Whittington has analysed 1,000 consecutive private cases. These are divided into two categories. In the first, refraction cases numbered 657 of whom 316, complained of headache or pain; 319, of inability to see; 37, of "spots," watery eyes, blinking, etc.; 67 showed defects of muscle balance and 19 were "nervy." The second series comprised 343 non-refraction cases, of which 94 showed signs of inflammation of the eyeball; 53 were cases of injury; 48 had lenticular trouble (18 cataracts); 8 were cases of glaucoma; 33 were cases of squint; 29 had lid conditions and 7 were lacrymal cases.

"The complete ophthalmologist must be a practitioner of medicine, a surgeon, a neurologist, a physiologist, a mathematician, a physicist, and above all, a psychologist."

This all points to the necessity of a wider view of ophthalmology and a less narrow training for the future ophthalmic surgeon than that which has been considered sufficient in the past.

R. R. J.

BOOK NOTICES


This monograph, which forms a valuable contribution to comparative anatomy, can hardly pass unnoticed by ophthalmologists since, although its interest is mainly zoological, it cannot fail to be of service as a work of reference in a branch of comparative ophthalmology up to the present practically untouched. The subject is that of the intra vitam appearance of the iris in vertebrates, and the list of species examined (139) includes animals chosen both from the point of view of systematic, and of adaptive characteristics. Several rare species, not hitherto investigated in this country, were also included as opportunity arose. The paper, which is extremely well produced, contains, besides exhaustive tables of classification and text figures, over fifty of the author's coloured drawings of slit-lamp appearances of the iris in a great variety of fish, reptiles, birds and mammals. From this point of view the paper is an interesting example of the interaction of allied sciences, since the introduction of an instrument of clinical precision has rendered possible a fresh approach to certain biological problems. The main thesis of the paper is an attempt to separate fundamental morphological characters depending on deep-seated embryological processes, from secondary adaptive or individual variations. In the first place it
was necessary to prove or disprove the hypothesis that the condition of the embryonic ocular circulation helped to determine the definitive iris pattern. Secondly, having shown this contention to be in the major part tenable, the author considers the question of the constancy of vascular arrangement for each order. Thirdly arises the problem of the correlation of variations with function or habitat. The second proposition was found to be of less wide applicability than the first, while the third was found to be definitely complicated by unknown factors, especially where pigmentation was concerned. Whatever may be the opinion of zoologists on much that is controversial in the paper, it is of undoubted value as a record of a series of first hand observations in what is practically an untouched field. Many of the descriptions, as for example, that of the specialization of the gecko pupil for diurnal vision, are entirely new.

Miss Mann is greatly to be congratulated upon a laborious, but fascinating piece of research, admirably carried out, and thanks are due to the Zoological Society for publishing what must have been a costly communication.


The number of ophthalmic hospitals, including travelling hospitals and ophthalmic departments of general hospitals is now 45. The largest hospital is that which has just been opened at Rod-el-Farag, a suburb of Cairo, which has 100 beds. Nearly half a million new patients were treated during the year, with more than four million out-patient attendances. Nearly two hundred thousand operations were performed. The annual cost of maintenance was £85,000. The work is carried on by 105 ophthalmic surgeons. This is the largest ophthalmic organization in the world, and Egypt may well be proud of this achievement.

The percentage of blindness in one or both eyes has been gradually falling since 1909, when it was 15 per cent. It is now 8 per cent. This shows that the ophthalmic hospitals and their propaganda are exercising enormous influence in the country. The incidence of primary glaucoma exceeds that of any other country, more than 1 per cent. of all new patients showing definite signs of this condition, and calling for a decompression operation in 5,000 cases.

Great importance is attached to the post-graduate courses in ophthalmology which are held twice a year, and were attended by 35 medical men in 1929.

Perhaps the most important work carried out is that in the Government Primary Schools, at 32 of which there are ophthalmic
clinics. At each of these during the school terms, an ophthalmic surgeon attends on five days a week to carry out treatment for trachoma and acute conjunctivitis. On the date of the final inspection, 835 pupils were wearing glasses, which had been prescribed after retinoscopy under cycloplegia.

The pathological work on behalf of all the ophthalmic hospitals is carried out at the Giza Memorial Ophthalmic Laboratory under the supervision of Dr. Rowland Wilson. 692 microscopical examinations were made, and 1,036 Wassermann tests performed. Special culture tests for diphtheria of the conjunctiva were made; of which 8 were positive. The number of malignant tumours detected was very large. They include those affecting the eyelids, 43; the limbus, 32; the choroid, 1; the retina, 10; and the orbit, 4.

Important experimental work on the aetiology of trachoma was carried out by Dr. Rowland Wilson and his assistants which forms the subject of a separate report.


The annual report for 1930 of the Director of Health, Palestine, Colonel G. W. Heron, C.B.E., contains a very interesting and well-written account of the activities of his department of the Government. Palestine is a small country, roughly about 125 miles long and 35 miles broad, containing less than a million inhabitants. There are four times as many Moslems as Jews and twice as many Jews as Christians.

In Jerusalem there are eight hospitals which cater for ophthalmic patients, of which the most important is the Ophthalmic Hospital of the Order of St. John, of which Dr. Strathern, C.B.E., is the Warden. Here about 20,000 patients a year are treated. The Jewish Hadassah Hospital and the Church Mission to Jews Hospital each treat rather less than 4,000 patients a year, while each of the other hospitals, of which the French St. Louis Hospital is the largest, has a smaller clinic.

Government ophthalmic clinics are maintained at Ramleh, Gaza, Acre, Beersheba, Nablus, and Tulkarem. French hospitals carry on ophthalmic clinics at Bethlehem, Jaffa, Haifa, and Nazareth. Jewish ophthalmic clinics are maintained at Jaffa, Haifa, and Tiberias.

It is to be noted that at Ramleh school 99 per cent. of all the boys showed evidence of active or of cured trachoma.

The number of patients attending the out-patient clinic becomes enormously increased in August, September and October, as the result of the incidence of acute conjunctivitis in epidemic form. Very similar conditions obtain in Egypt during the hot weather.
Book Notices


Nine years have elapsed since the third edition of this book appeared. The last edition was noticed in our columns (Vol. VII, p. 203) where the general scope of the work was outlined. It forms one section of Wright's Index Series in Medicine and Surgery, and can be confidently recommended to the busy general practitioner for whose benefit it has been written.

It is not surprising that many of the articles have had to be amplified or rewritten to bring them up-to-date. The ophthalmic section is in the hands of Mr. Arthur D. Griffith, and comprises, as in the former edition, short articles on cataract, glaucoma, interstitial keratitis and myopia. These articles are well-balanced and cover the ground fairly; they are based on sound principles of ophthalmology, and are amply sufficient for the general practitioner. The family doctor is not expected to be au fait with the latest views on ophthalmic physiology and biochemistry, or with the newest methods of treatment of retinal detachment by Gonin's method; whereas he may reasonably be expected to be able to help in setting the minds of his nervous patients, whose general health he is concerned with, at rest over the matter of a few peripheral striae which may have recently made their appearance in the lens.

Medical Social Service in Eye Clinics. Transactions of the first of a series of study meetings arranged by the Committee on Development of Social Service in Eye Clinics of the Medical Social Service Section of the Welfare Council of New York City.

During the years 1930 and 1931, a series of meetings was arranged by the Committee on Development of Social Service in the Eye Clinics of New York, and at these certain ophthalmic surgeons were invited to read papers and open discussions on various diseases of the eye and their social implications.

The transactions consist of a report of these meetings and the discussions that followed. A simple and brief description of the pathology, diagnosis, and treatment of certain diseases of the eye is given in terms that social workers and laymen are able to understand and appreciate, and in each instance this is followed by suggestions as to the care of patients, investigations into their environment, after-care and "follow-up." Special attention is paid to the advice that a social worker should give to a patient and his family regarding the nature of his disease, its treatment and prognosis.
Cataract; trachoma; glaucoma; diseases of the cornea; diabetes; strabismus; nephritis; detachment of the retina; diseases of the optic nerve; uveitis; arteriosclerosis and progressive myopia are amongst the subjects discussed at these meetings.

These transactions will be of interest to the social service departments of ophthalmic hospitals and also to ophthalmic surgeons who are interested in this aspect of their clinic work.

Ophthalmologicky Sbornik. Collection of Papers read before the Sixth Congress of the Czechoslovak Ophthalmological Society, 1931. Published by the Society, Prague.

The Transactions of this Society, now in its sixth year, afford evidence of the scientific activity of its members. The present volume includes 37 communications, and appears to contain much material of value and interest, though concealed in a language known to few outside Czechoslovakia. It is true that some indication of the contents of each paper is given in a résumé in English, French or German, but usually this is too brief to be of much service. The reviewer notes a great deal in the original, the translation of which into any one of the three foreign tongues, would be welcome.

Among the communications which arouse interest are several dealing with secondary glaucoma of varying causation, luxation and sub-luxation of the crystalline lens, hereditary familial ectopia lentis, etc. A valuable contribution concerns the treatment of ulcus serpens corneae with ultra-violet rays; the conclusion of the author, Dr. J. Derer, is—"In slight and moderately severe cases, this treatment held its place well with the usual methods; in very severe and advanced ulcers, no better result was obtained than with the usual treatment."

A number of the papers are furnished with useful bibliographies. The volume is well printed; it is lacking in illustrations; it is worthy of something more lasting than a paper cover.


The Director of the Giza Memorial Ophthalmic Laboratory, Dr. Rowland Wilson, has produced an interesting, well-written and well-printed report for the year 1930.

The laboratory being adjacent to the Giza Ophthalmic Hospital is well situated for the post-graduate lectures on ophthalmology which are given in two sessions each year, after each of which examinations are held for admission of young ophthalmologists to the Government Ophthalmic Service.

Pathological specimens are received from all the ophthalmic hospitals and from a number of private oculists. Among 81 blind staphylomatous eyes with secondary glaucoma which were sent up
one was found to contain a retinal glioma and another a melanotic sarcoma of the choroid. Seventy other specimens of malignant tumour were dealt with; these affected the eyelids 42 cases, the conjunctiva 3 cases, the limbus 12 cases, the cornea 1 case, the choroid 3 cases, the retina 6 cases, the orbit 2 cases, and the lacrimal gland 1 case. The pathological material available for study is extremely rich.

The results of the experimental investigation of the aetiology of trachoma are summarized as follows:—

1. Pure cultures of bacterium granulosis have utterly failed to produce "chronic granular conjunctivitis" in monkeys (13 in all).
2. Inoculations into monkeys with infected monkey tissue or secretions thereof never fail to give positive results even in monkeys refractory to pure cultures.
3. Bacterium granulosis is capable of inducing in the human conjunctiva an acute conjunctivitis of short duration. The inflammation is accompanied by mild granular lesions which, however, disappear without treatment leaving no permanent sequelae.
4. Tissue transfers from monkey to the human conjunctiva have so far failed to produce granular lesions.
5. Bacterium granulosis has never yet been recovered from Egyptian trachoma.

In the Fourth Annual Report of the Laboratory full details were published of an ophthalmic survey of a village, Bahtim. This investigation has been continued. Thirty-seven infants were born during the months September to December who have been examined frequently since birth. Of these, two died at the age of six months and in both cases the presence of tiny follicles on the tarsal conjunctiva was suspected. The remainder, with one exception, developed definite trachoma before they were a year old. Of the 34 cases which developed trachoma, in 22 the appearance of the first definite signs of trachoma was preceded by an acute mucopurulent conjunctivitis mostly of Koch-Weeks bacillus origin. In the remaining 12, there was a previous chronic catarrhal conjunctivitis, in seven of which the Koch-Weeks bacillus could be found. In the one case out of the 37 which has not as yet developed trachoma, i.e., after 18 months, there has been a mild chronic catarrhal conjunctivitis but no pathogenic bacteria have been found in direct smears.

There is no rigid seasonal incidence of trachoma for it may develop at any time of the year. Some of the cases developed the disease during the winter without any preceding attack of acute inflammation. Koch-Weeks or other bacillary infection of the conjunctiva is not therefore a necessary prelude to infection with trachoma.

During a period of the year under review a bench at the laboratory...
was placed at the disposal of an American pathologist for research work on trachoma. The admirable facilities which this well equipped laboratory affords, and the abundant clinical material which is available, make it the object of a necessary pilgrimage for any pathologist who wishes to carry out a research in the aetiology of trachoma, and who has the requisite credentials as to experience in experimental work.

CORRESPONDENCE

To the Editors of The British Journal of Ophthalmology.

DEAR SIRS,—In the December 1931 number of the Journal, on page 723, an abstract is given of Hughes's method of treating spastic entropion, taken from the American Journal of Ophthalmology.

The treatment of this condition by novocaine and absolute alcohol, was introduced into the Ophthalmic Department of the Royal Hospital, Baghdad, in September, 1930, and since then, 11 cases have been treated by this method. In all cases except one, the treatment has met with complete success, and in this one case, the entropion was turned into a slight ectropion. In no case was it necessary to repeat the treatment. Our procedure differs slightly from that described. Novocaine 2 per cent. is used, and may be injected in quantity up to 1.0 c.c. The needle is inserted at the outer canthus of the lid, and pushed through the lid to the inner canthus. The injection is then made, the needle being gradually withdrawn during the injection. Absolute alcohol is then injected in a similar manner, 0.5 to 1.0 c.c. being used. Hot fomentations are then applied to the eye four hourly.

Yours truly,

ROYAL HOSPITAL,
BAGHDAD (IRAQ),
January 6, 1932.

GORDON SPENCER.

To the Editors of The British Journal of Ophthalmology.

SIRS,—In the review of Mr. Ernest Clarke's book "The Fundus of the Human Eye" in the February number, page 122, your reviewer has fallen into error in attributing to me the selection of the drawings and the writing of the descriptive legends. Mr. Clarke was good enough to ask me to look through the drawings and legends, which I did, but the work is Mr. Ernest Clarke's and not mine.

Yours faithfully,

A. H. LEVY.