tion which Professor Pearse has had to survey. This second volume is principally concerned with enzyme demonstration, but there are interesting new chapters on fluorescence microscopy, autoradiography, and electron histochemistry, and an outline of techniques available for quantitation; of special interest because of the wide field of potential clinical application is the chapter on the demonstration of biogenic amines. I personally have always regretted that the titles of journal articles are not included in the reference lists, but otherwise I have nothing but praise for volume 2, which is of the same high standard as its predecessor; the two will continue deservedly to be an essential on the bookshelves of every routine and research pathological laboratory.

IAN DAWSON

Exfoliative Cytology By G. S. Andrews. (Pp. xiii + 103; 32 figures. \$12.00.) Springfield, Illinois: Charles C. Thomas. 1971.

In entitling this work *Exfoliative Cytology*, the author invites comparison with the many outstanding texts that now exist.

The first chapter presents an account of the morphology and chemistry of the malignant cell. Two more chapters, about half the book, are devoted to the female genital and respiratory tracts. Two brief chapters describe the problems in examining other body fluids, and the author summarizes his conclusions in a final chapter. The illustrations are in black and white.

In his own words, he has attempted to 'review the present position of exfoliative cytology both from the technical laboratory aspect and from the point of view of its practical value to clinical work based on the experience of running a large cytology department both for hospital patients and for the general population of the area'.

Unfortunately the reviewer believes the author has fallen victim to his own ambition—there is much that is useful and of interest, but the monograph cannot be recommended as a standard text for the tyro in exfoliative cytological practice.

M. LEVENE

The Platelet Edited by K. M. Brinkhous, R. W. Shermer, and F. K. Mostofi. International Academy of Pathology Monograph by 40 authors. (Pp. xiii + 420;

illustrated. £12.00.) Baltimore: Williams and Wilkins Co. Edinburgh: Churchill Livingstone. 1972.

This volume is one of the monographs on pathology of the International Academy of Pathology. The main editor is a distinguished pathologist and an authority on platelet research. The chapters, all by different authors, are expansions of lectures given at a course entitled 'Pathologic physiology and anatomy of the platelet'. The individual chapters are all quite short and cover almost every aspect of the subject, from the origin of the platelets as cytoplasmic fragments of the megakaryocyte to the involvement of platelets in disease and the clinical evaluation of platelet function. The quality of the chapters varies considerably, both in writing and in content selection; this is inevitable in such a collection. Some contributions, particularly on more fundamental aspects, do not relate confirmed observations on platelets sufficiently to analogous observations made with other types of cell.

Recognition of the involvement of platelets in several important clinical conditions, eg, in homograft rejection, has led to a remarkable acceleration in research on platelets and understanding of their functioning. This in turn has caused the appearance in the last few years of many books and review articles on platelets, most of which are more specialized and less comprehensive than this one. Therefore, this volume is likely to appeal less to specialists than to general, particularly clinical, pathologists, as well as to haematologists and to those concerned with medical and surgical problems of haemostasis and blood transfusion. The book is as up to date as can be expected (the publication date is 1971); it is well produced with clear illustrations and has a comprehensive index.

G. V. R. BORN

Glycoproteins of Blood Cells and Plasma Edited by G. A. Jamieson and Tibor J. Greenwalt. (Pp. xii + 307; illustrated. £9.00.) Philadelphia and Toronto: J. B. Lippincott Co. Oxford and Edinburgh: Blackwell Scientific Publications. 1971.

Modern methods of purification and identification have put the chemistry, biochemistry, and chemical pathology of the glycoproteins on a sound basis. This volume records the Proceedings of the

Fourth Annual Red Cross Scientific Symposium dedicated to Professor Newberger, who has continued to make major contributions to the subject since he isolated a pure glycopeptide from albumin more than 30 years ago.

Although the Symposium was mainly concerned with glycoproteins as they occur in the blood cells, and, among other topics considered, immunoglobulin structure, surface membranes, and glycopeptide hormones other glycoproteins also received attention, eg, those of epithelial secretions, connective tissue interfibrillary matrix, and collagen. Not surprisingly, this volume will, therefore, be of interest to a wide group of workers including haematologists, immunologists, oncologists, endocrinologists, virologists, and biochemists. It defines present knowledge as well as lack of knowledge of these important compounds. The publication within one year of the contributions of experts and their discussions make the volume a useful, up-to-date account of the subject.

C. H. GRANT

The Pneumonias By Hobart M. Reinhard. (Pp. + 215; 29 figures; 14 tables. £7.50.) United Kingdom, Europe, and British Commonwealth: Adam Hilger Ltd. Rest of the world: Warren H. Green, Inc., St. Louis, Missouri. 1972.

This book gives a comprehensive list of agents causing consolidation of the lung. A brief description is given of the nature of the agent, its laboratory isolation and confirmation, the clinical features, and treatment.

Sadly the problems associated with the pneumonias are almost totally omitted. For a whole book devoted to the subject of pneumonia, there is only passing reference to pathogenesis or to discussion upon the various ways in which invading organisms may initiate 'pneumonic' inflammation in the lung. The practical aspects of the problems of managing the acutely ill patient with a pneumonia are also largely ignored. There is, for instance, no informed discussion on the choice of antibiotics before bacterial identification, or the criteria for assuming that the sputum culture results reported from the laboratory, do or do not reflect the causal agent. The chapter on allergic pneumonias is particularly disappointing in that its excessive brevity has resulted in a number of misleading statements.

Short books can be extremely valuable to the practising clinician, but their content has to be selected carefully if they are to remain useful and this volume has not really provided the clinical perspective so important for a publication of this type.

M. TURNER WARWICK

Microbial Pathogenicity in Man and Animals Symposium 22 of the Society for General Microbiology. Edited by H. Smith and J. H. Pearce. (Pp. 451; illustrated. £6.20.) London: Cambridge University Press. 1972.

Published simultaneously with the Symposium, this book consists of the written papers of 18 contributors. The main attention is given to five aspects of the subject, namely, the ability of microbes to enter the host by surviving on and penetrating mucous membranes, their ability to grow within the host, their ability to counteract host defence mechanisms, and the reasons for host and tissue specificity.

The tone is set by the first chapter, that after reminding the reader that in many countries public health measures, unaided by sophisticated biochemical research, have controlled the worst effects of bacterial disease, goes on to draw attention to the difficulties of investigating the determinants of pathogenicity, and to point out how much there is still to discover. The subsequent chapters give a detailed and up-to-date account of the large amount of work going on in this field, and will be welcomed not only for their content but as a valuable source of references.

R. A. SHOOTER

Immunobiology: Current Knowledge of Basic Concepts and Their Clinical Applications Edited by R. A. Good and D. W. Fisher. (Pp. xii + 305; illustrated. £5.20.) Stamford, Connecticut: Sinauer Associates Inc. Distributed in United Kingdom by W. H. Freeman and Co. Ltd, Reading. 1971.

Textbooks of immunology are almost as many and diverse as immune reactions themselves. *Immunobiology* by R. A. Good and D. W. Fisher is distinguished by the anecdotal flavouring of the text and by the profusion of illustrations. These make it supremely readable — although perhaps that is not quite the right word. We know that the modern scientist must be not only literate but numerate: to understand the hieroglyphs and anaglyphs

of biology he must be something else—glyphate, perhaps.

The figure illustrates the probable effect of reading this book.

H. E. M. KAY

Clinical Chemistry in Diagnosis and Treatment By Joan F. Zilva and P. R. Pannall. (Pp. xxvi + 430; 39 figures; 26 tables. £2.50.) London: Lloyd-Luke (Medical Books) Ltd. 1971.

This is one of the best books on elementary clinical chemistry that I have met. The preface states: 'It is written for those who learn best if they understand what they are learning'; the authors have done their best to set out explanations for the facts when these are known and most of us would feel that to understand what one is learning this is essential. Wisely, no attempt is made to be exhaustive and this has compelled the authors to be selective in the material they have put out: no two people will ever agree on what ought to be omitted but your reviewer would find it hard to fault the selections made. At £2.50 the book is cheap by modern book price standards. It can be wholeheartedly recommended for medical students and

for junior medical staff and many of their seniors will find parts which are both helpful and profitable for them.

ARTHUR JORDAN

Laboratory Tests in Diagnosis and Investigation of Endocrine Function 2nd edition. Edited by Roberto F. Escamilla. (Pp. xvii + 456; 107 figures; 85 tables. £11.75.) Philadelphia: F. A. Davis Company. Oxford: Blackwell Scientific Publications. 1971.

This book is described in the preface as a second edition (the first was in 1962); in reality it represents publication of the contributions to a postgraduate course held in San Francisco. Of the 33 contributors, 22 are from San Francisco and another seven from other parts of California, so the book may be regarded as giving a very representative view of the pattern of clinical endocrinology in San Francisco. The topics covered are pituitary, thyroid, parathyroid, pancreatic islets, adrenals, testes, and the ovaries. The plan of the course provides an introductory chapter to each topic written by a clinician in which he outlines the tests now in use in clinical practice; this is followed by chapters by different scientific investigators reporting their own work, indicating the individual fields of interest of the subject and trying to forecast the future. This last aspect needs to be viewed with caution.

It is difficult to know at what kind of audience the book is aimed. The level would be elementary for the hospital chemical pathologist and the clinical aspects are too elementary for the clinician. It is perhaps best suited to registrars in chemical pathology but for this it is too expensive. The individual chapters are necessarily of varying quality but, in terms of the apparent objectives of the book, competently done. The chapter by M. M. Grumbach on sex chromosomes is particularly capable.

On the whole the book is not recommended.

ARTHUR JORDAN

Biomedical Technology in Hospital Diagnosis Edited by Alex. T. Elder and Desmond W. Neill. (Pp. xxvi + 503; illustrated. £17.00.) Oxford: Pergamon Press. 1972.

Lord Zuckerman in the foreword of this book stresses the importance of bio-