According to certain observers the toxicity of pantocain is 10 times that of novocain when injected subcutaneously into experimental animals, but as the effective dose of pantocain is one-tenth that of novocain their relative toxicity is 1:1. Pantocain is inexpensive, has a prolonged action, in some instances lasting as long as 4 to 6 hours, is readily sterilized and combines well with adrenalin. It causes no irritation or hyperaemia when instilled into the conjunctival sac. In some cases there was a slight degree of smarting which lasted no longer than 25 to 47 seconds. Anaesthesia is complete in two minutes. Two drops of a 0.5 per cent. solution are sufficient for the purpose of tonometry, dilatation of the puncta and other minor procedures. There is very little tendency to drying of the cornea, the pupil does not dilate and the intra-ocular pressure is not increased.

H. B. Stallard.

BOOK NOTICES


This is a text-book written primarily for students attending a department of applied optics and is intended to cover work required by a student up to the stage at which he commences to specialize in such subjects as ophthalmic optics, optical instruments and lens design. It also includes the work required by students of Light for the Intermediate Examination of the Universities.

The book is well produced and as well as the lucidity of the diagrams, contains some beautiful photographs illustrating Interference, Fringes, Newton's Rings, Diffraction, and so on, the best we have ever seen (Mr. Fincham is a well-known and skilful photographer whose studies are frequently seen at photographic exhibitions).

Outstanding features of the book are lucid exposition, such as we would expect from an experienced teacher, and a well selected collection of exercises. We do not know of any other text-book in English which combines so conveniently the theoretical exposition of optical apparatus as well as diagrammatic illustrations that give at a glance the explanation of say, erecting prisms, telescopes, and the rest.

It is altogether an attractive volume of moderate price, to which one may turn for an exposition of any problem that may arise in the work of an ophthalmic surgeon.

This monograph, by the acknowledged pioneer in what has been one of the greatest advances in ophthalmic surgery in recent years, should be read by every ophthalmologist. In spite of the fact that any bibliography of the subject of detachment of the retina shows the production of between 300 and 400 papers within the last 25 years, this book should be enthusiastically welcomed. It bears throughout the stamp of an intense individuality and is in no sense a review or compilation. It is a logical, reasoned treatise, showing the steps by which the author arrived at his conclusions concerning the pathogenesis of detachment. His scientific work on the subject led him by direct inference to the method of treatment which has since proved so successful. It is true that Galezowski in 1902 had cured a detachment by means of ignipuncture in the region of the tear, but his conceptions of the development of the tear were unconvincing. The operation was, therefore, thought to be purely empiric, and was never seriously considered. It remained for Gonin, working primarily to prove or disprove Leber’s work on the pathology of detachment, to point the way to a rational treatment.

The monograph is divided into two sections, the first on the Pathogenesis of Detachment, and the second on Treatment. The pathology is dealt with from every point of view. Both traumatic and non-traumatic detachments are considered and the mechanism of the various groups illustrated by actual examples. The author has amassed a most convincing collection of both macroscopic and microscopic preparations (which the reviewer has had the opportunity of inspecting and studying) and this part of the book is freely illustrated by actual cases.

Reference is made to the work of other observers and Arruga’s Rapport presented at the 1933 Congress in Madrid is considered. The author is insistent on the importance of a thorough examination of specimens if a proper idea of the pathological relations of the vitreous, the detachment and the retinal hole is to be arrived at. He emphasizes, what is now probably admitted by most observers, the extreme frequency of the retinal hole, tear or disinsertion. He insists that clinically failure to find the hole (in the absence of corneal or lens opacities) in more than 2 per cent. of recent detachments is due either to an insufficient search or to lack of experience in recognizing the hole when seen, since it can assume a multitude of appearances. He points out certain conditions which constitute a prodromal stage, such as minute foci of peripheral choroiditis, irregularities of pigmentation,
migration of pigment cells from the ciliary region into the vitreous and posterior detachment of the vitreous.

The second part of the book deals with treatment. As a logical result of the pathology demonstrated in the first part the treatment is seen to consist in sealing the retinal hole or holes. The author holds no particular brief for his own method (puncture with a Paquelin cautery), but attempts to assess the value of all the known methods (ignipuncture, chemical cauterization, and electrocoagulation) in the various types of case. He believes that indications for one operation rather than another can sometimes be found in the size, number and situation of the holes and in the state of the vitreous and retina. He shows, however, that, properly applied, practically all the methods can produce successes. Particularly interesting is a series of cases, almost identical in type, but all cured by different methods. He emphasizes throughout the fact that the essence of success is an extremely careful clinical examination.

The book is well printed and bound. It contains a large number of coloured plates of great beauty, mostly the work of the author himself. The whole bears the stamp of originality and sincerity.


This volume completes the system of slit-lamp microscopy of the living eye that has been planned and published by the Société Française d'Ophtalmologie. These publications have varied in excellence, although all have been good.

The conjunctiva does not lend itself to slit-lamp examination so well as other anterior parts of the eye, but Drs. Cuenod and Nataf have produced a volume full of interest and most beautifully illustrated, the artist being M. Iseli, who presumably was responsible for the pioneer drawings in the first edition of Vogt's Atlas.

Some of the early part of this volume consists of an elaborate discussion of the anatomy and histology of the conjunctiva, and is consequently not really slit-lamp microscopy at all, but the authors have inserted it so as to correlate their own findings with the published accounts of earlier observers, especially that of Bailliart on the circulation of the conjunctiva in health and disease.

First, then, there is a description of the normal conjunctiva with special attention to the vascularization of the limbus. A section deals with the lymphatics, on which in the past there have been such discordant opinions.

Researches have been conducted by means of vital staining. The authors have used dyes, methylene blue, polychromatic
methylene blue, as well as other stains. By this means they are able to stain the epithelium, sometimes isolated cells, sometimes in groups.

They admit that it is difficult to stain a living cell, and believe that the cells that take up the stain, although possibly living, have reached the term of their existence and are on the point of desquamating.

With methylene blue, after a preliminary use of cocaine, certain star-shaped cells of the conjunctiva itself may be stained, sometimes above and sometimes below the level of the superficial vessels.

Nerves may be stained, preferably by a subconjunctival injection of methylene blue. By this means the corpuscles of Krause may be seen. The nerve fibres are best seen by the use of polychromatic methylene blue.

Observations by this method have been made on the vessel walls and lymphatics.

When we come to the section dealing with pathological conditions there is a detailed exposition of the various stages of trachoma, which is most informative and illuminating, and should be of help in the diagnosis in the early stages of the disease.

The authors' practice in North Africa where they have a large experience in trachoma, and their description of the earliest stages of the disease seen in children, before any complication by new or old conjunctivitis, is of great value. We have seldom met with such a careful description of any of the stages of trachoma.

In dealing with follicular conjunctivitis, sub-divisions are made; pseudo-follicular, chronic follicular, swimming-bath follicular conjunctivitis (on which Morax has published such an excellent monograph), acute follicular conjunctivitis (Beal), and lymphoid hypertrophy with opalescent nodules (Dejean and Temple).

In all these forms the authors point out small differences in slit-lamp appearance.

Spring catarrh does not seem to present any new appearance nor phlyctenular conjunctivitis.

Scleritis or episcleritis, and Parinaud's conjunctivitis seem to offer no new signs and the same applies to tuberculosis, syphilis, pemphigus.

In lesions produced by the gases of warfare, note is made of the varicosities of the vessels which were first described by Genet.

An interesting observation concerns certain signs of gassing:—

(a) Abnormal vascularization at the limbus, the vessels being abnormally red, dilated, and tortuous; (b) the scleral portion of the limbus appears more opaque and extensive than usual; (c) anaesthesia, or lessened sensitiveness of the limbus.
In artificial pigmentation of the conjunctiva, of which argyrosis is a type, they point out that the epithelium is free of pigment and that the pigment is disposed regularly along the sides of the blood vessels.

Observations have been made on the sub-conjunctival migration of Indian ink. There should be many opportunities now-a-days of making observations on those cases of detachment of the retina in which points of reference have been marked on the conjunctiva with Indian ink.

There follows an excellent classification of naevi and tumours of the conjunctiva, and their description, together with the beautiful pictures, are a feature of the book.

The authors conclude that the slit-lamp is indispensible for a complete examination of the conjunctiva.

Certainly, in examining inflammatory conditions the slit-lamp allows us to follow the vascular reaction to an irritant and the formation of the fundamental and specific inflammatory papillae, which are always richly vascularized.

Follicules, properly so-called, are already separated from papillae, and the term should be strictly reserved for those essentially follicular elements, with their poor vascularization.

Although, as the authors say, they have invented neither papillae nor follicules, their observations stretch wider than the strict domain of ophthalmology, and are such as to clear up certain facts in general physio-pathology.

In the same way, the importance of Bailliart’s researches on capillaroscopy of the conjunctiva is shown.

From the purely clinical point of view, in almost all types of conjunctival affections, including tumours, all the well-known external characters are confirmed with greater precision, and certain minute lesions are revealed.

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Appointment

Mr. Henry H. Aitchison has been elected Hon. Surgeon to the Newcastle-upon-Tyne Eye Hospital.

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Middlemore Prize

The Middlemore Prize of the British Medical Association for the year 1936 is announced. The subject chosen is “The Aetiology, Prophylaxis and Treatment of Myopia, especially in its higher degrees.” Essays submitted in