for guidance in the repair of such larger defects. Total
reconstruction of an eyelid receives no mention at all,
and the large and beautifully executed drawings, which
occupy much of the space in this chapter, merely depict
the meticulous repair of relatively trivial defects.
Incredibly there is no mention anywhere in the book of
burn injuries of the eyelids, which seems a curious
omission from a work of this sort.

One should add that, in spite of this critical review,
the book contains much practical information and should
be a useful addition to the textbook literature in this field.

ROBIN BEARE


The Optometry Handbook has chapters on visual acuity,
ophthalmic optics, prescription design, ophthalmic
lenses, refraction and analysis, contact lenses, low
vision, and pharmacology. Each chapter is a compilation
of statistical data drawn from various sources which
will be particularly useful to manufacturers and opticians
but of little value to ophthalmologists unless they specialise
in ophthalmic optics. Of some interest to ophthal-
mologists would be the section on pharmacology,
which lists and cross-references many drug preparations
used locally and systemically that have an effect on
vision. The other statistics given still keep to the obsolete
American foot measurements with regard to acuity, and
therefore will be of less value to British and Continental
readers.

M. RUBEN


The subjects covered in this volume are the ageing of
the lens, persistence and hyperplasia of the primary
vitreous, the mechanisms of amblyopia, the use of laser
interferometry to measure retinal visual acuity, and
finally the papers presented at a symposium on lasers and
the anterior segment of the eye.

Professor Jean Nordmann's publications on the bio-
chemistry of the lens span an astonishing 50 years from
his thesis in 1926 to the present very welcome review of
the ageing process in the human lens and the pathology
of senile cataract. The normal lens continues to grow
throughout life, though the rate of growth slows down
with age. In all types of senile cataract the axial cortex is
thinner than in a normal lens of the same age, and there is
a deficiency of fibrogenesis and protein synthesis before
opacities occur. All attempts to involve extralenticular
factors in the genesis of cataract have failed except
perhaps for hyperglycaemia, and it seems that cataract
is a local condition resulting from changes in the lens
alone. Protein synthesis is slowed down, particularly
with regard to glutathione, but the importance of this
factor is unknown. Attempts to substitute the deficient
glutathione have not given satisfactory results, and the
most hopeful therapeutic possibilities are to find substances
which can penetrate the lens to activate protein synthesis.
The requirements for substantiating claims for any
method of treatment are clearly outlined. Drs M. Gonvers,
R. Faggioni, L. Zografos, and C. Gailloud from Lausanne
review the literature and present a case of persistence
of the primary vitreous, concluding that this is a condition
comprising a number of entities previously considered
as separate. The possibility of an aetiological connection
with retrolental fibroplasia cannot be excluded.

Dr G. K. von Noorden reviews the mechanisms of
amblyopia as revealed by animal experiments which
have shown that amblyopia is accompanied by alteration
in the response of neurons in the striate cortex and by
structural changes in the lateral geniculate body. It is
likely that the bilateral amblyopia in such conditions as
genital cataract results from deprivation of form
vision, whereas in unilateral amblyopia from squint there
is an additional factor resulting from abnormal binocular
functions.

Retinal function can be tested by forming interference
fringes on the retina with a low-power laser. This
subjective test is independent of refraction and can be used
to assess function in patients with cataracts. The instru-
ment used by Drs Rassow and Wolf is described, and a
comparison of the results with the final visual acuity after
cataract extraction was encouraging.

The symposium on lasers and the anterior segment was
held in Hamburg in April 1976 and was concerned with
experimental and clinical studies on the use of lasers for
iritidotomy and trabeculotomy. The experimental studies
dealt with the biochemical reactions in the eye after laser
irradiation, including metabolic changes and the libera-
tion of prostaglandins, threshold damage levels for the
structures of the anterior segment, and experimental
results with a dye laser.

The clinical discussions confirmed that laser iridotomy
is now well established as a satisfactory procedure, and
although it is possible to burn a hole with the argon laser
alone it is probably better to use the argon laser to
prevent initial stromal damage and to complete the
iritidotomy with a pulsed laser. The clinical value of laser
trabeculotomy for chronic simple glaucoma is still
controversial, although good results were claimed from
using a Q-switched ruby laser. But the fall in intraocular
pressure in successful cases is limited, suggesting some
degree of obstruction in outflow channels beyond the
trabeculum.

As is usual with this series the volume is well produced
and illustrated and provides an excellent review of current
work in the fields represented.

E. S. PERKINS

Grundlagen und Methodik der Ophthamodynamome-
trie, Ophthalmodynamographie, Temporalisdyna-
21 diagrams, 33 tables. Georg Thieme: Leipzig
(no price)

In comparison with other blood vessels in the body the
retinal vessels have two advantages for measurement of
blood pressure; they can be easily seen and they are
enclosed in the corneo-scleral envelope. This means that
it is relatively easy to increase the external pressure acting