attempted to bring it up to date by the addition of many footnotes. Whether the completed work is too long must be a matter of opinion, but there is no doubt it is very expensive.

In the present reviewer's opinion the text could have been shortened in many places with advantage and expanded in others. For instance, there are many extensive (and expensive) tables of blood counts and other data in the chapters (by Dr. E. Stransky) on the blood picture in infancy and childhood, and Dr. Baar's own account of the discrepancies in the calculation of red-cell life-span, based on measurements of reticulocyte ripening times and those based on Ashby or ^{51}Cr survival studies, and his account of the effect of heat on red cells, could have been drastically cut. In their place one would have welcomed more discussion on the practical aspects of the treatment of acute leukaemia as it occurs in childhood, and of the value of fresh blood or platelet transfusions in aplastic anaemia.

The authors of books on blood diseases are faced with some quite difficult decisions. These centre around the scope or breadth of the book; whether, for instance, Hodgkin's disease should be included and if so whether its aetiology should be discussed (Dr. Baar does both); the balance between clinical and pathological interest and the depth of treatment. In writing a book on blood diseases in childhood, there is the additional difficulty of deciding what to leave in and what to omit. Should, for instance, giant follicular lymphadenopathy and multiple myeloma, which are almost unknown in childhood, be included, and what about haemorrhagic thrombocythaemia? Dr. Baar includes all three disorders, the last simply because in one case of thrombocytopenic purpura he had noted a rise in platelet count to over 1 million as a result of treatment with phenylhydrazine.

The reviewer finds it impossible to write about this book with enthusiasm. It contains, however, a great deal of information and extensive bibliographies at the end of each section, and the historical approach to each subject is welcome. But it has to be added that the text contains far more mis-spellings, particularly of authors' names, and other errors than it should.

J. C. DACIE

THE CONTACT PHASE OF BLOOD COAGULATION By H. L. Nossel. (Pp. xv + 160; 37 figures: 32 tables. 35s.) Oxford: Blackwell Scientific Publications. 1964.

This is a delightful little book. The author has explored the mysteries of the initial or contact phase of blood coagulation in great detail, and introduces the reader to his ideas and the experiments he has used to investigate, what is to haematologists, a puzzling subject.

The reader is first gently introduced to the complexities of the subject, but most of the book is taken up with a description of the many experiments and techniques used by the author.

The subject is at first sight academic but the practical implications of the results obtained becomes apparent as one reads on. A study of this phase of blood coagulation not only relates to the hypocoagulant state but provides information that may be important to research into the problems of thrombosis.

Each chapter requires and merits meticulous study, as the text contains several confusing terms, *e.g.*, Celite 6 exhausted plasma. On reflection, however, it is difficult to see how this use of compound terms could have been avoided. This book should be read by everyone who has an interest in academic and diagnostic problems related to blood coagulation and thrombosis; the expert will find this book refreshing and the tyro should be stimulated to fresh efforts.

ALAN SHARP

BIOLOGICAL ASPECTS OF OCCLUSIVE VASCULAR DISEASE Edited by D. G. Chalmers and G. A. Gresham. (Pp. xiv + 420; illustrated. 120s.) Cambridge University Press. 1964.

This beautifully produced volume sets out the papers which were presented at a Cambridge postgraduate course in March 1962. The editors have done their work efficiently, clearing away the trivialities from the discussions so that these now provide pithy addenda to the set papers.

A remarkably wide field is covered, extending from the fundamentals of micro-structure, histochemistry, tissue metabolism, and the biophysics of blood flow, through the physio-pathology of coagulation, thrombosis, and fibrinolysis to the anatomy of human, animal, and experimental atherosclerosis. Finally, a section on clinical research ends with a somewhat philosophical discussion of the part the practising clinician can play in advancing the subject.

Amongst this wealth of material histopathologists will perhaps enjoy most the electron microscopy of the intima by French, the histochemical papers by Helen Muir (mucopolysaccharides), Curran (collagen formation), and Adams (lipids and enzymes), while haematologists will appreciate the very full discussion of the reactions of platelets in relation to thrombosis in the papers by Poole, Mitchell, McDonald, Sharp, and Hellem. Perhaps the papers which strike the most original notes are those of Bangham on surface reactions in relation to coagulation, and Scott Blair on the physics of blood flow in small vessels. The papers serve to remind readers that many of the problems of vascular pathology require the collaboration of physicists in their studies.

T. CRAWFORD

STRUCTURE AND METABOLISM OF CORTICOSTEROIDS Edited by Jorge R. Pasqualini and Max F. Jayle. (Pp. x + 168; illustrated.) London and New York: Academic Press. 1964.

This volume represents the papers read at the symposium held in Paris in July 1963. This will be of special interest to research workers active in this field. The book is divided into three sections dealing with intermediate structure, with assay of intermediates and conjugation, and with metabolism of the corticosteroids in disease states. James and Landon describe the effect of dexamethasone on blood cortisol levels. Cost describes what appears to be the new familial salt-losing defect of C-18 block, while Brooks gives data on the cortisol 17KGS ratios differentiating Cushing's syndrome from 'normal'

fat boys, a valuable point in differentiating a difficult clinical group. This is a book for the specialist.

NICHOLAS MARTIN

FLUORESCENT PROTEIN TRACING 2nd Ed. Edited by R. C. Nairn. (Pp. xv + 335; illustrated. 45s.) Edinburgh and London: Livingstone. 1964.

It is not surprising that a second edition of this book should have been called for so soon after the first. It is admirable that it has actually appeared. The new edition is only 55 pages longer than the old and it is a measure of both the growth of the subject and the thoroughness of the revision that nearly half of the increase is due to the list of additional references quoted.

The general structure of the book is unchanged. The first six chapters give the physical, chemical, and immunological principles of the methods together with practical details. Unfortunately the practical details tend to be buried in the text and take some digging out. This criticism has been anticipated by the authors who say they have not included a synopsis of technical procedures because of the dangers of rule of thumb application; your reviewer disagrees. It is the duty of authors to present their material as clearly as possible. The intelligent reader would use a synopsis intelligently. The unintelligent should not be using the method at all.

The second half of the book is a valuable comprehensive review of the results of applying immunofluorescence methods to specialized fields of microbiology and immunology.

All those using immunofluorescence methods should possess this book. Many others should read it.

A. A. GLYN

IMMUNOELECTROPHORETIC ANALYSIS Edited by P. Grabar and P. Burtin. (Pp. xii + 302; 99 figures; 21 tables. 80s.) London: Elsevier. 1964.

A book on immunoelectrophoretic analysis by P. Grabar and P. Burtin must command the interest of everyone using this valuable technique, more especially because the editors themselves have written 11 of the chapters and collaborated in the twelfth. Though they have taken the opportunity in the preparation of this, the first English edition, of introducing some textural revision, readers should realize that the book is, in essence, that published in French in 1960. It does not contain, therefore, any reference to valuable technical modifications such as those introduced by Feinberg, Goldsmith, and Kekwick (1964) nor does it adopt the suggested nomenclature of the World Health Organization for γ -globulins.

Part I deals in sufficient detail with the techniques of immunoelectrophoresis using agar gel to guide a competent research worker with no previous experience. It seems unfortunate that the editors have not seen fit, in this section, to include a chapter on the preparation of satisfactory antisera. At the Pasteur Institute they have had unrivalled experience of the preparation of such sera.

Part II, the main bulk of the book, deals with the results obtained in the analysis of normal human plasma, of plasma fractions, and of anomalies which occur in a wide range of diseases associated with serum protein derangement. The authors do not claim that

these chapters are comprehensive but it does seem unfortunate that in chapter 11, the principal abnormal globulin component in Waldenström's macroglobulin aemia is stated to be the 12-17S globulin when it is now generally recognized that this is the 19S globulin, and that in chapter 13 the flocculation tests are dealt with in such a sketchy manner with no reference whatsoever to the fundamental work of MacLagan and Bunn (1947).

Part III gives a series of brief reviews of information which the technique has yielded in studies of the protein pattern of other biological fluids, such as human milk and colostrum, cerebrospinal fluid and seminal fluid. It also includes a brief section on the applications of immunoelectrophoresis to the study of the formed elements of the blood. It is hoped that in further editions the information which immunoelectrophoresis yields on tissue protein will be considerably expanded.

It would be churlish to denigrate a book so beautifully produced and so full of information but it does seem to the reviewer that it is ripe for a more comprehensive revision in the light of new work in the field and new concepts regarding the serum proteins that have developed in the last decade.

NICHOLAS MARTIN

CELLULAR INJURY Ciba Symposium. Edited by A. V. de Reuck and Julie Knight. (xi + 403; 81 figures. 60s.) London: Churchill. 1964.

It was fitting that the Ciba Foundation should arrange an international symposium on cellular injury in the year of Sir Roy Cameron's retirement from University College Hospital and that he himself should chair the meeting. The measure of Sir Roy Cameron's contribution to the topic is indicated by the fact that of the 19 chief speakers eight are former members of his department.

The volume follows the customary Ciba pattern of series of communications dealing with various aspects of the main topic, interlarded with lively discussion. Subjects dealt with include alkylation of cell components, the cytotoxicity of leucocidin, hepatic poisons, ionic shift, peroxidation of lipids, folic acid antagonists, corticosteroids, viruses, dietary deficiency, and lysosomes. Additional papers were read on endogenous inflammatory mechanisms, the effect on living tissue and the classification of dead and dying cells, cell injury in the newborn, injury of cell membranes, and controlled degeneration during development.

All the speakers and those taking part in the discussion are active workers in their fields and the volume provides a readable and reliable guide to recent work in the field of cellular pathology, much of which will be new to the majority of readers. Where the text requires it, figures and photographic plates are included, the majority of the latter being electromicrographs, surely a sign of the times. A useful index is provided.

W. G. SPECTOR

BOOK RECEIVED

(Review in a later issue is not precluded by notice here of books recently received.)

ACTION OSTEOGENETIQUE DE LA GREFFE DE MUQUEUSE VESICALE By R. Dozin. (Pp. 118; 30 figures) Brussels: Editions Arsacia S.A. 1964.