epiphysis of the humerus. The nerve had been freed from the callus by which it was surrounded. Dr. DUNCAN FITZWILLIAMS: (1) A case in which a lipoma had been removed from under the parietal pleura; (2) a fibro-lipoma from under the deltoid; it had been attached to the capsule of the shoulder-joint.

Reviews.

OPHTHALMOLOGY.

THE second volume of Dr. M. L. FOSTER'S translation of ROEMER'S *Textbook of Ophthalmology*[1] appeared rather less than a year after the first volume, which impressed us favourably. It includes diseases of the eyelids, injuries of the eye, diseases of the vitreous, sclera, lacrymal organs, and orbit, glaucoma, and muscle errors. It differs from most ophthalmic textbooks, since it is in the form of lectures, and this goes far to account for its bulk. Although various theories and methods of treatment are described, as a rule Roemer lays down what he considers to be the correct course without discussing the views of others in much detail. A thorough explanation of the various theories which have been adduced to account for sympathetic ophthalmitis is given. In sympathetic ophthalmitis the Leber-Deutschmann theory of migration and the modified cilio-neural theory of Schmidt-Rimpler are discarded as unsatisfactory, as they fail to account for the facts of the disease. The theory the author advocates is that the disease is a specific metastasis, that it arises haematogenously, and is due to a specific metastasis from the eye first affected. This, he holds, has received adequate experimental support and affords a natural explanation of all the clinical symptoms. In describing the operations for glaucoma, iridectomy is given the premier place, then cyclodialysis, and finally sclerotomy, but no mention is made of trephining nor of Herbert's method of sclerotomy. A good deal of attention is bestowed upon the changes in the fluid contents of the normal eye. The final chapter of the volume deals with muscular anomalies. The third volume contains a chapter on the pupil and its normal and abnormal reactions, in which considerable attention is given to the action of the pupil in certain diseases of the central nervous system. The chapter or lecture on the extraocular muscles contains a full discussion of the diagnostic importance of paresis of the various muscles, and of the effects of injury, and such diseases as herpes ophthalmica. Next follows an account of the affections of the choroid, retina, and optic nerve. Considerable attention is given to errors of refraction and presbyopia. The account of colour vision is based on the Hering theory, and the author is apparently one of the few who still consider this theory either correct or adequate to explain the subject; the only tests mentioned for the determination of colour vision is the Holmgren, Stilling's tablets and Nagel's test. This is unusual in a German book, for it is so well recognized in that country what unreliable a test the former is. There is an appendix, written by Dr. M. L. Foster, on asthenopia and its causes. The three volumes which comprise this book treat very thoroughly of the subject of ophthalmology. The style is that of a teacher speaking to the students, and the matter is clearly and explicitly put and generally sound and correct. The book occupies a unique place in ophthalmic literature.

We welcome the seventh edition of *Diseases of the Eye*,[2] by G. E. DE SCHWEINITZ of Philadelphia. The first 200 pages contain a description of the examination of the eye, and a discussion of optics and refraction. Some of the illustrations are anything but artistic, especially those dealing with the examination of the eye. Figures 26, 27, and 28 might well give place to something a little more worthy of the book, and the passages in which colour blindness and its detection are dealt with might be rewritten with advantage. The chapter on glaucoma is good, and the modern operations of Lagrange, Elliot, and Herbert are well described. There is an article on the injurious effects of the arylarsenates; the amblyopia which has in some cases followed the use of soamin, orsudan, etc., Dr. de Schweinitz considers due to the aniline in these compounds and not to the arsenic, and he definitely states that salvarsan has no injurious effect on the optic nerve—a matter which we had supposed to be as yet unsettled. Almost all recent work finds a place in this volume, which is one of the larger textbooks, containing as it does nearly 1,000 pages. The book is too well known not to be familiar to most ophthalmic surgeons, and it justly occupies one of the first places in textbooks of eye diseases.

Surgery of the Eye,[3] a book of some 500 pages recently brought out by Drs. ERVIN TÖRÖK and GERALD H. GROUT, both of New York, is profusely illustrated with 509 diagrams of which 101 are in colour as well as two coloured plates, and the whole get up of the book is excellent. Detailed explanations are given of such operations as are described together with their indications. The introduction is written by Dr. Arnold Knapp, and in the first chapter—dealing with the general preparation and surroundings required for ophthalmic operations—nothing is lacking, so that a beginner will find all details for the performance of surgical work on the eye. Although the book is of fair size no mention is made of many of the operations which are more or less in general use. Good useful methods are given for dealing with every ordinary condition likely to be met with, and some of the newer operations are well illustrated and described. It is an advantage rather than otherwise for a beginner not to be confused with too many alternative ways, and those that are given here are really useful methods of dealing with the various conditions for which they were designed. The book can be recommended as an up-to-date volume on the surgery of the eye.

In Dr. KARGER'S work on the development of the spherical refraction of the human eye,[4] the whole question of the development of the three conditions of refraction—hypermetropia, emetropia, and myopia—is discussed at great length. The three conditions must, he says, be considered together, because they are not essentially different. Both long and short sight depend upon a lack of the correct balance between the corneal curvature and the length of the eye. The corneal refractive power varies within fairly wide limits, but corneae which are more or less curved than the average may be and are found in emmetropic eyes. Similarly a strongly curved highly refractive cornea may be found in a hypermetropic eye, and a cornea flatter than the average may be associated with myopia. Generally speaking, however, the hypermetropic eye is furnished with a flat cornea; myopic eyes have in most cases a sharply curved cornea. The average variation is about half a dioptre, but in exceptional cases it is much more. These two factors—axial length and corneal curvature—afford, the author contends, the necessary variable factors for natural selection and heredity to act upon; either of the two may be inherited from either parent. Among aboriginal tribes myopic individuals would, he argues, be at a serious disadvantage, and hence natural selection would tend to eliminate this form of refraction, and accordingly short sight is rare among savage tribes. Myopia is, on the other hand, not such a serious disadvantage among cultured races, and in some callings may even be an advantage. He concludes therefore that the higher the culture the greater will be the percentage of myopic individuals. In Dr. Steiger's opinion heredity and natural selection are the all-important factors in determining whether the refraction of an individual shall be hypermetropic, emmetropic, or myopic. He regards myopia as a single entity, and disapproves of any division

[1] *Textbook of Ophthalmology, in the form of Clinical Lectures.* By Dr. Paul Roemer, Professor of Ophthalmology at Greifswald. Translated by Dr. M. L. Foster. Volumes ii and iii. London: Rebman, Limited. 1913. (Roy. 8vo, pp. 277-571 and 572-892. 10s. 6d. net each volume.)

[2] *Diseases of the Eye: A Handbook of Ophthalmic Practice for Students and Practitioners.* By G. E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the University of Pennsylvania. Seventh edition. Philadelphia and London: W. B. Saunders Company. 1913. (Med. 8vo, pp. 980; 360 illustrations; 7 chromo-lithographic plates. 21s. net.)

[3] *Surgery of the Eye.* By Ervin Török, M.D., and Gerald H. Grout, M.D. London: Baillière, Tindall and Cox. 1913. (Roy. 8vo, pp. 515; 509 illustrations; 2 plates. 18s. net.)

[4] *Die Entstehung der sphärischen Refraktionen des menschlichen Auges.* Von Dr. med. Adolph Steiger. Berlin: S. Karger. 1913. (S. roy. 8vo, pp. 380; 15 figs. Mk. 18 unbound, Mk. 20 bound.)

into varieties, such as inherited myopia, school myopia, and pernicious myopia. He points out that two sisters may have myopia which they have inherited from myopic forbears, and yet one may have a normal fundus and the other serious changes in the choroid, and it may even happen that these changes are present in the sister who has the lower degree of myopia than the other. There is, he holds, no such thing as school myopia; the disease often advances with the increased age of the children, but this has nothing to do with the work the scholars perform. He severely criticizes the deductions which have been drawn from enormous masses of figures on the ground that statistics have been compiled upon such varying plans that they are useless for purposes of comparison. The results of those ophthalmologists who have examined schools without using a mydriatic are, he thinks, worthless. We do not think that anything is to be gained by attempting to avoid drawing a distinction between ordinary low grade stationary myopia and progressive myopia. One child inherits a faulty balance between axial length and corneal curvature determining a stationary myopia, which ceases when growth has ceased, while another child inherits a sclera which fails to withstand the strains imposed upon it and progressively elongates, whether he studies in school and college or works in the fields; high grade myopia, with fundus changes, is at least as common among the labouring classes as among the professional, and is by no means unknown among such uncultivated races as the Bedwân. There is justification for the author's refusal to entertain the theory advanced by Cohn that school work may be a cause of myopia. English boys often work as hard at books as German boys, yet myopia is quite the exception among English professional men, while in Germany it reaches 50 per cent. Half the German doctors, it is said, are myopic; we doubt whether even one-tenth of English doctors are so afflicted. If these statements be correct, it seems obvious that we have to do with a question of racial proclivity. Dr. Steiger's book, as a whole, is open to the criticism that all he has to say could have been condensed into 100 pages, and we have over 500. In some places his diction is so lacking in clearness that we feel that we may not have interpreted him correctly; 441 references are given at the end of the book, and by far the larger part of the work is devoted to the views of ophthalmologists, some of high others of little repute. The statistics compiled by the London County Council's medical advisers, Bishop Harman and others, are not even mentioned. The book is tedious, and the author adds little to our knowledge of the subject.

Dr. C. Adam, of Berlin, has produced an excellent atlas[5] showing the normal and pathological appearances of the retina, in coloured plates and with a magnification of about ten diameters. The pictures, drawn by Landsberg, are first rate, and have been very well reproduced and printed, rarely leaving anything to be desired. The greatest excellence of Dr. Adam's book, however, lies in the ample notes and explanations with which each picture is expounded, and in the pages of text with which the different series of retinal pictures are each introduced. Beginning with a short and clear account of the technique of ophthalmoscopy, and the way in which to correct the faulty methods that beginners are likely to employ, the author goes on to discuss the normal papilla and fundus, and the etiology and pathology of optic atrophy, optic neuritis, and the diseases of the retinal vessels, the retina, and the choroid. In each case the normal and the morbid anatomy of the part are given, in simple terms but very thoroughly, and always the main object of the book is kept in view—the use of the ophthalmoscope as an aid to diagnosis. The text is not burdened with detail, but clearly written and readily intelligible. The book is admirably got up and printed, and may be warmly recommended, not only to specialists in diseases of the eyes, but to all practitioners and advanced students who are not strangers to the use of the ophthalmoscope.

[5] *Ophthalmoskopische Diagnostik, an der Hand typischer Augenhintergrundsbilder. Mit besonderer Berücksichtigung der für die Allgemein-Medizin wichtigen Fälle für Aerzte und Studierende.* Von Priv.-Doz Dr. C. Adam. Berlin and Vienna: Urban and Schwarzenberg. 1912. (Imp. 8vo; 86 illustrations, 41 tables, 18 figures.)

MEDICAL GYMNASTICS AND ORTHOPAEDICS.

The treatise on medical gymnastics of Dr. Anders Wide,[6] which was published in Stockholm in 1896, had many readers in Scandinavian lands and was subsequently translated into the three chief European tongues. The French translation, by Dr. G. Falk, of the second edition which has just appeared, will no doubt also have a large circle of readers. Although this work is largely founded on the teaching of Ling, the author has found it convenient to adopt the nomenclature based on that used by Zander in his mechanical exercises, which Dr. Wide also recommends with the reservation that they should be combined with, but can never take the place of, massage. Nearly a century ago Ling divided gymnastics into four principal branches, namely pedagogic, military, medical and aesthetic, but although these four groups differ in the objects aimed at, the means employed have much in common.

There are three main divisions of medical gymnastics—the active, the passive, and the group of movements against resistance. Part I of the book is devoted to detailed description and discussion of the various movements and exercises, while Part II is occupied by a consideration of their application to different diseases. In the first part the descriptions and illustrations are necessarily familiar to all readers of books on Swedish gymnastics, and are adequate and clear. In the second part the author, after defining the extent of the usefulness of the method, warns us against some teachers of Swedish gymnastics abroad, who have applied it as the sole means of treating all diseases, even infectious fevers and malignant tumours. Then follow sections on the treatment of the circulatory, respiratory, digestive, genito-urinary, nervous and muscular systems; on constitutional and intoxication diseases and on those of the bones and joints. Finally, some fifty pages are devoted to consideration of the diagnosis and treatment of scoliosis. This subject, probably owing to want of space, is dealt with in a rather sketchy manner, and some causes of scoliosis, for example, anterior poliomyelitis, are not mentioned. Should a third edition of this popular treatise be called for, the author would be well advised to leave out discourses on etiology, pathology, and diagnosis of scoliosis, and utilize the space saved by amplifying the descriptions of manipulations and exercises and increasing the number of illustrations of them, for there is no deformity in which the selection of appropriate exercises calls for more discretion if good results are to be attained. The book has no index.

[6] *Manuel de gymnastique médical et orthopédique Suedoise.* Par le Docteur A. Wide, Professeur à l'Université de Stockholm, Directeur de l'Institut gymnastique orthopédique. Traduit par le Docteur G. Falk de l'Université de Stockholm. Bruxelles: A. de Boeck. Paris: F. Alcan. 1913. (Roy. octavo, pp. 318; 100 figures, and 1 plate. 10 Fr.).

SURGERY FOR DENTAL STUDENTS.

In a handbook entitled *Surgery for Dental Students*,[7] Mr. Arthur Underwood has tried to define the surgical knowledge requisite for the examinations for the dental licence. Ten years' experience as examiner on the English Dental Board, and an official visit of inspection to all the existing British examinations, should be an efficient preparation for such a work. The authors also thought that a clearly written elementary treatise might not be unwelcome to the general student as an introduction to the study of surgery. This we think unfortunate, since it seems to have induced the authors to write at least as much for the general as for the dental student, and opportunities of explaining the text by reference to oral conditions have not been as much utilized as they might. For example, more is said on the subject of facial paralysis than is ever required of the dental student, and less on the oral manifestations of syphilis than he should know. In discussing chronic pharyngitis, it would have been well to point out that it frequently depends on a septic mouth, and in connexion with chronic inflammation of bone pyorrhoea alveolaris should have been mentioned. It is said that Hutchinson's teeth may be caused by some other affection than syphilis. We

[7] *A Handbook of Surgery intended for Dental and Junior Medical Students.* By Arthur S. Underwood, M.R.C.S.Eng., L.D.S.Eng., late Examiner, Royal College of Surgeons, England; and Bayford Underwood, M.B., B.S.Lond., M.R.C.S Eng., L.R.C.P. London: John Bale, Sons and Danielsson, Ltd. 1912. (Fcap. 8vo, pp. 252; 19 illustrations. 3s. 6d. net.)

should like evidence that this occurs even rarely, for the point is one of great interest. Like all Mr. Underwood's work, the book is written in an interesting and clear style. The chapters on pathology are especially good reading, and great care has been expended in sorting out the information given throughout the book. The dental student who masters its contents, and can apply the knowledge to his speciality, should not only satisfy the requirements of any dental examining board, but also give a good account of himself in daily practice.

Messrs. MILLS AND HUMPHREYS have also published a work on *Surgery for Dental Students*.[8] They have written solely for dental students and practitioners, and claim to meet all the requirements of the new curriculum of the Royal College of Surgeons of England and of the various licensing bodies both here and in America. The authors deal with surgical pathology in general and with diseases and injuries of the mouth and adjacent parts in particular. The work is open to the same criticism as that by the Messrs. Underwood—full advantage has not been taken of opportunities of illustrating general pathology by mouth conditions, and the influence of dental sepsis appears not to be fully appreciated. When we read that "chronic inflammation (of bone) is usually due to tuberculosis or syphilis, but occasionally to chronic irritation," we are inclined to suggest that in the jaw bones the reverse is the fact, that the chronic irritation of dental sepsis is the common causal factor, and tubercle and syphilis uncommon. We note that while Mr. Underwood would avoid alveolar drainage in the treatment of chronic antral suppuration at all costs, Messrs. Mills and Humphreys find it the most satisfactory method in the majority of cases. The book is well and clearly written, and includes all, not excepting "foot and mouth disease," that the dental practitioner is likely to meet with. It is unlikely that any dental examining board will require more of the candidate than is contained in its pages.

DYSENTERY.

Dysenteries: their Differentiation and Treatment,[9] a small book by Professor LEONARD ROGERS, deserves very careful study. The author has given special attention to the subject, and has from time to time advocated strongly the ipecacuanha treatment for the amoebic variety of the disease. Still more lately, applying Vedder's experimental work on emetine, he has opened up a very great improvement in the therapeutics of the condition, and has done inestimable service in advancing strong clinical evidence of its efficacy. Protozoal diseases present special difficulties in treatment, and amoebic dysentery is no exception to this rule. The expectation that a few doses of emetine would always cure dysentery, if ever entertained, is now being proved by experience to be too sanguine; it would appear that a fairly prolonged course may be necessary, and that even then relapses may occur. We would strongly advise those who have had little experience of dysentery to read this book. It is very simply written, and gives a very good account of the subject, including not only the amoebic, but also the bacillary and other forms of the disease. The last chapter of the work is devoted to sprue.

NOTES ON BOOKS.

MR. C. STRICKLAND, medical entomologist, Federated Malay States, has prepared a *Short Key to the Identification of the Anopheline Mosquitos of Malaya* for the use of medical officers and others. The key is concerned with fifteen species, which, in the author's opinion, comprise all those of importance for medical purposes. Attention is first directed to one part of the mosquito's anatomy and then to other parts, and it is believed that, with the aid of the diagrams given, the identification will be comparatively easy. The pamphlet, which is published by the Government Printing Office, Kuala Lumpur, will undoubtedly prove useful.

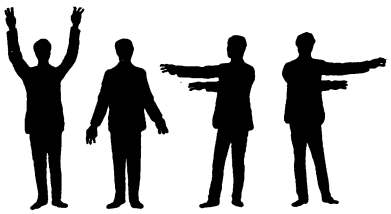
[8] *A Textbook of Surgery for Dental Students*. By G. Percivall Mills, M.B., B.S.Lond., F.R.C.S., Surgeon to the Royal Orthopaedic and Spinal Hospital, Birmingham, and Humphrey Humphreys, M.B., Ch.B., B.D.S.Birm., L.D.S.Eng., Demonstrator in Dental Surgery, Birmingham Dental Hospital. London: Edward Arnold. 1913. (Demy 8vo, pp. 352; 57 figs. 12s. 6d. net.)

[9] *Dysenteries: their Differentiation and Treatment*. By Leonard Rogers, M.D., F.R.C.P., B.S., F.R.C.S., C.I.E., I.M.S., Physician to the Isolation Ward (Cholera and Dysentery), Medical College Hospital, and Professor of Pathology, Medical College, Calcutta. London: Oxford Medical Publications; Henry Frowde and Hodder and Stoughton. 1913. (Demy 8vo, pp. 346; 10 plates, 2 charts, 3 diagrams. 10s. 6d. net.)

MEDICAL AND SURGICAL APPLIANCES.

The "Signal" Vision Test Type.

MR. N. BISHOP HARMAN, M.B., F.R.C.S. (Ophthalmi: Surgeon, Belgrave Hospital for Children, London), writesc This test type has for its signs the block E after the fashion of Hirschberg's test types; but only one sign is given for each grade of the test. The signs are mounted on turntables, so that their positions can be varied indefinitely. In one model the whole of the turntables are geared together by a simple pulley arrangement, so that the movement of a milled head at the front bottom edge of the board causes all the signs to turn in different directions. In the simpler model the turntables have knobs projecting behind the board by which they are moved as required. This test is of particular value where



it is desired to make a subjective test of vision with a minimum of error due to the "mental factor"—that is, in testing seamen, railwaymen, or other employees whose vision is a matter of importance. The test requires no knowledge of letters, only the minimum power of imitation. The test has already been in use for some time for testing school children with excellent results. As a school-vision test the children should be taught to regard the E sign as three fingers, turned up, down, to the right or left. The teacher should draw these signs on the class blackboard in large size and teach the whole class "signal drill," showing them how to stretch out three fingers of both hands in the position of the fingers of the E sign pointed to. After this drill vision-testing will be quick and sure. The test should be hung in full daylight (not sunshine), a monitor should stand beside the test holding a sheet of dull-coloured card, so as to cover all the signs below the one the child is looking at. The child should stand toeing a chalk line drawn at the distance of 16 ft. 6 in. from the test. The examiner sitting slightly behind the child will see both the sign and the signal of the child. The signs should be altered in position for each child by the monitor turning the milled head or one or two of the discs. Except that the test will get dirty, there is no objection to letting it hang in the class room, for it cannot be learnt by heart. On the back of each test card there is gummed a printed sheet with the instructions as above and a figure showing the manner of signalling with the arms and fingers. The test is made in excellent fashion by Messrs. Curry and Paxton, Great Portland Street, London, W.

SANITARY AND DOMESTIC APPLIANCES.

Irish Frieze.

THREE specimens of Irish frieze that have reached us are samples of the fabrics now being used by Messrs. M'Alery, of Belfast (27, Rosemary Street) in the making of ulster coats. They present variations in colour and slight differences in weight, but all alike offer, even when stretched, marked resistance to the passage of water, as also to that of air under pressure. Such cloth, even as it stands, would offer the wearer a high degree of protection both against cold wind and driving rain, and when its resisting power is further increased by lining it with tweed—as is the practice of Messrs. M'Alery—the resulting garment should be of a highly satisfactory kind from the point of view of those who wish to take all reasonable precautions against chills. Messrs. M'Alery have had long experience in the building of winter overcoats, and the cloths from which the samples in question were derived seem well calculated to maintain their reputation. The ulsters are made with deep collars and wind-proof cuffs, and the firm claims that they will wear for ten years. Patterns can be obtained on application.