Defective Colour Vision: Fundamentals, Diagnosis and Management. By ROBERT FLETCHER AND JANET VOKE. Pp. 608. £45.00. Adam Hilger: Bristol. 1985.

This comprehensive tome is the result of a great deal of reading and quite some thought. The gamut covers such topics as how colours are seen (does anyone really know?), how colour is measured and specified, how colour vision deficiencies present, how they are acquired and, may be, passed on, etc. A great deal of attention is devoted to the description and practice of testing; this, like other sections, betrays the authors' keen interest in the history of their subject.

The practical approach to colour defects is not often treated, and therefore doubly welcome. However, Canada is not the only country where the red traffic signal is larger than amber and green, and it is a little surprising that authors, to whom the visual angle should mean a great deal, comment on this as little as on the (unquoted) fact that Switzerland has a different shape for each traffic colour.

In spite of some solecisms ('the Stiles π_4 and π_5 mechanisms, the fundamental colour mechanisms for red and green . . .'), the book is to be recommended. Its illustrations are helpful, its presentation good by modern standards, and the spelling of surnames largely correct. ROBERT WEALE

Laser Therapy in Glaucoma. By JACOB T WILENSKY. Pp. 148. £40.00. Appleton-Century Crofts: Norwalk, Connecticut. 1985.

The clear optical media of the eyeball have allowed examination of structures within for more than a century. With the development of lasers it was only a matter of time before the ingenuity of optical engineers and ophthalmologists miniaturised the laser light beam sufficiently to allow its use in ophthalmic work. Meyer Schwickerath, in 1956, used a xenon arc photocoagulator to produce iridectomies in aphakic eyes, while intraocular pressure control with the laser was attempted in 1972 by Lee and Pomerantz. It was not until 1981, however, that the ophthalmological community were informed of the respectability of laser treatment for glaucoma, when at the American Academy meeting corroborative reports of laser trabeculoplasty and argon laser iridectomy were presented. The nationwide interest which then developed was followed by instruction courses in laser treatment for glaucoma. This book reports on one such course that was held in March 1982 at the Illinois Eye and Ear Infirmary. It consists of the papers presented at the meeting together with some editorial comments.

The book is divided into sections, of which the largest are devoted to argon laser iridotomy and laser trabeculoplasty. Other chapters cover goniotomy, photomydriasis, and cyclotherapy. Finally there is a small chapter on the neodymium-YAG laser. All the sections are useful and instructive and contain explanations sufficiently clear to allow the inexperienced reader to perform the laser procedures described. As the book arose out of a teaching course, the writing style is relaxed and chatty and contains many references to personal technique adopted by the authors.

The book was conceived three years ago. During the gestational period the neodymium-YAG laser has proved a

more efficient instrument for making holes in the iris than the argon laser as well as having suggested roles in laser trabeculotomy and transscleral photocoagulation of the ciliary body. In addition more information on the long-term efficacy of argon laser trabeculoplasty has appeared. Despite these later developments *Laser Therapy in Glaucoma* remains a good introduction to laser treatment for glaucoma and will be of use to all ophthalmologists who wish to treat these diseases with the argon laser. ROGER A HITCHINGS

Corneal Grafting: Principles and Practice. By T A CASEY AND D J MAYER. Pp. 352. £65.00. Saunders: Philadelphia. 1984.

This book represents a major revision and expansion of its precursor, which was edited by the senior author in 1972. Although advances in corneal transplantation since that time have been rather less dramatic than those in, say, vitreous surgery, there has been significant progress in a range of aspects related to keratoplasty, such as immunology, specular microscopy, and intraocular implants, and the book provides a comprehensive review of the whole. This should ensure that its popularity is as great as before. The previous book was widely read both by ophthalmologists in training and by fully fledged ophthalmologists who dabble in corneal grafting.

After an interesting historical chapter there follow several chapters on basic sciences relevant to keratoplasty, which could well be read by anyone with an emerging interest in external eye disease. There are then chapters on eye banking and instrumentation, followed by the main part of the book concerned with indications, techniques, and complications of the various surgical procedures encompassed by 'corneal grafting,' including discussion of particular problems such as grafting in children, aphakia, and chemical burns. These are followed by chapters on refractive keratoplasty, contact lenses, and complications. Although other experts in the field would not be expected to agree with all that is written, the text is readable, misprints are minimal, and there are only a few minor irritations such as the misspelling of Terrien's and the discussion of 'rejection' with autografts. These serve more to highlight the otherwise high quality of the book. The references are plentiful and well chosen; the illustrations are profuse, and many of them are in colour. Some are poorly exposed, preventing ready identification of the point in question, but this may be a result of the need to economise on printing costs: at £65 the book represents good value. M G FALCON

Clinical Visual Optics. By ARTHUR G BENNETT AND RONALD B RABBETTS. Pp. 470. £38.00. Butterworths: Sevenoaks, Kent. 1984.

This well-produced and extended text is an update of the standard work *Visual Optics* by H H Emsley. It covers a very wide field, and its intended readership includes those in the optical profession as well as ophthalmologists.

So far as the latter are concerned, the clinical matters dealt with are variable in their completeness. It is useful for the ophthalmologist to have a reference work in which the

optical principles of many of the instruments which we use are fully and clearly elucidated. It is, however, something of a surprise to see a picture of a very old model of the Haag-Streit slit-lamp. Pseudophakia is approached in a rather academic manner, and some reference to the SRF formula and the various instruments used in computing the required power of an intraocular lens would add completeness to this section. Ultrasound is dealt with, but no indication is given of the accuracy with which one can predict the axial length of the eye. The subject of keratometry does not cover the instruments used for operative assessment, and indeed the subject of aphakic astigmatism is lightly dismissed. Some statements about clinical examination will cause a little surprise—for example, the view that it is pointless to do a cover test without spectacles if the patient wears them. At a more advanced level one might have expected to see some reference to modern surgical treatments for myopia.

It is not easy to imagine that this book will have a vital place in the library of every ophthalmologist, but it certainly should be present in major reference institutions.

J D ABRAMS

Symposium on the Laser in Ophthalmology and Glaucoma Update. Transactions of the New Orleans Academy of Ophthalmology. By H BECKMAN, D G CAMPBELL, F A L'ESPERANCE JR, M A MAINSTER, H A QUIGLEY, R N SHAFFER, R J SIMMONS, R C WATZKE, J WISE. Pp. 342. £70.00. Mosby: St Louis. 1985.

The 33rd meeting of the New Orleans Academy of Ophthalmology was held in March 1984. A symposium on glaucoma was held in 1961 and again in 1975. The latest *Transactions* covers more than just glaucoma but discusses uses of the laser in ophthalmology. There are nine participants contributing to twenty-five chapters, seventeen of which are on glaucoma with or without laser treatment. The remaining eight chapters include discussions on laser systems and photo vaporisation therapy (L'Esperance) and three chapters on laser treatment of macular disease (Watzke). However, the bulk of the topics and the round-table discussions are on glaucoma. They make no pretence to cover the subject in depth but present views of selected topics. These topics include excellent chapters on optic nerve cupping (Quigley) and pigment dispersion glaucoma (Campbell). There are also contributions reflecting the ingenuity of ophthalmologists in finding uses for the laser in the treatment of less common glaucoma conditions. The round-table discussions are good, that by Shaffer clearly a tour de force (unfortunately it is a verbatim report of a slide show and it loses much significance without illustrations).

These views are directed at the general ophthalmologist and as such prove interesting reading. Together they form a book to borrow from the library but not necessarily to buy.

ROGER A HITCHINGS

Viral Diseases of the Eye. By RICHARD W. DARRELL. Pp. 341. \$51.00. Lea and Febiger: Philadelphia. 1985.

This book contains contributions from many respected research workers in the field of ocular virology and associated infections. Most groups of viruses contain species capable of causing ocular disease. The spectrum of diseases caused include acute conjunctivitis, keratitis and blepharitis following infection of the external eye tissues, anterior and posterior uveitis following infection of the uveal tract, optic neuritis, oculomotor paresis, and meningoencephalitis following infection of the central and peripheral nervous system, and the induction of tumours. Other viruses, for example HTLV-III, while they may not directly infect the eye, may have an indirect effect by increasing susceptibility to other infections.

Individual chapters deal in turn with the various viruses responsible for ocular diseases and outline the diseases caused by these viruses, their clinical features, epidemiology, laboratory diagnosis, and methods of prevention and treatment. Eleven chapters on the herpes viruses, five on paramyxoviruses but only two on adenoviruses and single chapters on poxviruses, papovaviruses, picornaviruses, togaviruses, and orthomyxoviruses reflect the clinical concern, amount of research, and state of detailed knowledge of diseases caused by these viruses rather than their prevalence in the population. Four final chapters deal with immune mechanisms in viral ocular disease, the role of viruses in ocular tumours, the differential diagnosis of follicular conjunctivitis, and Thygeson's superficial punctate keratitis. The text is generally well supported by tables and photographs of the clinical conditions, histological sections, and electron micrographs of the viruses. There is unfortunately no index to the figures and the introduction is for some reason missing from the table of contents.

Altogether this book provides a valuable source of information on the present state of knowledge of ocular virology for both the clinician and the research worker. My only concern is that the balance of space allocated to the various groups of viruses, while inevitable, may tend to belittle the problems presented by some viruses such as the adenoviruses and picornaviruses, and concentrate research into certain popular areas like the herpes viruses. Clearly there are large gaps in our knowledge of the mechanisms of ocular pathogenicity and methods of treatment of many of the viral diseases described in this book.

R M WOODLAND