegal Investigation of the President John F. Kennedy Murder. Edited by Charles G. Wilber. (Pp. xv + 318; illustrated; \$14.50.) Springfield, Illinois: Charles C. Thomas. 1978.

The murder of President John F. Kennedy has left in the history of the United States, if not the world, a deep and lasting wound

in the political and social structure of that country. The murder itself was carried out in the plain view of thousands of people watching television or listening to the radio, and numerous photographs were taken, both still and in motion, during the procedures leading up to, at, and after the incident. In spite of the assemblage of information and recording sources, the murder is still, in the minds of most people, an unresolved problem obscured by deceit, corruption, and ineptitude. We in the medicolegal field in the United Kingdom should trust that such ineptitude would not be found in Britain. Nevertheless, this book, and the incident, should be regarded as a constant reminder for those involved in such cases of the importance of team-work and powers of observation in that, as far as legal medicine and pathology are concerned, politics should not be considered. The book concerns itself only with the medicolegal aspects of the late President's assassination. It is not intended to explore the details of international relations—federal police or spies in the domestic and foreign scene—but is based primarily on an evaluation of the available medicolegal facts by a forensic scientist and a practising death investigator. After studying all the facts the author arrives at what he considers to be some inevitable conclusions, namely, that the version of the assassination outlined in the Warren Commission was untenable and that more than one person fired at, and hit, President Kennedy. He finally concludes that it is not even certain that Lee Harvey Oswald actually fired the rifle in question. It would be totally erroneous for the reviewer to pass his own personal judgment on this interesting and well-written document, but he merely suggests that all those interested in reviewing various murders and assassinations could well benefit by reading this recent book on the assassination of President Kennedy.

J. M. CAMERON

Atlas of the Ultrastructure of Human Breast Diseases. By Ali Ahmed. (Pp. 183; illustrated; £20.00.) Edinburgh, London, New York: Churchill Livingstone. 1978.

It is now widely accepted that electron microscopy has an important role to play in diagnostic histopathology. However, whereas at the level of light microscopy there is a vast array of specialised 'bench books' to aid the pathologist in making a diagnosis, only a few of these include the

ultrastructural appearances. Hence this atlas will be a welcome addition to the pathologist's armamentarium.

It covers all the common (and some of the less common) breast lesions and correlates the appearances at light and EM level with good illustrations and brief descriptions. This should not only help pathologists who are struggling to interpret appearances at EM level, but also once the ultrastructural appearances of the various lesions have been understood it should be a help in the interpretation of the light microscope appearances. In particular, in the case of benign and malignant breast lesions, the relationships of the epithelial and myoepithelial cells are of great interest.

One small criticism is that there is no mention at all of the techniques used to prepare the sections illustrated. Although routine paraffin-embedding and H + E staining are so well known as to need no explanation the techniques used to prepare the electron micrographs and toluidine blue (presumably 1 μ resin) sections are likewise completely unexplained.

Since breast pathology provides a sizable part of the work of most surgical biopsy services this atlas will be a useful reference work for all electron histopathologists.

JULIE CROW

Immunology Simplified. By T. R. Bowry. (Pp. vi + 223; illustrated; £2.50.) Oxford: Oxford University Press. 1978.

How successfully a subject can be simplified really depends upon how much is known about it. An author can contrive to be both clear and brief about a subject which is well understood, but where there is uncertainty these qualities may be achieved only at the expense of expressing honest doubt. In describing the basic principles of immunology, Dr Bowry has produced a pleasing, balanced, and well-illustrated account. As an introductory text, this book gives a perfectly satisfactory outline of matters such as lymphocyte heterogeneity, antibody structure and complement. Dogmatism is both unavoidable and acceptable. Indeed, the author has wisely eschewed discussion of more recent developments such as the detailed mechanism by which antigen is presented to and triggers different lymphocyte subpopulations. In such contexts simplicity and doubt can certainly not be

reconciled, but there is no point in attempting this in a book designed for an elementary readership. However, when the author comes to deal with clinical matters she is often sadly out of touch, and her simplicity becomes dangerously misleading. To cite specific points, there is no evidence that lymphoma cells become secondarily infected by virus because these cells are unable to synthesise interferon. One would like to know the basis for her belief that 10^8 malignant cells is the critical number above which immunotherapy can be expected to fail, or that Burkitt's lymphoma and the other neoplasms mentioned in her list share common neoantigens. There is no clear evidence that rheumatoid arthritis predisposes to malignant disease. The relation between IgA deficiency and immediate hypersensitivity is purely theoretical. Transfer factor no longer warrants such serious consideration as a therapeutic agent. Such statements can sow misconceptions in the minds of the wholly inexperienced reader. Only in relation to parasitic diseases does the author show any particular familiarity, no doubt because she works in East Africa. On balance, therefore, this book can be recommended to uninformed readers as an inexpensive, easily read introduction to basic but not clinical immunology. It cannot be regarded as a suitable course or reference book.

A. M. DENMAN

Diagnosis of Liver Diseases: An Illustrated Textbook. Edited by H. Wallnöfer, E. Schmidt, and F. W. Schmidt. (Pp. 298; illustrated—99 in colour; £43.) Stuttgart: Georg Thieme. 1977.

This book attempts to describe the aetiology, pathogenesis, clinical presentation, and biochemical, immunological, laparoscopic, scintigraphic, sonographic, angiographic, and pathological changes (including ultrastructural changes) found in most of those liver diseases commonly encountered. It broadly achieves this aim but at the expense of being superficial and non-critical in some areas. This is particularly so in the sections on electron microscopic and laparoscopic appearances of the liver.

The book is, on the whole, accurate, and the translator has done a good job in converting the original German text into very readable English. Particularly praiseworthy are the extremely high-quality colour plates of laparoscopic appearances