Book reviews

Contact Lens Practice: Hard and Flexible Lenses. By R. B. MANDELL, 2nd ed. 1974. Pp. 819, figs, tables, refs. Thomas, Springfield, Illinois (\$32.50)

A book that has been reprinted five times in its first edition has obviously filled a need.

The 2nd edition of Professor Mandell's book has increased in size, but most of this increase is taken by new chapters on flexible lenses. Contributors include seven American optometrists, an American ophthalmologist Dr Antonio Gusset who describes the therapeutic use of soft lenses, and gratifyingly Professor Robert Fletcher of the City University London who gives an account of scleral hard lenses.

The book is described as a contact lens fitting guide for practising ophthalmologists and optometrists and a comprehensive guide for students. It achieves this aim, is well written and easily readable. More information about the vitally important water content of continuously worn soft lenses is needed.

Excellent printed, bound and illustrated, this book represents good value in dollars although the sinking pound makes it more expensive for UK purchasers.

M. O'RIORDAN

Contact Lens Practice: Visual, Therapeutic and Prosthetic. Pp. 368, 382 figs (18 colour plates), tables, refs. 1975. Baillière Tindall, London (£19.50)

The arrival of the first edition of *Contact Lens Practice* is an event keenly awaited by all those with an interest in this field. There can be no disappointments since this book is a masterly production and Montague Ruben and his contributors have written a balanced comprehensive text covering all aspects of contact lens practice. It contains a wealth of information and the up-to-date knowledge will prove useful to the established contact lens practitioner and the novice alike.

The book consists of 15 clearly written chapters, each with an extensive bibliography. In addition a useful appendix and a comprehensive index have been included.

The author begins with an interesting summary of the history and evolution of contact lenses. This chapter is followed by one dealing with indications for contact lens wear. All the principles appertaining to the management of therapeutic cases with contact lenses are discussed. An exhaustive list of specific diseases, treatable with contact lenses could have been included with benefit, even though they are discussed in a later chapter.

The next chapter deals with tears, and with certain aspects of the physiology, anatomy, and pathology of the cornea, conjunctiva, and ocular adnexa, of immediate concern to contact lens practitioners. This discussion,

with many photomicrographs, allows an easy understanding of these relevant topics. The following chapter provides concise basic information on optics in relation to contact lenses. Useful nomograms have been included, and formulae relevant to contact lens work explained. The succeeding chapter deals both with physical chemistry pertinent to contact lenses and all materials encountered in contact lens practice.

Accurate measurement of the corneal curvature is essential for correct lens fitting and the next two chapters cover this topic thoroughly. The following few chapters deal extensively with the fitting of corneal, scleral, and soft lenses; patient management; intolerance and eye disease resulting from contact lens wear.

Special diseases for which contact lenses are indicated are discussed in detail; these diseases which require special consideration when fitting lenses, include keratoconus, aphakia, bullous keratopathy, postkeratoplasty, dry eyes and tear anomalies. The chapter on manufacturing techniques is useful for the contact lens practitioner since he should be aware of the limitations imposed by manufacturing techniques. The final chapter deals fully with ocular cosmetic and prosthetic appliances.

It is a difficult task to produce a work of this quality, when the field is advancing rapidly and when there exists a wide range of techniques and opinions. However, the author has succeeded admirably and it is difficult to find fault with this book. I would have preferred a chapter to deal specifically with soft contact lenses, although all the relevant and current information in this important development is covered, albeit, distributed in various chapters. Some illustrations and plates are without reference in the text but they are all relevant and self-explanatory.

This textbook is essential reading for all those who work with hard or soft contact lenses. It is likely to become the standard text for reference and study in this field.

R. DANIEL

The Diagnosis and Treatment of Cerebral Arterial Disease of Extracranial Origin. Edited by R. D. FINE. 1974. Pp. 203, figs, tables, refs. Australasia Medical Publishing, Glebe, NSW (\$A15.00)

This book is concerned with embolism and carotid and vertebrobasilar disease in relation to their effects upon the cerebral circulation. It opens with concise accounts of cerebral vascular anatomy and physiology, and describes how the latter may be disturbed by disease. The mechanisms of ischaemic episodes are thoroughly discussed together with their clinical manifestations and how to investigate them.

The chapter on ophthalmic aspects of carotid and vertebrobasilar disease will be of particular interest.

The illustrations are unusually good and the references selective and well chosen. The typography is, however, somewhat faint and as some sections are in very small type it is not easy to read.

JOHN MARSHALL

Differential Diagnosis of Intraocular Tumors: A Stereoscopic Presentation. By J. D. M. GASS. 1974. Pp. 371, figs. Mosby, St Louis; Kimpton, London (£34.45)

The series of American ophthalmological textbooks, which is being produced to provide a stereoscopic presentation of different aspects of the subject, has been greatly enhanced by the volume on the differential diagnosis of intraocular tumours under the authorship of Dr Donald Gass. As one of the pioneers of fluorescein angiography he has been able to associate clinical appearances, fluorescein studies, and the pathological findings in such a way that the reader cannot but achieve an excellent working knowledge of the problem.

The author's comment in the preface upon the indication of statistics at the Armed Forces Institute of Pathology that, of every five eyes with clear media enucleated for malignant melanoma, one proved to have an alternative pathological diagnosis, is a timely reminder of the importance of studying intraocular swellings in all their aspects.

JAMES R. HUDSON

Diplopia. By ROBERT A. CRONE. 1973. Pp. 488, figs, bibl. Excerpta Medica, Amsterdam (approx. \$60)

This excellent book deals in considerable depth not only with anomalies of binocular vision and disturbances of ocular motility but also with the physiology and anatomy of the development of binocular vision based on evolution and including the kinematics and control of eye movements.

The clinical problems are extensively illustrated by well-documented details relating to a large number of patients personally examined and for the most part treated by the author himself all of which will be of considerable interest to the practising ophthalmologist.

The division of each page into two parallel sets of print is attractive and makes for easy reading. The case photographs are clear and so are the fields of binocular fixation. The simplified Hess charts are for the most part adequate except where they are only reproduced in a cruciform manner as in Case 12.33 page 267 which does not sufficiently illustrate the deviation.

The book covers most aspects of binocular anomalies of all types with special reference to ocular palsies. There is an excellent chapter on orbital lesions causing diplopia in which is included diplopia after operations for retinal separation.

The retraction syndrome is well described and it is interesting to read that the author considers that 'anatomical abnormalities predominate in some cases and paradoxical innervations in others', in connexion with which he cites a case in which the abducent nerve was missing and the external rectus was supplied by a branch of the third cranial nerve.

The chapter on diseases of the ocular muscles including dysthyroid ophthalmopathy is excellent.

Dr Crone has included a most useful bibliography with some 1580 references but the subject index is short and not really adequate if the reader wishes to refer quickly to a particular topic.

The emphasis throughout the book is on clinical examination and diagnosis rather than on detailed methods of treatment, although the general principles of therapy are clearly stated.

There is very little reference to the problems relating to young infants suffering from squint nor of the special methods of assessment of their visual function.

Some of the most interesting material is to be found in the last three chapters which deal with convergence disturbances and diplopia of supranuclear origin, diplopia resulting from acquired disturbances of fusion, and uniocular diplopia.

This is certainly a book which should be read by all ophthalmologists interested in neuro-ophthalmology as well as those who are primarily concerned with the problems of strabismus.

T. KEITH LYLE

The Eye (Comparative Physiology) Vol. 5. Edited by H. DAVSON and L. T. GRAHAM. 1974. Pp. 528, figs, tables, refs. Academic Press, New York (£21.60)

This is the first of two volumes on this subject. The book is planned to allow the authors to discuss specific types and is, therefore, not a generalized account. Such an approach has the advantage of making the book interesting and readable although the relationships of some of the topics to human physiology are necessarily obscure on occasion.

The first chapter deals with the vascular supply of the eye. The wide variety of vascular arrangements to ensure that the optic nerve and retina receive adequate blood supply are discussed, including the blood supply of the optic nerve in man. The comparative aspects of the intraocular fluids are discussed in the second chapter, and the extensive tables will be of value to workers in this field.

The third chapter deals with the authors' views concerning the mechanism of aqueous outflow based on electron-microscopic appearances. Intermittent vacuolar transcellular pores are considered to be the fundamental mechanism of aqueous transport through the trabecular mesh work and many excellent photographs are used to support this view. Chapter four deals extensively with the physiology of lens membranes, and a useful account is given of our present knowledge of the membrane structure of the lens. In chapter five the author discusses the methods whereby lens protein is examined and compared in different species. A valuable assessment of the method is given and the need for the consideration of other features, such as accommodation, which modify the properties of lens proteins is stressed.

This book is of particular value to research workers who wish to have an easily readable account of the particular topics discussed. An extensive bibliography after each chapter also contributes to the ease of reference for further reading.

R. FISHER