

REVIEWS.

Handbook of the Diseases of the Eye. By HENRY R. SWANZY, A.M., F.R.C.S.I., Surgeon to the National Eye and Ear Infirmary, Dublin. Pp. 437. 122 Illustrations. London: H. K. Lewis.

THIS is the age for condensed manuals. Nor could we expect any other result from the rapid strides made in the various departments of surgery during the past decade. These advances have enlarged the literature enormously in the different specialities into which surgery has been of late years subdivided. The bewildered student turns from his ever-increasing text-books, with their inadequate information on such subjects as those of ophthalmology and otology to special treatises, for more exact and definite, as well as more recent information. But the time required to read these, when added to that already absorbed in attention to general medicine and surgery, and the time necessarily devoted to clinical instruction and study, render it impossible for him to attempt their perusal, unless at the risk of neglecting his general work, so he lays them down in despair. Hence the demand for manuals which, while not too diffuse or abstruse, still furnish the student or junior practitioner with sufficient information to enable him intelligently to follow his teacher in the special department of the hospital, or to serve as an introduction to more extended studies, and also as safe guides in general practice. In no branch is such an assistance more required than in the science of ophthalmology. And in no department of medicine is there, perhaps, still prevailing such lamentable ignorance amongst those in general practice. Nor is this any matter for surprise, whilst the licensing bodies, with two exceptions, forbear from enforcing an attendance on an ophthalmic hospital or department during the undergraduate's course in medicine or surgery. The work before us, the author says, "is chiefly intended for students attending an ophthalmic hospital." He hopes also that it may prove more than this, and be of use after the nominal studentship has ceased, as a book of reference.

We need not remind our readers how rapidly has this—the most exact of all our medical sciences—advanced during the past twenty-five years. During that period modern ophthalmology may be said almost to have sprung into existence. Helmholtz gave it a new birth with the ophthalmoscope. Donders was

the parent of our improved system of treatment of aberrations of refraction. Graefe was the sponsor to whose genius and fostering care we owe the conception, growth, and development of such operative measures as iridectomy and linear cataract. We can hardly realise how this science has grown unless we recall what the past few years have effected in bringing it to its present state of comparative perfection. Taking up, for example, such an excellent epitome of its progress as the plainly written and lucid handbook of Dr. Swanzy, and passing over the heading of its pages, let us note a few of the most important additions of recent years. In his chapters on refraction, which follow a summary of useful hints on "elementary optics," there are the perimetric charts of Landolt for recording the dimensions of the field of vision, and the relative acuteness of vision for various colours in the periphery of the field, and the tables of the same distinguished oculist, which give the proportionate lengths of the eye in different degrees of ametropia, both in myopia and hypermetropia. Even with a small work like this of Mr. Swanzy's, the student has no longer any excuse for ignorance in estimating the degree of astigmatism, both simple and compound. A few years since, even some ophthalmic surgeons smiled when the existence of astigmatism was spoken of as a common source of trouble, and the necessity for its correction was enforced by those who took more pains to discover its presence. In chapter iii the principle of retinoscopy and the "shadow test" is explained, and the determination of myopia, hypermetropia or astigmatism by this method is clearly taught. The adoption of this plan, which saves an immensity of time and trouble in testing the eyes for various degrees of myopia or hypermetropia, has only, within a few years, become general; in fact, the use of the metrical system of numbering lenses is comparatively of recent date. In the treatment of diseases of the conjunctiva, chap. iv, the treatment of granulations by electrolysis (Walpole), by jequirity (Wecker), and the cure of pannus by the operation of peritomy, remind us of these new and important means of cure. The transplantation operations of Teale and Knapp for symblepharon, and the transplantation of a piece of rabbit's conjunctiva (Wolfe), are all now practised with success for this most serious complication. Chapter vi, on diseases of the eyelids, reminds us of the vast improvement in operations on the eyelids for the common troubles and deformities arising out of inverted lashes. Dianoux's, and the complete operations of Snellen and Berlin for entropium, especially the latter; and the ingenious operation of Argyle Robertson for ectropium, are described in addition to

other better known and more antiquated operations, and the operative steps are illustrated by excellent engravings. Of late the galvano-cautery is rightly coming into more general use in the treatment of small *nævi* and various tumours of the eyelids. Bowman's admirable suggestion for the treatment of stricture of the nasal duct and lachrymal obstruction, made as far back as 1857, has hardly been improved on, but his subsequent employment of larger probes completed one of the most important suggestions of the many made by the veteran English ophthalmologist.

The whole management of corneal ulcers has undergone a revolution since the relative advantages of atropine and eserine in the treatment of corneal ulceration have come to be understood (chap. viii). In this particular affection, the operative step of Sæmisch has become a recognised step, and we cannot point to a more telling example of the consequences of ignorance in ophthalmic practice than the daily loss of eyes, which is the result of neglect, in not carrying out this simple step in certain ulcerations of the cornea. The relation of hereditary syphilis to corneal affections, and the evidences of this taint in the structure of the cornea and the eye generally, as also the other concomitant evidences of its presence, have been clearly dwelt on by Mr. Hutchinson. In the improvements in surgical procedures on the cornea, we are reminded of the various operations of ablation in staphylomatous states (Wecker and Critchett), and the now familiar but ingenious device of Wecker, of tattooing in cases of leucoma.

Our author treats us to but two and a-half pages on affections of the sclerotic, and we cannot help remarking that, even at the risk of a little enlarging his handbook, he might have been a little more generous of his thoughts and pen in parts. There is such a thing as too concentrated nutriment. However, in this pithy chapter we are reminded of the introduction of massage by Pagenstecher for painful affections of the eye, more especially rheumatic and neuralgic; and in a footnote, Mr. Swanzy describes the method of practising this therapeutical measure. In the chapter on diseases of the iris, we have the reasons assigned for the more intelligent use of atropine in iritic complications; importance rightly attached to iridec-tomy, performed at the right time in cases of iritic adhesions threatening closure of the pupil; the value of the salicylates in rheumatic iritis pointed out, while the indications for mercury in affections of the iris, as well as the employment of pilocarpine to lower tension in cases of serous iritis and other hyper-exudative states are here alluded to. But we must again express regret

that this chapter of the work does not more fully enter into some of the affections of the iris which certainly deserve, even for a student, more notice than the scant one of a few lines, while the only operation on the iris described at length is that of iridectomy, though in this section of the work, as well as in that devoted to affections of the crystalline lens, we might have anticipated detailed allusion to the operations of Critchett and Wecker, more especially that of the latter (iritomy) in cases of closed pupil. Perhaps it is in the pathology and therapeutics of abnormal changes in the deeper tissues of the eye that we most realise the substantial progress of ophthalmology (chap. xi-xx), and we may thus summarise these:—

(a.) The connection between the pathological changes in the ciliary region, the result of traumata or disease, and sympathetic ophthalmia.

(b.) The evidences of the syphilitic taint, inherited and acquired, in choroidal or choroido-retinal morbid changes.

(c.) The importance of the early recognition of sclero-choroiditis anterior and its treatment; the early diagnosis of sarcomatous growths of the choroid.

(d.) The pathology and treatment of sympathetic ophthalmitis, and the accepted rules for the operation of enucleation in cases of injury or disease, which threaten the implication of a sound eye.

(e.) The etiology and pathology of glaucoma; the researches of Graefe, Weber, Knies, Donders, Leber, and others on the continent, and of Priestly Smith in England, throwing light on the part taken relatively by the lymphatics and blood-vessels in the process of hyper-distention, as also the pathological changes in the filtrating media of Fontana and Schlemm; the rationale of the operations iridectomy and sclerotomy, and the contra-indication for the use of atropine, and the explanation of the therapeutical action of eserine (Wecker) in the treatment of this disease.

(f.) The diagnosis of hyalitis, and the differentiation of vitreous opacities, and the introduction of the use of the magnet (a substantial gain), which M'Keown, of Belfast, was the first in this country to advocate, for the removal of foreign bodies in the vitreous humour.

(g.) The relations of retinal hæmorrhages and apoplexies to cardiac and renal diseases, and the bearings of retinal infarctions on the prophylaxis of puerperal eclampsia; the diagnosis of retinitis albuminurica; the relation of nyctalopia to retinitis pigmentosa; the treatment of detached retina by replacement

and puncture (Sichel and Wecker); the occurrence of retinal embolism from aneurism of the aorta, mitral disease, and albuminuria; the early recognition of glioma.

(h.) The connection between optic neuritis and intracranial disease, various disorders of menstruation, syphilis, blood poisoning, sclerosis of the spinal cord, locomotor ataxia; those curious cases recorded by Nettleship, Priestly Smith, and Leber, of persistent dropping of the nostril, attended by atrophy of the papilla; the results of the abuse of tobacco and alcohol, seen in atrophic papilla; the various methods for estimating the degree of colour blindness.

A useful chapter for the student, added by Mr. Swanzy, is that on "The Motions of the Pupil in Health and Disease," explaining the physiology of myosis and mydriasis and the action of myotics and mydriatics on the iris. In the clearer understanding of the action of the alkaloids atropia, duboisine, hyosciamine, gelsemine, eserine, and pilocarpine, and the indications for the use of these different agents in ulcers of the cornea, glaucomatous states, after cataract and other operations, in suppurative conditions of the cornea, and in the diagnosis and treatment of myopia, important advances have been made, thanks more especially to the work of Wecker.

The author does not mention the muriate of cocaine, which promises to be an important addition to the ophthalmologist's pharmacy, through its unquestionable power of producing local anæsthesia in certain operations on the eye. The relation of the state of the pupil to both cerebral and spinal lesions has assumed of late years a special significance. The contracted pupil of tabes dorsalis (Argyle Robertson), of general paralysis, sclerosis, aneurism, paralysis of the cervical sympathetic; the mydriatic condition which attends on growths in the cervical region of the cord, as an early symptom of tabes dorsalis, in mental derangement, in glaucomatous conditions, in diseased processes affecting the third nerve, have all been carefully differentiated, whether they are due to an irritation or a paralysis.

Dr. Swanzy's short, but concise and well written, chapter on "Affections of the Crystalline Lens," is prettily illustrated, and sufficiently indicates the favourite modern methods for removal both of hard and soft cataract. He gives the preference to Wecker's peripheral flap method, the "three millimetre flap." The author does not refer to Bowman's suction operation for soft cataract. Perhaps he considers it risky to recommend to those whose experience in the diagnosis of the consistency of a

cataractous lens is limited. But it certainly deserves a place in a student's manual. Performed with a steady hand, in a suitable case, there are few prettier or more effective operations in eye surgery.

In the concluding chapters, on "The Orbital Muscles and Diseases of the Orbit," the operation for the advancement of the recti (Wecker) is described, and the treatment both by lenses and prisms, as also the ordinary operative measures for strabismus, are sufficiently detailed. Tumours of the orbit, malignant growths, and exophthalmic goitre, the latter affection particularly, with an account of some recent views (Fitzgerald) of its pathology, form the subject matter of the last chapter. Taking at random, as we have done from the work before us, these descriptions of some modern advances in this important science, we have instanced sufficiently the ground it covers, at the same time that readers will understand how difficult a task is that undertaken by any one who would endeavour to condense so large a subject as that of ophthalmology into a small handbook of a few hundred pages. Indeed, to us, the literary feat seems an impossible one. Reading through this excellent book one cannot but feel, here and there, that but scant justice is done to modern ophthalmological science in the brief allusions to many important matters in the necessary "boiling down" process to which such important matters as affections of the conjunctiva and cornea, glaucoma, retinal diseases, and amblyopia have been subjected. Nor would it be fair to analyse hypercritically this first effort of Mr. Swanzy's to place a reliable and "up to date" book in the hand of the student. Perhaps in a second edition, in some of the chapters referred to, he will see good reason for entering more fully into several topics of etiological and pathological interest which can hardly be omitted in an exact description. So, also, in point of treatment and therapeutics generally, we should like to see additions and greater detail, to make the work more valuable to the junior practitioner in his daily work. But we can say, conscientiously, of this book that, for its size, in the information it contains, in the lucidity of its style, and the practical directions found throughout its pages, there is no work we should prefer to place in the hand of the student.

We have omitted to mention that the book is well illustrated throughout, and that, both in the general get up and printing, nothing has been left undone by Mr. Swanzy's publishers.