

tables' published in 1961 and in their recent book (1965) the latter authors admit that the classification of this genus 'is not well established'.

MARY BARBER

COMMON COLDS AND RELATED DISEASE By D. A. J. Tyrrell. (pp. 197; 49 figures. 42s.) London: 1965 Edward Arnold.

This is a new book and a companion volume for Professor Stuart-Harris's book on influenza. Dr. Tyrrell has set out to piece together a mass of new data on the common cold and related respiratory infections and in doing so has achieved a nice balance of material that will be found useful to both clinician and laboratory worker. In the first six chapters, Dr. Tyrrell discusses the clinical syndrome, epidemiology, and volunteer studies on the common cold and methods for studying respiratory viruses in the laboratory. Subsequent chapters are devoted to the myxoviruses, adenoviruses, reoviruses and the common cold or rhinoviruses. A useful chapter is included on prophylaxis and treatment. The book contains numerous charts and illustrations, all of which are extremely well produced. This is a welcome and useful addition to textbooks outlining modern trends in virology and is thoroughly recommended to both clinicians and virologists.

J. A. DUDGEON

INFLUENZA AND OTHER VIRUS INFECTIONS OF THE RESPIRATORY TRACT, 2nd ED. By C. H. Stuart-Harris, with a foreword by Sir Christopher Andrewes (Pp. vii + 248; 25 tables. 45s.) London: Edward Arnold.

The first edition of Professor Stuart-Harris's monograph, published in 1953, described four main clinical syndromes associated with acute respiratory infections—influenza, the common cold, atypical pneumonia, and febrile catarrh. At that time, apart from influenza, our knowledge of the aetiology of these conditions depended on human volunteer experiments. Now, eleven years later, this monograph has had to be entirely rewritten, such has been the advances in our knowledge of respiratory viruses. Many new viruses have been discovered, the adenoviruses, parainfluenza viruses, and respiratory syncytial, all of which are fully discussed in this new edition together with methods of laboratory diagnosis by tissue culture and serology. The account of the clinical symptoms produced by these numerous causative agents are excellent. It is well documented and with good illustrations. Two chapters on treatment and prevention put the problem of chemotherapy and immunization into clear perspective. An amazing amount of fresh information has been fitted into this new edition and it is thoroughly recommended for all those who wish to keep abreast of these new developments.

J. A. DUDGEON

DYNAMIC STUDIES OF METABOLIC BONE DISEASE. Edited by O. H. Pearson and G. F. Joplin. (viii + 229; illustrated 50s.) Oxford: 1964 Blackwell Scientific Publications.

This slim but attractive volume contains the proceedings of a symposium which was held at Western Reserve

University, U.S.A., in March 1963 on four related topics. The first section deals with the interpretation of calcium isotope studies, the second with osteoporosis, the third with osteomalacia and Paget's disease, and the fourth with the excretion of hydroxyproline.

For the average clinical pathologist the approach will be somewhat esoteric since the papers deal with some of the most controversial aspects of what is in itself a highly controversial field. On the other hand, this book must be considered to be essential reading for anyone engaged in this field or proposing to enter it. Bauer's introductory review on tracer techniques is useful and straightforward. Heaney's contribution on the interpretation of calcium kinetic data is also admirable and so is his description of his studies of disuse osteoporosis. Lafferty and Pearson describe again their controversial procedures for the measurement of bone resorption and present some remarkable results in vitamin-D resistant rickets. Arnold's work on the quantitation of bone mineralization in osteoporosis is admirable and is followed by Urist's description of accelerated aging and premature death of bone cells in osteoporosis. Finally Klein and Curtiss review the use of urinary hydroxyproline as an index of bone metabolism but seem reluctant to accept the general view that this reflects collagen breakdown rather than collagen synthesis.

This is a useful contribution to a difficult and rapidly changing field. The individual papers still remain fresh although written two years ago. The book is profusely illustrated and perhaps this and its somewhat limited appeal may explain its relatively high cost.

B. E. C. NORDIN

ADVANCES IN METABOLIC DISORDERS, vol 1, edited by R. Levine and R. Luft. (Pp. xxii + 366; illustrated. 86s.) New York and London: Academic Press. 1964.

This is the first volume of a new series primarily of importance to chemical pathologists but not unimportant to pathologists in other branches and to physicians. Eight subjects are treated: glycogen storage disease, the parathyroids, mitochondrial respiratory control, osteoporosis, basal metabolic rate and thyroid hormones, insulin antagonists and inhibitors, aldosterone, and folic acid deficiency and its interrelationship with vitamin B₁₂ metabolism. The chapters on the parathyroids and on osteoporosis both cover well-trodden ground and the chapter on mitochondrial respiratory control contains much that is little more than hypothesis to explain well-established facts. The remaining chapters can fairly be described as excellent reviews of their particular topics.

Books and journals have multiplied so extensively that one is reluctant to say that no one can afford to be without a given book, but it may apply to this one.

ARTHUR JORDAN

TECHNIQUES IN CHEMICAL PATHOLOGY By G. A. Cheyne. (Pp. vii + 397; 14 plates; 24 figures. 42s.) Oxford: Blackwell Scientific Publications. 1964.

This book, stated to be primarily aimed at technicians, taking the examinations of the Institute of Medical Laboratory Technology, consists of two parts. The first, occupying almost a third of the book, is devoted to

background chemistry such as 'a refresher course in inorganic chemistry', the balance, volumetric standards, and to a description of some instruments and general techniques used in biochemical laboratories. There is much useful material in this though the range covered in the space allotted leads at times to undue brevity.

The remainder of the book is devoted to a description of techniques used for determining constituents of body fluids. For the most part these are well selected familiar standard methods widely used. In several cases only one technique is given although more than one is in common use. Sometimes the method chosen is not the best. Thus the Somogyi iodometric method, the only one given for serum amylase, is inferior to techniques based on the iodometric method of Huggins and Russel. The technique of Broughton for barbiturates is much superior to the cobalt one given. There are also a number of substances for which no technique is given when one might have expected one. Considering its importance in connexion with prolonged apnoea following scoline, it is surprising to find the determination of serum cholinesterase dismissed as of little value because it is not required as a liver function test; consequently no technique is given.

Brief interpretations are included but are rather short and too general. These contain some errors. Thus on p. 201 it is said that serum globulin falls with liver impairment whereas it usually rises while albumin falls. On p. 205 thymol turbidity is said to be increased in multiple myeloma; it is more often normal. It may be noted that on p. 229 42% hydrated sodium sulphite *i.e.*, 21% anhydrous, is used to precipitate globulins whereas on p. 235 in the biuret method 28% anhydrous sulphite is used. The latter corresponds to the salt concentrations now accepted as giving the most satisfactory separation.

The book is said in the Preface to fill a notable gap between books written for clinicians and giving a minimum of working details and many small books of collections of technical methods. It is difficult to agree with this. There are available both practical books with fewer techniques than this and with a wider range. There are also books with a similar sort of mixture of background material and techniques aimed primarily at technicians. With these latter the present book compares well. It is pleasantly and compactly written. It contains a good deal but by no means all of the knowledge, not even of the techniques, technicians require for their qualifying examination in this subject.

H. VARLEY

COLORIMETERS WITH FLOW THROUGH CELLS A critical assessment of 4 instruments. (Pp. 54; 12 figures; 14 tables. 13s. 6d.) Association of Clinical Biochemists, London. 1965.

This is an excellent summary of the performance of four flow-through colorimeters used or likely to be used in routine laboratories. This is the first of a series of scientific reports to be produced by the Association of Clinical Biochemists. It is easy to read and could be followed by a person with little scientific experience. This is a most valuable contribution and I look forward to other reports by the scientific committee of the Association. This

should be in the hands of every laboratory which takes its biochemistry seriously.

NICHOLAS H. MARTIN

NEW BIOCHEMICAL SEPARATIONS Edited by A. T. James and L. J. Morris (Pp. ix + 424; 84s.) London:Van Nostrand. 1964.

This book, containing articles by authors from many countries, is intended primarily for research biochemists. Gas-liquid chromatography and thin-layer chromatography predominate with five papers each of the 17 in the book. In the case of both of these techniques, chapters are devoted to steroids, amino-acids, and bile acids. Gel filtration techniques for proteins, peptides and amino-acids, and for polysaccharides are discussed and three chapters consider techniques for the separation of lipids. The object of the book is to provide workers with the very latest developments. This it does well with adequate references and much practical detail. It is thus a book to be consulted by those with problems in the fields dealt with.

H. VARLEY

STEROID ANALYSIS BY GAS LIQUID CHROMATOGRAPHY By A. A. Patti and A. A. Stein (Pp. viii + 95. 30 tables \$5.50). Springfield, Illinois: Charles C. Thomas, 1964.

This monograph will only be of value to analysts with experience of gas liquid chromatography who will recognize the limitations of the work reported and know of the literature not reported. The essential practical preliminaries are either neglected, as with column, paper, and thin-layer chromatography, inferring naively that they are not necessary, or are presented in out-of-date form, as with conjugate hydrolysis and steroid extraction with solvents. In addition, the varieties of adrenal hyperplasia are confused, steroid nomenclature is haphazard, and the proof reading inadequate.

R. W. H. EDWARDS

FIBRINOLYSE ET PATHOLOGIE VASCULAIRE By J. Salmon (Pp. 219; 47 figures.) Brussels: Editions Alsacia. 1964.

Because of the length of time involved in their preparation, monographs on subjects developing as rapidly as fibrinolysis soon become dated. This 200 page review, published from Brussels, suffers this defect because it refers largely to work between 1957 and 1962. Written in French, it nonetheless provides a useful bibliography, including a number of continental references not readily available to English-speaking workers.

Dr. Salmon's principal interests span the four sections into which he has divided this book: a general discussion on the physiological significance of fibrinolysis, comments upon the role of fibrinolytic enzymes in thrombocytopenic purpura, the application of immunoelectrophoretic techniques to the study of the fibrinolytic system and, finally, the place of fibrinolysis in the treatment of vascular lesions.

With frequent reference to animal experimentation the author attempts to reconcile platelet function, vascular fragility, and plasmin activity in the causation of purpura. In the rat, reduction of platelets alone, or fibrinolytic activation alone, failed to cause purpura which, however, became manifest when both occurred together. The use is thus advocated of fibrinolytic inhibi-