

that the old operation of "couching," or pushing the lens back into the vitreous, has been completely abandoned, as it was found that fully 50 per cent. of the cases thus treated were ultimately lost from destructive inflammation.

The treatment of strabismus and paralysis of ocular muscles in late years has been modified and improved. By the operation called "layering forward," the insertion of a weakened muscle is advanced nearer the cornea. Tenotomy of a contracted muscle is performed sub-conjunctivally. A conjunctival suture is used to modify the effect of an operation, and prismatic spectacles are used to relieve diplopia and muscular strain.

With the modern improved methods of preparing tissue for the microscope, there has been an advance in our knowledge of the normal and pathological histology of the eye, but we can not stop to particularize.

Quite recently the extraordinary discovery has been made that in the living retina there is secreted a photo-chemical matter, called the "visual purple," which is bleached in a bright light, and re-secreted in the dark. It is said to be an albuminoid secretion, confined to the layer of rods, and is believed to be a conservative element which enables the eye, in conjunction with the iris, to adapt itself to variations in the intensity of the light.

An advance has been made in our knowledge of the etiology of glaucoma. The prominent symptom in glaucoma is excessive intraocular tension. The eye is hard and unyielding. Until recently, this condition was supposed to depend upon hyper-secretion of the choroid. It is now known that this is not necessarily the case, and that the loss of equilibrium of intraocular pressure may be caused by any interference with exosmosis or filtration from the eye, that pressure of the peripheral part of the iris against Fontana's spaces and Schlemm's canal—at the so-called "iritic angle," causes glaucoma, not from any increase in the secretion from the iris or choroid, it is claimed, but by mechanically interfering with exosmosis or filtration through the trabeculæ of the anterior scleral ring.

Iridectomy, or the removal of about $\frac{1}{2}$ of the

iris, was supposed to relieve the intraocular pressure by removing a large secreting surface, but its action is now believed to depend partly upon the removal of pressure at the iritic angle, and partly upon filtration being favoured by the cicatrix, in the anterior scleral ring.

The construction of the ophthalmoscope has been greatly improved of late years. The form now in general use is Knapp's and Loring's. A disc is secured behind the mirror which can be rotated, and which carries a series of very small convex and concave lenses behind the central aperture of the mirror. By this convenient arrangement, any optical defect either in the eye of the observer, or in the eye under observation, is counterbalanced. By suspending the accommodation and rotating the lenses behind the mirror, the latter being brought close to the eye under observation, the refraction can be, at least approximately, determined; and it is possible to prescribe the proper correcting spectacles by this method alone. In prescribing spectacles, however, this method of examination is rather resorted to for the purpose of confirming the result of the examination made with the test types and trial glasses, —with or without paralyzing the accommodation.

Among the operative procedures which may be said to be on trial may be mentioned opticociliary neurotomy as a substitute for enucleation; sclerotomy as a substitute for iridectomy in certain forms of glaucoma, and Loring's dissection of the iris for closed pupil after cataract operations.

Eserine is being substituted for atropine in connection with cataract operations, and in the after treatment of extraction, the eye is now less interfered with than formerly. If there is no œdema of, or discharge from between the eyelids, it is now advised to keep the eye closed for about 7 days after the operation. For the removal of chips of iron or steel from the interior of the eye, the permanent magnet is giving place to the more powerful electro-magnet.

Antisepsis, which has proved a boon in general surgery, has been tried in ophthalmic surgery, but not with encouraging results; and, moreover, the practical difficulties in the way