The introductory chapters on fibrinogen and the plasminogen-plasmin system and on physiology are well presented, but the chapter on 'Hyperfibrinolysis and fibrinolytic haemorrhages' makes heavy weather in attempting to clarify something that cannot yet be so disciplined. There are 30 pages on fibrinolytic therapy and here failure to extract the good from the bad is a particular disadvantage—the list of lytic agents and activators is certainly comprehensive.

This book is intended as a source of specialized information; as such it can be thoroughly recommended and research laboratories should apply for a copy while the generous offer by the publishers (a firm of Finnish pharmaceutical manufacturers) remains open. But anyone wishing to learn about fibrinolysis from scratch must seek elsewhere.

J. L. STAFFORD

A Short Synopsis of Human Protozoology and Helminthology 2nd ed. By L. R. S. Macfarlane. (Pp. 259; 61 figures. £2·50) Edinburgh and London: E. and S. Livingstone. 1970.

The second edition of this useful volume has been called for and has been produced in workman-like style. The book grew out of notes used for teaching the Diploma in Tropical Medicine and Hygiene and the abbreviated style of writing is accounted for by this, but it is still acceptable in what is primarily a laboratory guide and reference manual.

The material is covered fully and is up to date; new aspects of parasitology are dealt with in considerable detail. An innovation in this edition is the introduction of brief references to drugs used in the treatment of parasitic infections. The wisdom of this step is open to doubt. Many would argue that instructions regarding therapy should either be in full or omitted altogether, for therapy unless properly carried out, can be against the patient's interests, may confuse the diagnosis, and make appropriate management in the future difficult or impossible.

As a guide to human protozoology and helminthology the book can be thoroughly recommended.

A. W. WOODRUFF

Clinical Acid-base Physiology By P. Kildeberg. (Pp. 228; 61 figures. £4·37½) Copenhagen and Baltimore: Scandinavian University Books. 1968.

This work is a monograph which sets out the results of the author's studies in the field of acid-base disorders in childhood, especially in premature infants; in addition to this the author attempts to give a comprehensive survey of the achievements of clinical acid-base physiology.

The whole field of these disturbances has been the subject of many studies in the paediatric field. There can be no questioning of the great need for a clear exposition of the underlying facts and principles set out with a simplification of terminology and an avoidance of abbreviations. Unfortunately, the present monograph observes neither of these prescriptions.

It may be a matter of regret that the present work can only be called confusing: it is often difficult to discern any guiding thread. For anybody already specialized in the field the author's results are obviously of interest and importance and the review of the literature, up to 1967, is very complete. Apart from these two facets the book is not to be recommended.

A. JORDAN

Clostridia of Wound Infection By A. T. Willis. (Pp. ix + 470; illustrated. £8.) London: Butterworths and Co. Ltd. 1969.

The author's aim, in a book addressed primarily to clinical bacteriologists, is to provide an up-to-date review of the clostridia of wound infection. An introductory chapter, mainly devoted to the discussion of nomenclature and classification, is followed by three long chapters on the main gas gangrene pathogens and four shorter ones on more doubtful pathogens or those likely to confuse the uninitiated. In all these accounts the author concentrates on the cultural characters and toxicology of the clostridia and more or less leaves metabolism to the biochemists. A chapter on anaerobic infections rather surprisingly includes a full account of *Clostridium welchii* food poisoning, but concentrates on the clinical pathology and management of gas gangrene and the less common clostridial infections. A final chapter is devoted to the clinical and laboratory aspects of tetanus.

The reference lists are remarkably comprehensive and take up virtually one third of the whole book. An unusual feature is the inclusion of long excerpts from papers in the literature. Many of these are apt original descriptions of interesting events or phenomena. Not every clinical bacteriologist, perhaps, would be very interested in, say, a half-page verbatim account of the local lesion produced by *Cl. histolyticum* in the rabbit!

The energetic author mentions that the book was prepared during a somewhat nomadic period of his life. This may explain a fair number of minor lapses in proof correcting, and writing of uneven quality that is occasionally hard to understand. A book that contains such a wealth of material from an acknowledged expert will certainly be used by clinical bacteriologists deserves a better final polish in these matters of detail and will doubtless be tidied up in another edition.

B. MOORE

Gynecological Vital Cytology By P. Stoll. (Pp. 81; 45 figures. $16·00; DM58·00.) Berlin. Heidelberg, and New York: Springer-Verlag. 1970.

This is a beautifully produced monograph, describing the use of phase-contrast and interference-contrast microscopy in the examination of unstained and unfixed gynaecological secretions, aspirations, and urine.

There are 15 pages of instructions, well and clearly translated into good English from the original German edition. The remaining 66 pages are fine black and white photographs of what can be seen.

The work is not intended for the practising pathologist, and the authors admit that they do not use the technique for searching smears for malignancy. It can, however, be recommended as a primer for anyone interested in glimpsing the vital dynamic world for which pressure of work rarely affords us enough time.

M. LEVENE

Biochemical Disorders in Human Disease 3rd ed. By R. H. S. Thompson and I. D. P. Wootton. (Pp. 875; 174 figures. £8.) London: J. and A. Churchill. 1970.

The heavy demands of clinicians on the laboratory services have led to an explosion of biochemical knowledge and have cast a heavy responsibility on editors and authors for revising at frequent intervals standard texts of such importance as biochemical disorders in human disease. To avoid extensive growth by accretion the editors have to strike a balance between

introducing new concepts of knowledge and omitting important but generally known information.

Since the publication of the second edition of this book in 1964, major advances have been made in our knowledge of the metabolic hormonal changes in diabetes, of the role of renin and angiotensin in hypertension, the roles of long acting thyroid stimulator and of free and protein-bound tri-iodothyronine and thyroxine in tlyroid disease, of the immunoglobulins, diseases of bone and connective tissue, as well as the ever increasing list of inborn errors of metabolism, such as amino acidaemias, lipidoses, and mucopolysaccharidoses to mention only a few. There is also the increased knowledge due to improved techniques such as immunoassay and gas liquid chromatography which have permitted more accurate characterization of the gastrointestinal peptide hormones and of the prostaglandins respectively.

The authors have met this formidable challenge well and although some individuals have not lengthened their contributions, many have found the increased information impossible to compress. The editors and press have dealt admirably with this difficulty by a careful reduction in the size of many of the tables and figures and by choosing a smaller print without decreasing legibility thereby enabling the present edition to be a few pages shorter than the earlier version.

New authors have been responsible for contributions on the diseases of the gastrointestinal tract, on the anaemias, on the glycogen storage diseases and galactosaemia, and on diabetes mellitus and hypoglycaemia; other authors are either unchanged or have collaborated with new coauthors, but there is a new chapter on the biochemistry of malignant disease. It would be invidious and impossible in a brief review to indicate the relative merits of the various contributions, which in general are of very high standard. The whole provides a substantial book which is not just a book of reference but is also eminently readable. It is probably too long for the average medical student but will be essential for the aspiring chemical pathologist or clinical biochemist as well as for the clinician interested in the metabolic diseases. Its excellence and modest price should ensure that it will be bought rather than borrowed. Some of the numerous references are as recent as 1969.

C. H. GRAY

Clinical Chemistry for the Small Hospital Laboratory By M. D. Reynolds. (Pp. 196. $9·75.) Springfield, Illinois: Charles C. Thomas. 1969.

This book is seemingly aimed at technicians working without adequate supervision in small hospitals and private laboratories that apparently still flourish in the USA and other parts of the world but are mercifully disappearing from the scene in Britain.

After a brief introduction covering 40 pages in which basic equipment such as blood pipettes and the elementary theory of colorimetry is described, there are 21 chapters giving 'best Mrs Beaton style cook-book methods' for measuring the clinical biochemistry 'top twenty'.

In most cases Dr Reynolds describes her own personal practice in the laboratory of a 48-bed general hospital in Vermont. In the main she uses prepacked commercial reagents and specifies the suppliers whose addresses are usefully given in the appendix. These are not generally represented in Britain and would dissuade me from recommending this book to British clinical biochemists; even if it were desirable in other respects. The book is beautifully produced and well written. The tragedy is not that a book published in 1969 should, for example, advocate the use of a commercial kit for measuring serum sodium 'chemically' (true only when a flame photometer is not available!) but that there is apparently a need for such a book in so highly a developed a country as the United States.

V. MARKS

Biochemistry for Medical Students 9th ed. By W. V. Thorpe, H. G. Bray, and S. P. James. (Pp. 512; illustrated. £3.) Oxford and Edinburgh: Blackwell Scientific Publications.

The appearance of a ninth edition of this well known book in a period of 32 years obviously indicates a continuing need for a book of this kind and the continuing popularity of this particular example. The book follows in general the line of previous editions and although the number of pages is slightly smaller the larger size of page is an improvement and gives a better display of diagrams and formulae.

The general standard of writing is very high and the subject coverage is certainly adequate for the average medical student. Indeed, if all medical students entering a clinical course were familiar with the contents of this book, it would simplify the task of teachers in chemical pathology very considerably. The standard of production is excellent and very few errors have been detected. However, on page 128 the wording suggests that thiouracil interferes with the action rather than with the synthesis of thyroid hormones and on page 205 figures 23 and 24 appear to be transposed.

The book can be confidently recommended to all medical students, both during their second year and for subsequent revision. It could also be read to advantage by all interested in metabolic medicine. By modern standards it represents extremely good value for money.

N. F. MACLAGAN

The Distribution of the Blood Groups in the United Kingdom By A. C. Kopeć. (Pp. xi + 146; illustrated. £8·50) London: Oxford University Press. 1970.

To the pathologist blood groups are extremely important because of their relationship to blood transfusion but, as will be seen in this book, they do have a much wider application.

The author derives her information from data made available by all British Regional Blood Transfusion Centres. Provided with more than half a million cards, one for each donor, Dr Kopeć has extracted the ABO and Rh groups for each individual as well as their current postal address. These findings she has assembled so that she knows the frequencies of ABO and Rh blood group in towns or postal districts, each of which contains at least 100 individuals. Those units containing less than 100 donors are combined with adjacent areas so that, in all, information is available from no less than 1,156 unit-areas.

In a large series of tables, ABO and Rh phenotype and gene frequencies are recorded for each of these 1,156 areas. The findings are then collected into each of the regions into which the British Transfusion Service is divided and each region is illustrated by a map showing where each individual area is situated. It follows therefore, that an immense amount of information is available.

Dr Kopeć's main aim has been to provide the facts, though she does discuss her findings in some detail. As would be expected, the increase in the O frequency accompanied by a fall in A as one goes