Book reviews

Eye Movements and Visual Perception. By R. W. DITCHBURN. 1973. Pp. 421, figs, bibl. Oxford University Press, London (£9.50)

Understanding the complex series of events involved in the simplest eye movement demands some knowledge of the anatomy and physiology of the neural control mechanisms involved, and analysis now demands some understanding of simple bio-medical engineering terms.

The present book reflects this trend and the author's main interest in the physical characteristics of ocular movements. After a general introduction there is an excellent chapter on the various techniques that have been used for recording eye movements. This is followed by chapters on small eye movements and their dynamic characteristics and the effects of visual stabilization. The final chapters consider some of the optical features of visual perception.

This book is written for research workers in visual perception and provides an enormous amount of material on eye movements with a good bibliography. It is recommended for the ophthalmologist with a particular interest in eye movements but will not facilitate diagnosis in his clinical practice.

M. D. SANDERS

Contact Lens Practice. A Clinical Approach. By D. KUMAR and B. S. GOEL. 1974. Pp. 352, 176 figs, bibl. Kothari Book Depot, Bombay, India (Rs 60)

Dr. Kumar is an ophthalmic optician and Dr. Goel an ophthalmologist working in the Contact Lens Department, Gandhi Eye Hospital, Aligarh, India. This department was started in 1956 and has seen over 30,000 patients.

They have attempted to write a practical manual in contact lens practice particularly for practitioners in India.

There are chapters on basic sciences, haptic lenses, corneal lenses, one by Mr. C. Ruben on aspheric lenses, one by Dr. T. Grosvenor on soft lenses, a section on cosmetic lenses, and a final section on recent advances. This last section is already obsolescent because epikeratoprostheses are no longer used.

This book certainly embraces the scope of contact lenses practice. The main criticism is one made by a previous reviewer and printed on the jacket cover that the printing, paper, and illustrations are not of satisfactory standard. The information given is in the main correct, although many would disagree that the progress of myopia is affected by contact lens wear. I should have liked to have read more of the practical difficulties of contact lens fitting and wear in India, but I feel sure this book will partly fill a gap in ophthalmic knowledge and practice in many parts of the world.

M. O'RIORDAN

Modern Problems in Ophthalmology. Vol. 13 Colour Vision Deficiencies II (Proceedings of the

Second Symposium of the International Research Group on Colour Vision Deficiency, Edinburgh, June, 1973). Senior editor: E. STREIFF. Volume editor: G. VERRIEST. 1974. Pp. 380, 181 figs, bibl. Karger, Basel (£23.10)

The proceedings of the second symposium of the International Research Group in Colour Vision Deficiencies have appeared only some 15 months after the meeting, and are therefore still topical.

The subjects covered include mensuration problems connected with foveal vision. Congenital defects are considered from the point of view of function, spectral sensitivity, and subjective aspects; there is also a section on genetics. Acquired anomalies are approached basically from the pathogenetic and pathological points of view.

In addition to the normal pedestrian material, there are fascinating reports on new fields, *e.g.* the effect of excessive light on both the structure and function of the primate retina, studies of aphakes of various ages, a unilateral defect, and a great deal of interesting detail on clinical conditions. The price is so high that one would expect the quality of the contributions to match it. Hansen's splendid application of so-called laboratory techniques to the study of cone dystrophies enables one to overlook one or two of the more calamitous papers, like that by S. R. Cobb. The book is well edited by Guy Verriest, but the cost of paper makes it imperative for editors to use even sharper scissors to decide what should and should not see the light of day.

R. A. WEALE

Handbook of Sensory Physiology. Vol. VII/3 Central Processing of Visual Information. Part A: Integrative Functions and Comparative Data. Edited by R. JUNG. 1973. Pp. 775, 208 figs, bibl. Springer, Berlin (\$81.40)

This Third section of Volume VII comprises two parts: **A** is described below and **B** (Visual Centres in The Brain) has already been reviewed (*Brit. J. Ophthalmol.*, 50, 562).

Part A, which maintains the high standard of the series, includes chapters by established authorities, mainly drawn in this instance from Research Centres in Germany and Australia. The first nine chapters deal with Visual Perception, Form Discrimination, Colour Vision, Binocular Vision, Movement Detection, and details of the neuronal changes which follow visual deprivation. The three remaining chapters are concerned with aspects of Comparative Neurophysiology, including Colour Vision.

Chapters of particular interest to ophthalmologists include a discussion on the neural basis of stereoscopic vision, and the recent neurophysiological findings related to colour vision. Proponents of optokinetic techniques for the assessment of visual acuity will be interested in the five types of movement detecting neurones that are now de-