NEW BOOKS AND NEW EDITIONS.

The Disorders of Postnatal Growth and Development. By Hastings Gilford, F.R.C.S. Pp. 727. Illustrations, 65. London: Adlard & Son, Bartholomew Press, Bartholomew Close, E.C. 1911. Price 15s. net.

This is a thoughtful and also a thought-provoking book, full of interest for the man who tries to look through the details of ordinary professional experience into the great principles which underlie them, into the determining factors in causation, and into the laws which govern the apparently haphazard choice of the effective cause. It is, moreover, an entirely readable book, an excellent thing in books, amiable and grateful to the jaded reviewer of many text-books, with their somewhat monotonous marshalling of facts in conventional divisions, chapters, and paragraphs. It is at the same time a difficult work to review, calling rather for the lengthy essay of the early nineteenth century commentator than for the short and often superficial sentence of praise or condemnation of the present day. The reader, in this case, will understand that he is to go to the book itself, and not to content himself with the few matters chosen for consideration in this review.

Mr. Hastings Gilford is fond of triads, and he begins with that of growth, nutrition, and development. The chapter in which he distinguishes between these three processes calls for careful reading, for it forms, in many respects, one of the foundation piers on which much of the edifice of the book rests. It is a little difficult also to accustom oneself to the conception of senile degeneration being identical with retrogressive development, indeed, "retrogressive development" itself is rather an elusive and paradoxical idea. As in all books which break up new ground, the terminology is apt to constitute a difficulty, for words take on a new signification to suit new conceptions arising out of the novel conditions set forth; for example, nutrition is not used here in its special relation to food or feeding, but "to a condition which is in part the result of the assimilation of food, and in part of factors of whose nature we know nothing," and this "nutrition" is to be judged of mainly by the way in which an organ, or part, resists bacterial poisons (i.e. immunity). As a matter of fact, however, nutrition disappears from the triad in an early part of the book, leaving growth and development to be expanded and discussed at great length.

By making development regressive as well as progressive the author is able to support his thesis that development is coterminous with life. He works out man's second childhood in the terms of physiology, and he has much to say that is fresh, if not absolutely convincing, about the resemblance of old age to infancy, maintaining that the tissue
changes of old age are known quite as much by the reappearance of embryonic characters as by actual decay. But there is a difference, and the tissue changes of second childhood are distinguished from those of first childhood by defective control.

Another triad is that of the cell, the organ, and the complex animal. The human body is made up, first, of cells, second, of organs (which are communities of cells), and third, of the groups of organs which constitute the whole animal; so that every cell of the body leads a triple life. It has its own cellular existence, its co-operative life with other cells in an organ, and its subordinate life as a part of the complex organism which constitutes the individual man or animal.

In development there are two tendencies at work—heredity, which is conservative, and variation, which is changeable, and may be either reactionary or progressive. But development, whilst progressive, has periods of greater or less energy and rapidity, and Shakespeare's seven ages are not mere poetry but actual periods with intervening climacterics, named (e.g. birth, puberty, menopause), or unnamed, (e.g. that between babyhood and childhood). Mr. Hastings Gilford accepts the theory that menstruation is in many respects a miniature childbirth, and has its cyclical increase and decrease of development. He might well have made use of the Stephensonian menstrual wave notion here, for in it lies the germ of the idea that in the male also there is some such cycle of changes as exhibited in urea excretion. He admits the effect of the foetus upon the mother in pregnancy, although he also speaks of the foetus living as a parasite on sterilised food, which it gets from the tissues of its host; but Professor Bar's conception of the mother and foetus, as being in the relationship of harmonious symbiosis, seems to be rather more accurate than the commonly accepted one of parasite and host.

Mr. Gilford brings his two triads into touch with each other when he considers disorders of growth as they affect cells, organs (cell-communities), or the complex body, and when he deals with the more difficult subjects of disturbances of development as they affect these three things (cells, organs, body). Growth may be defective or excessive, and there may be overgrowth or undergrowth in the cell (e.g. innocent tumours), in the organ (hyperplasia and hypoplasia of an organ), or the whole body (gigantism, dwarfism); again, development may be defective or excessive (i.e. premature) in the cell (malignant growths), in the organ or in the whole body (general infantilism and general senilism).

The rest of this interesting volume is occupied with the detailed examination of the disorders of postnatal growth and development of cells (including some fascinating speculations on tumours, innocent and malignant), of organs (under which are found many disorders which the reader has doubtless not been in the habit of placing here), and of
the whole body (including gigantism, dwarfism, correlated overgrowth, obesity, masculinism, feminism, postnatal hermaphroditism, infantilism and ateleiosis of various kinds, senilism, progeria, centenarianism, etc.).

Even from this brief enumeration of the contents of this volume it will be evident that there is here much food for thought, and many suggestions which call for further testing before they can be freely accepted. It is difficult at first to get on familiar terms with old diseases under their new names, e.g. with myxoedema under the synonym of thyroid senilism, and with senilism as it affects the child; but if the underlying principles of Mr. Gilford's theories are firmly grasped, his arguments and conclusions can be followed with interest and a measure of enthusiasm. It matters, perhaps, little in the end whether a man dies of old age or passes away because he has reached his second infancy; but the thoughts evoked by the latter of these conceptions lead on into spheres of speculation, which afford opportunities for much interesting and, it may be, stimulating mental action. Thoughtful and thought-provoking is the character we give the book.

Refraction and Visual Acuity. By KENNETH SCOTT, M.D. Pp. 191. London: Rebman, Ltd. 1911. Price 6s. net.

This little book, according to the author's preface, is principally intended to assist the general practitioner who cannot attend a practical course of post-graduate instruction on Refraction. Abstruseness is avoided and attention is confined simply to the most essential points. As an intimate knowledge of physiological optics for the purpose in view is not needed, the reader is not troubled with optical dissertations, but with those of the most elementary and easily understood kind. So far as it goes we have very few faults to find with the book, but from long experience we feel certain that the only way to acquire anything like an accurate and practical knowledge of the subject, so as to be able to prescribe spectacles correctly, is to attend a course of practical instruction under the immediate supervision of a qualified teacher.

Exception must be taken to the use of the interpupillary distance in determining the optical centring of spectacle lenses, for the visual axis does not as a rule traverse the centre of the pupil. To measure the interpupillary distance an adjustable trial frame is recommended in preference to the graduated millimetre rule. The reverse, in our experience, is preferable, especially if a sliding rule be adopted, which can readily be made by the surgeon himself.

The term mydriatic is used instead of cycloplegic when speaking of drugs employed to paralyse the ciliary muscle. The use of the term mydriatic should be restricted to drugs which dilate the pupil.
In retinoscopy the concave mirror is selected by the author, although the plane mirror is preferable and is now almost universally used.

The chapters on colour blindness and simulated blindness are good, and in the chapter on the medical inspection of school children many useful hints will be found.

Part II.—Visual Acuity in the Public Services—is much more fully dealt with than in any other book of the kind we know of, although perhaps unnecessarily so, for few, if any, of the readers of the book will find it necessary, for example, to know anything regarding the conditions required in the railway service in far-off Japan.

Altogether the book will be found useful and reliable, but we must repeat that it can never replace the practical training found in the ophthalmic clinique, where the subject is taught by a competent teacher.

*Handbook of Treatment for Diseases of the Eye.* By Dr. Curt Adam, Assistant-Surgeon in the I. University Clinic for Diseases of the Eye, Berlin. Translated by Drs. Sym and Lithgow, Edinburgh. Pp. 264. London: Rebman, Limited. 1911. Price 10s. net.

This book is primarily designed for the service of the surgeon in practice, and it must be gratifying to the author that within the short space of one year it has undergone two editions, which in itself is sufficient proof of its usefulness.

For this translation from the second German edition we are indebted to Drs. Sym and Lithgow of Edinburgh, and we congratulate them on their successful efforts in placing at the disposal of English-speaking surgeons the methods of treatment practised in the great University Eye Clinic of Berlin.

Throughout the subject-matter is presented in such a succinct form that the surgeon can, with the least possible difficulty, furnish himself with the methods of treatment most applicable to any case under consideration.

The part of the work which interests us most is that devoted to general and modern methods of treatment. Here serum diagnosis is fully discussed, the very latest in this important subject being presented in a most clear and lucid manner.

Then follows the special part dealing with the diseases of the different parts of the eye and adnexa. Here it is interesting to note that the practice pursued in Berlin is in great measure similar to that of many ophthalmic surgeons in this country. We note with considerable interest in passing that our Berlin *confrères* are not afraid of the so-called dangers of cocaine, for apparently the drug is employed fearlessly, even in corneal affections, with undoubted success. It is
somewhat curious to observe that in the preparation of ointments the salts of alkaloids, although insoluble in fats and oils, are employed instead of the alkaloids themselves which are soluble.

The whole book is full of interest and will repay careful perusal, not only on the part of the general practitioner but of the ophthalmic surgeon, and we most heartily recommend it as an up-to-date and reliable guide to ophthalmic therapeutics.

The Refraction of the Eye. By Gustavus Hartridge, F.R.C.S.
Fifteenth Edition. London: J. & A. Churchill. 1911. Price 5s. net.

In preparing the fifteenth edition of this popular manual for students studying the refraction of the eye the author has carefully revised the book throughout and has made various additions without affecting the original plan.

In the chapter devoted to hypermetropia the time-honoured statement that “a considerable number (of hypermetropes) become emmetropic as they get older, and a certain percentage of these pass on to myopia,” should in a subsequent edition be considerably modified, for in actual practice one finds that hypermetropia, as a rule, remains practically stationary throughout life.

No doubt the most useful remedies we possess in dealing with cases of progressive myopia showing symptoms of irritation are complete rest, cycloplegia, and plane neutral-tinted glasses, but we have never seen any benefit derived from the use of either counter-irritation or artificial leeching. The use of dionin instillations, which is admittedly both rational and beneficial, is not referred to, and the modern theories regarding the etiology of concomitant strabismus are conspicuous by their absence.

Although a few other omissions are noticeable, yet, as a manual for students studying this important branch of ophthalmology, we have no hesitation in saying that the book before us, so far as it goes, is not only a safe and reliable guide but one of the best in this or any other language.

Ophthalmic Therapeutics. By Dr. A. Darier, Paris. Translated by Sydney Stephenson, M.B., London. Pp. 444. London: Rebman, Ltd. 1911. Price 17s. 6d. net.

This compact well-illustrated octavo volume, one of an International System of Ophthalmic Practice edited by Walter L. Pyle, M.D., Philadelphia, is written by Dr. A. Darier of Paris and translated by Dr. Sydney Stephenson of London. It provides a convenient and thoroughly up-to-date digest of ophthalmic therapeutics, together with the results of the latest investigations connected therewith.
Part I., consisting of 194 pages, is devoted to general therapeutics, such as methods of diagnosis, constitutional treatment, extra-oral medication, intra-ocular and subconjunctival injections, serum therapy, diaphoretics, heat and cold, phototherapy, electricity and electrotherapy, X-ray and radium, hydrotherapy, anaesthetics, analgesics, mydriatics and myotics, etc.

Part II. deals with special therapeutics in 213 pages, e.g. diseases of the orbit, lachrymal apparatus, eyelids, conjunctiva, cornea, sclera, uvea, vitreous, retina and optic nerve, together with a chapter on the treatment of glaucoma.

The whole work, written by one of the foremost ophthalmic therapeutists of the day, contains a mine of information of the most authoritative character, and is one of the most reliable books of reference available. It is indeed indispensable to the ophthalmic surgeon who wishes to keep abreast of the times in the rapidly advancing subject of modern ophthalmic therapeutics.

The printing, paper, and general character of the book leave nothing to be desired, and the work as a whole reflects the greatest credit on all concerned.

_A Text-Book of Bacteriology._ A Practical Treatise for Students and Practitioners of Medicine. By PHILIP H. HISS, Jn., M.D., and HANS ZINSSER, M.D. Pp. 745. London and New York: Appleton & Co. 1910. Price 15s. net.

It would be difficult to deal with all the branches of the science of bacteriology within the compass of an ordinary text-book, and as a matter of fact the present volume professes only to treat of medical bacteriology. At the same time, very properly, non-pathogenic organisms likely to be met with in the course of clinical and pathological investigation are also fully described.

The volume commences in the usual way with chapters on morphology classification and biological activities of bacteria, followed by others dealing with sterilisation, media making, staining, etc. Section 2 is devoted to the complicated subject of immunity and the consideration of allied questions, such as the Wassermann test, opsonins, and vaccine therapy.

The pathogenic micro-organisms are dealt with in Section 3. There is a rough attempt made at classification founded on morphological resemblances, not upon similarities, in the diseases produced, a method no doubt perfectly sound.

One would have thought, however, that the evidence in favour of the bacillus tuberculosis belonging to the streptothrix group of higher bacteria, if not the fact of the similarity of the lesions, was sufficiently strong to warrant its inclusion among the latter along with actino-
myces. The colon-typhoid-dysentery group is very naturally considered an entity, and several chapters are devoted to its discussion.

The next section deals with diseases of unknown etiology, and an exceptionally interesting account of the American work on yellow fever is given. Rabies, also, and smallpox are fully discussed from the bacteriological standpoint.

Lastly, there is a section devoted to bacteria in air, soil, water, and milk. In this the public health and industrial aspects of the subject are considered shortly.

The book is a thoroughly sound one, and the illustrations, which are nearly all original, are good. Some of the photo-micrographs would be improved by cutting out peripheral portions which are out of focus. There is a useful diagram showing graphically the sugar reactions of the typhoido-colon-dysentery group of bacteria by means of coloured squares.

Observations upon the Natural History of Epidemic Diarrhoea. By O. H. Peters, M.D., D.P.H. Pp. 177. Cambridge: At the University Press. 1911. Price 7s. net.

The etiology of epidemic diarrhoea has been much discussed during recent years, and we welcome this valuable addition to the literature of the subject. Dr. Peters has made a searching investigation of the incidence of the disease in the town of Mansfield, and in particular founds his conclusions upon experience gained by the detailed study of diarrhoeal attacks in two selected areas of the town which differed considerably in their character, and which illustrated two different methods of sewage disposal—the water-closet and conservancy systems. He discusses at length the influence exerted by personal infection, fly carriers, soil, dust, milk, water, fruit and food infection, and the inter-relation of temperature, flies, rainfall, and diarrhoea. His observations on all these subjects are illuminating, and show evidence not only of laborious study but of a well-balanced judgment. While he is more anxious to detail the results of his experience than to give dogmatic conclusions he considers that there is a mass of evidence in favour of personal infection and fly carriage, whereas there is but little in support of the "ground theory." The provision of water-closets appears to be a point of minor importance, as in the case of the young children chiefly affected by the disease closets are not as a rule employed, even if they exist, the cloths being changed in the living rooms and affording great opportunities for the leakage of infection. The immunity enjoyed by breast-fed infants is well emphasised, but Dr. Peters considers that milk plays little or no part in introducing diarrhoea into the home. Boiling milk appeared to produce no effect at all; if anything, it seemed to increase the liability to diarrhoea—a fact in accordance with the well-known views of Vincent. Peters regards this as suggesting that certain vital pro-
Properties which inhibit the growth of disease organisms are destroyed by boiling. On the whole he inclines to the fly theory of infection as being more compatible with the increased spread of the disease at the time these insects are most prevalent, but throughout his monograph he adopts a very cautious attitude as regards definite conclusions. Interesting diagrams illustrate a most complete and scientific study of this debated question, and the book should be read by all who are interested in epidemiology and public health.

The Mechanism of the Heart Beat, with Especial Reference to its Clinical Pathology. By Thomas Lewis, M.D., M.R.C.P., D Sc. Pp. 295. London: Shaw & Sons. 1911. Price 16s. 6d. net.

This work is an important contribution to the literature on cardiac physiology and pathology. During the last eight or nine years so many additions have been made to these branches of cardiology that a monograph, even although it covers only a portion of the field, is undoubtedly welcome. The author has already published in Heart, of which journal he is the editor, many of the original observations with their accompanying illustrations that are now grouped together in one volume. The text is freely illustrated by electrocardiographic and polygraphic tracings. It is unfortunate that in a number of the latter the "index marks" are lacking, so that the reader is unable to analyse the tracings to his own satisfaction.

The work demonstrates that records obtained by means of the polygraph and string-galvanometer enable us to analyse a disorderly cardiac mechanism with much precision, and to draw many definite conclusions regarding the nature of the disorder. Following the opening chapters on the primitive muscle tissue of the heart, the analysis of the normal venous pulse and the electrocardiogram, the author discusses the evidence concerning the origin of the heart beat in the sino-auricular node. Heart-block is then discussed under three headings—experimental, clinical, and pathological. The difficult subject of the extra-systoles and "heterogenetic rhythms," regarding which much light has been thrown by electrocardiographic studies, is next considered in detail. Thereafter auricular fibrillation is dealt with; and the subsequent chapters are concerned with such subjects as auricular tachycardia, the influence of the vagus upon the heart, the Adams-Stokes syndrome, and alternation. Regarding the essential nature of alternation, the author's conclusion is that no definite opinion can yet be entertained. One of the most important features of the work is the attempt that is constantly made to demonstrate the identity or similarity of cardiac disorders as seen in clinical work with those which have been experimentally induced and studied in the laboratory. If the author's method of presenting his subject is sometimes rather obscure, this is doubtless inevitable owing to the complexity of the problems he is expounding.
Hospital Management. Edited by Charlotte A. Aikens, formerly Director of Sibley Memorial Hospital, Washington. 12mo of 450 pages, fully illustrated. Cloth, 13s. net.

This publication is described by its editress as "A Handbook for Hospital Trustees, Superintendents, Training-School Principals, Physicians, and all who are actively engaged in promoting Hospital Work," and a perusal of its contents fully justifies its claim to be so titled. The various contributors, it is apparent, have been carefully chosen, and each speaks in an authoritative and illuminating manner on the particular branch with which he or she deals. While naturally treating the subject from the American standpoint and containing observations and suggestions that are only applicable in that country, there still remains much that will prove helpful to those connected, either in a professional or a lay capacity, with hospital work in the United Kingdom. If one may venture to particularise, where all are excellent, the chapters on A General Hospital for 100 Patients, The Furnishings of 100-Bed Hospital, Hospital Book-Keeping, The Hospital Store, The Purchase and Economic Use of Surgical Supplies, will be found of special interest to those actively engaged in institutional work. The plates with which the book is furnished help materially to the understanding of the constructional and furnishing articles.

Some New and Interesting Points in Ship Hygiene. By W. Melville-Davison, M.B., B.S. Pp. 84. Bristol: John Wright & Sons, Ltd. 1911. Price 4s.

This little volume, whose "appeal is primarily to owners of steamships," as stated in the preface, consists of only six chapters. The author deals in a practical manner with the important question of how to ensure the purity of the drinking water on ships, advocating strongly the use of a prefILTER. In view of the probable spread of yellow fever to the East (when the Panama Canal shall have shortened the journey from its present haunts), practical methods of mosquito-screening at sea are fully described; and the record of the author's experiments in rat destruction, by intensified "virus," is worth studying. Bugs have a chapter devoted to them; but it is in the cockroach that the author finds "unseen though terrible dangers," regarding it as "the greatest enemy of the human race, with the possible exception of the mosquito"—this being in virtue of his belief that amongst its numerous intestinal parasites are to be found the causes of beriberi and scurvy. To bacteriologists his proofs may not be convincing, but, taken as a whole, this book, written for the promotion of the comfort and health of all sea-voyagers, is interesting and worthy of commendation.
New Books and New Editions

Puerperal Infection. By ARNOLD W. W. LEA, M.D., B.S.(Lond.), B.Sc.(Manch.), F.R.C.S.(Eng.), Lecturer on Obstetrics and Gynaecology, The University, Manchester, &c. Pp. xvi. + 384. With 23 Figures and 35 Plates (8 in Colour). London: Henry Frowde, Oxford University Press; Hodder & Stoughton. 1910. Price 25s. net.

Dr. Lea has written a large and elaborate monograph on puerperal infection. There are chapters dealing with the historical aspects of the subject, with the definition and classification, with statistics as to frequency and morbidity and mortality, with its bacteriology, its pathology and pathological anatomy, with symptoms, with diagnosis, and with treatment. The treatment is, as indeed it should be, dealt with in great detail (more than 100 pages being devoted thereto), and considerable space is given to prophylaxis, for, after all, puerperal infection is preventable and ought therefore to be prevented. Dr. Lea wisely draws attention to the dangers which may arise in pregnancy from erythematous and eczematous conditions of the vulva, from inflammation of Bartholin’s glands, from inflamed or prolapsed haemorrhoids, and from a fistula in ano. In the presence of vaginitis in pregnancy regular vaginal douching is recommended, and if it be gonorrhoeal in nature a thorough disinfection of the canal is indicated. The interior of the vagina is cleansed with an alcoholic solution of soap and then a strong solution of nitrate of silver (10 grs. to the ounce) or of protargol (10 per cent.) is applied; the canal is next packed lightly with iodoform gauze, and douches are given later. The author does not, however, recommend vaginal douching in labour under ordinary circumstances—it is far more important to carry out complete antisepsis of the vulva—but in exceptional cases it is recommended, e.g. in purulent vaginitis, prolonged labour, fever during delivery, and operative delivery (other than uncomplicated forceps cases). Gloves are to be used in certain instances. The immediate repair of injuries arising during labour is rightly insisted on strongly, for every wound may become the starting-point of an infection. Great caution is to be exercised regarding early rising in the puerperium, and the author is evidently not enamoured of the propaganda which hastens the resumption of the erect posture. The chapters on serum treatment of puerperal sepsis, on the intravenous injection of antiseptics, on immunisation by vaccines, and on operative interference are written with wisdom and caution; indeed the whole book is a careful and well-balanced exposition of a difficult and complicated subject. It would be well if it were studied by all obstetric physicians in charge of maternity hospitals.
Vaginal Celiotomy. By S. Wyllis Bandler, M.D., Professor of Diseases of Women, New York Post Graduate Medical School. Pp. 450, with 148 Illustrations. Cloth, 21s. net.

This work takes a fair-minded view of vaginal coeliotomy without voicing the extreme praise meted out to this operation by enthusiasts in its favour.

That vaginal coeliotomy has a distinct place in the domain of gynaecological surgery, only those who have no experience of it will gainsay. We doubt its value in conservative operations upon the adnexa, as this in many cases necessitates more elaborate methods than simple puncture of cysts.

With the author's indications for vaginal hysterectomy we are in agreement, but no mention is made of Mayo's method of preventing cystocele after this operation.

Vaginal fixation and its indications are discussed fully. We are in accord with much that is stated, and we think that against those who are unfamiliar with the operation and condemn it without a trial the author has presented a very strong case. The value in marked cystocele is undoubted.

We consider that the insertion of a finger into the rectum in any perineal operation is unnecessary, and not in accordance with modern technique, and must deprecate its use as depicted in Figs. 88 to 91.

The author is to be congratulated on presenting the subject in the English language, and will do much to overcome the prejudice to vaginal surgery, where it is frequently condemned by gynaecologists without a trial. The large number of illustrations and the contents make the book easily read, and render a difficult subject clear when it has been often little understood.

Maternity Primer. By A. H. F. Barbour, M.D., LL.D. Pp. 165. Edinburgh: Wm. Green & Sons. 1911. Price 1s. net.

This dainty book of 165 pages, with its simple title, Maternity Primer, consists of, as the preface informs us, notes privately printed for the use of nurses commencing their maternity training, and now published by request. It has a character of its own, different from that of the ordinary text-books on the subject. The style throughout is colloquial, familiar words have been used rather than scientific terms, and it is thus reminiscent of the early works on Midwifery addressed to women and men midwives, yet thoroughly up to date.

The subjects are well arranged under respective headings, no important point is omitted, and each one is dealt with in a separate paragraph; these are numbered "to save repetition and facilitate reference." At the end a useful series of questions is set with reference to the paragraph dealing with the subject—a valuable aid to the student.

As a Primer or as a note-book to lectures it fulfils its function, but there are parts where fuller detail might be desirable.