people must be given equal opportunities to those of the sighted, and it is contended that this has now been achieved in the United States of America. In about 1830 three private schools for the blind were opened in the United States, and in general these followed the pattern of those already working in Europe. The first director of the Perkins Institution in Boston was Samuel Gridley Howe who did much to integrate the blind into the life of the general population. He was responsible a few years later for the opening of the first state school for the blind in Columbus, Ohio. Craft training was very important in these early blind schools, and has continued to be an essential part of blind training. Some blind people lived and worked in blind institutions and finished their lives in homes for the aged blind. As time passed the blind were encouraged to live and work independently and not only by handicrafts. The importance of a family life for the blind is now receiving great attention.

A. G. CROSS


Although Dr McDicken is a hospital physicist he is accustomed to teaching doctors and radiographers and his book is designed to meet the needs of a similar readership. Two radiologists taking up ultrasonic work vouch for the suitability of the book for beginners.

Only a small proportion of the book is relevant to ophthalmology and the eight entries in the index under eye refer to very superficial accounts, apart from a paragraph on transducers in eye work.

With the increasing acceptance of ultrasonic diagnosis a book of this type is very suitable for hospital libraries and ophthalmologists should support its purchase. For their own use, however, their money would be better spent on one of the books on ultrasonography in ophthalmology.

DOUGLAS GORDON


The aim of this book is to introduce the commoner neuro-ophthalmological problems to ophthalmologists, neurologists, and neurosurgeons who are beginning their specialty training; as such it succeeds admirably. Any book of this type is bound to be incomplete in detail although the author overcomes this by the liberal use of lists, some of the contents of which may not be included in the text. The bias of several sections is unduly weighted by this incompleteness—for example, chiasmal lesion is the only cause for changes in refraction mentioned.

The layout of the book is good but the construction of each chapter and section is often not completely clear mainly because of the large amount of information that the author succeeds in including. The few diagrams are clear, and there is a carefully selected bibliography for those whose enthusiasm has been excited by this useful and concise book.

DAVID TAYLOR


This book on visual perception is part of a multi-volume treatise concerning human perception. It is written mainly for psychologists and perhaps natural scientists in general. Contributions to ophthalmology appear to be negligible. Altogether 11 authors have contributed 12 chapters on subjects ranging from the history and contemporary theoretical problems of research into seeing to painting and photography, sandwiching the measurement of visual stimulus, the neural basis of seeing, temporal and spatial resolution, and the perception of pattern, colour, space, and motion.

The arrangement and the choice of the chapters throughout the book is somewhat arbitrary and there is no synchronized theme running through the different chapters dealing with similar and related subjects. For example, the chapter by J. G. Robson dealing with the receptive fields of cells in the visual nervous system consists of a somewhat dogmatic review of the literature and the visual system is viewed as a spatial frequency analyser with modest capabilities. This is completely divorced from the chapter by J. P. Thomas dealing with the psychophysics of spatial resolution in human subjects with attempts to interpret this in terms of the receptive field organization of cells in the nervous system. Similarly, the chapter by R. L. and K. K. De Valois provides a comprehensive review of studies on the behaviour of colour-coded cells in the visual system and its relationship to the psychophysics of colour vision, but is completely divorced from the chapter by R. M. Boynton which deals with the physical, psychological, and physiological basis of colour, hues, and wavelengths.

The chapters dealing with temporal factors by L. Ganz, spatial factors by J. Thomas, three-dimensional depth and space factors in seeing by W. Richards, and also somewhat abstruse phenomena of pattern and object perception such as 'perceptual constancies' and 'illusions' by P. C. Dodwell take a basically bioengineering approach to these subjects.

The chapter on the measurement of the visual stimulus by Y. Le Grand includes much theoretical detail of the physics of light and photometric concepts but fails to give more practical information about different types of visual stimuli and the methods of measurement required in research on seeing.

The chapter by P. C. Dodwell on contemporary theoretical problems comes to terms with the fact that there is still a wide gap between our understanding of perception and our ever increasing knowledge about the neurophysiology of the visual system. This view is shared by the authors of some of the other chapters. However, the present impetus to research on seeing appears to be coming from recent neurophysiological studies of the nervous system as is evident from the fact that practically all the chapters attempt to correlate perceptual phenomena with recent neurophysiological data. An excellent example is the chapter by R. Sekular on visual motion perception which emphasizes the recent neurophysiological evidence on the parallel processing of spatial details and temporal factors by
two different classes of neurones in the afferent visual nervous system, and integrates this with well defined and controlled psychophysical experiments on pattern and motion.

The book begins with a chapter by Y. Le Grand on the history of research on seeing and ends with a chapter by M. H. Pirenne on vision and art. These two chapters are the most refreshing and readable chapters in the entire book. However, the reader who may have started with the hope of arriving at a clear picture of the results of many years of research on seeing will be left within a pool of detailed, conflicting, and poorly organized data.

A list of references at the end of each chapter may provide a useful source, though the choice of the references is always influenced by the personal views of each author.


This book covers a wide scope and there is a comprehensive survey of materials and types of frames, but out-of-date photographs have been used.

The chapters on rules and facial measurements are enlightening for learners for whom this book is primarily written, and the revision sections at the end of chapters are useful. The survey of lenses available is comprehensive and a chapter on vision screens is welcome.

The price, however, puts this edition in the category of a book to which a student would refer, but not necessarily be able to purchase.


As the author states in his introduction, the aim of this book is to emphasize that clinical decision-making must be as rational as possible, and to that end the doctor should have a clear idea of the reliability of the data obtained from the medical history, physical examination, and laboratory tests as well as the process by which a diagnosis was made so that suitable treatment can be selected. Although the examples are largely drawn from gastroenterology, the critical approach to the decision-making process is applicable in any clinical field.

Of necessity, statistical evaluation is given prominence, but the clear explanation of the methods used should not deter the non-mathematical reader. The chapters on diagnosis and the assessment of new diagnostic methods are particularly interesting, and if the critical approach outlined in this book were more widely adopted, patients would be spared many uncomfortable and expensive investigations. The evaluation of treatment, particularly the interpretation of reports of clinical trials is well discussed, and the importance of controlled therapeutic trials emphasized. All clinicians will find this book stimulating and interesting.


This small book is designed to inform parents, nurses, social workers, and teachers about the problem of squints. The anatomy and physiology of the visual apparatus is described in simple terms with the aid of a few diagrams. The pathogenesis of squint and the non-surgical and surgical methods of treatment are discussed. This is an unpretentious book, demanding little knowledge and providing useful information for those concerned in school clinics and in social work among children.


This is one of the first textbooks to be almost totally confined to the techniques of an ophthalmic prosthesis. Of especial interest will be those techniques described in congenital anophthalmia and the modifications to the moulded prosthesis to correct piosis sulcus retraction after enucleation. Some surgical techniques are described but, in most instances, these are brief and help to embellish the text; I hope that at some future date a text entirely devoted to the prosthetics will become available. It would appear that the technique of enucleation, evisceration of the eye and orbit has been neglected; as an end procedure this has special relevance to the younger person and his future life in society and is therefore important.


This book gives a detailed mathematical and physical account of the factors which modify vision. As only some 6 per cent of the account relates to the basic properties of the human visual system, it has but limited interest for ophthalmologists.

However, it is of great value, firstly to those engaged in the design of optical instruments, and secondly, to those interested in the factors which affect visual perception under difficult viewing conditions, such as object movement and atmospheric turbulence.

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