The Radiology of Bones and Joints. By James F. Brailsford, M.D. London: J. & A. Churchill. 1934. (30s.)

This book provides a most useful guide to the radiological appearances in the bones and joints which result from disease and injury. It should be of interest and value not only to the surgeon but also to the physician, the pediatrician and the radiologist.

There are three preliminary chapters dealing with general conditions affecting the skeleton, e.g., congenital deformities, the various forms of arthritis, osteoporosis, and tumours. There follow seventeen chapters in which skeletal changes are described on a regional basis. This concludes Part I (392 pages), while Part II consists of four chapters embodying a general discussion of bone changes in systemic and localized disease. This plan has many good points, but leads to a certain amount of unavoidable repetition.

The text is well written and sufficiently condensed without being scrappy, and the illustrations (310 in number) are of a uniformly high quality. There is a good bibliography and an adequate index. In every way the book reflects credit on the author and his publishers, and we feel confident that it will have a wide field of usefulness. The moderate price is an additional attraction.

A Text-Book on Heat. By A. W. Barton, M.A., Ph.D. London: Longmans, Green & Co. 1933. (7s. 6d. net.)

The divisions of the subject usually included in an intermediate text-book on heat will be found in Mr. Barton’s book, but brought thoroughly up to date, and at the same time discussed with an unusual insight into the difficulties that may arise in the mind of the student.

Chapters I to VII are occupied with thermometry, calorimetry, expansion of bodies, change of states, properties of vapours and gases—introductory to the remainder of the book. In these chapters experiment and theory proceed as far as is deemed expedient in historical order. Improvements on experimental methods up to the present day are carefully detailed and illustrated with numerous and well-drawn diagrams; and, what is of
first importance, the limitations of even the most perfect physical appliances are investigated, and their range of accuracy deduced.

Chapters VIII to XIII are concerned under various headings with the dynamical theory of heat, a branch of physical science which has application in every other. A full account is given of the experiments which prove heat to be a form of energy; then follows an admirable discussion (considering the scope of the work) of the second law of thermodynamics. Without introducing much of the higher mathematics, the reader is here given a sound knowledge of the fundamental principles of this great law. Refrigerators and heat engines are quite adequately dealt with, and the all-important scale of absolute temperature satisfactorily established. Entropy is explained, and the degradation of energy, and consequent destiny of the universe, derived.

Chapters on conduction, convection, and radiation conclude the volume. The modern theory of radiation is sketched, and the most recent improvements on Forbes’s classical experiment detailed, and Fourier’s equation worked out minutely.

The author designs his work to be not only instructive but cultural, so as, apart from the special subject of study, “to develop the spirit of enquiry, to train students in reliable observation and the judicious summing up of evidence, &c.” This object has never been lost sight of, but what success has been attained must be left to the judgment of the reader.

As a text-book bridging the interval between elementary works on heat and formal treatises, or accounts of research, Mr. Barton’s manual cannot be too highly recommended.

Manipulative Treatment for the Medical Practitioner. By T. Marlin, M.D., M.B., Ch.B., D.P.H., D.M.R.F. London: Edward Arnold & Co. 1934. (10s. 6d. net.)

In this valuable and suggestive little book Dr. Marlin has attempted to give a reasoned explanation of the success of the so-called bone-setters in cases which have resisted treatment by orthodox methods, and he states, quite properly, that it is wrong to dismiss all such cures as being brought about by faith and credulity on the part of the patient. He describes in detail the manipulations which are used in dealing with very many different conditions, and devotes a large section of the book to the technique of spinal manipulations, quoting many illustrative cases.

The book is profusely illustrated with clear photographs and diagrams, and the letterpress is excellent, so that its perusal is rendered easy and pleasant. Dr. Marlin is obviously unprejudiced in his view and has gone thoroughly into his subject, having visited personally the Osteopathic Colleges of America in search
Reviews

of material. He is to be congratulated on producing a book which, although small in compass, should prove of great value to the medical profession as a whole, and especially to those interested in orthopaedic subjects.

Report on the Health of the Army for the Year 1932. Vol. LXVIII. H.M. Stationery Office, 1934. (2s. 6d. net, postage extra.)

This Report is prefaced by an introductory letter from the Director-General, Army Medical Services, to the Under-Secretary, War Office, in which General Fawcus notes that the admission-rate of 412.5 per 1,000 of the strength is the lowest on record. The invaliding and constantly sick rates and the average sick time to each soldier, also, were the lowest recorded since the Great War. Coming to the more important diseases, e.g., malaria, dysentery, sandfly fever, dengue, &c., it is noted that all have shared in the decline. A good example of diminished incidence is seen in the case of malaria—284 per 1,000, as compared with 396 in 1931 and 99.8 in 1921. Contrasting with this, however, the pneumonia rate is comparatively unchanged—3.4 per 1,000, with a case-mortality of 9.1 per cent. In Part II of the Report there is much interesting matter relating to the special departments—Medicine, Surgery, Hygiene, &c. Part III takes up the health of the Army in the various Commands. The Report is an important contribution to medical literature, and one which no medical officer, military or civil, can afford to ignore. It can be obtained at H.M. Stationery Office, or through any bookseller.

Recent Advances in Vaccine and Serum Therapy. By A. Fleming, F.R.C.S., and G. F. Petrie, M.D. London: J. & A. Churchill. 1934. (15s.)

This latest addition to the Recent Advances Series is divided into two parts—the first half, written by Dr. G. F. Petrie, Bacteriologist-in-Charge of the Serum Department, Lister Institute, deals with the serum therapy and prophylaxis of bacterial and virus infections; in the second half Professor A. Fleming, a pupil of Sir Almroth Wright, reviews the results obtained from vaccines and toxins in the prevention and treatment of bacterial infections. Both authors are experts in their particular subject, and both have given in a judicious way their own experiences and beliefs along with a well-balanced review of other people's work. Such an analysis has naturally entailed extensive
reading, and Dr. Petrie, in particular, is to be congratulated for his careful summing up of the available evidence relating to the serum therapy of such diseases as scarlet fever and other streptococcal infections, lobar pneumonia, anthrax, tetanus, poliomyelitis. Bacteriologists will appreciate—perhaps clinicians will, too—his remarks on the need for early and accurate diagnosis, e.g., in the dysenteries, so that appropriate treatment may be quickly instituted. He ends with a very useful chapter on the use of sera and vaccines in veterinary practice.

It is less easy to be precise about vaccine therapy, because of the absence of reliable data. The prophylaxis of the common infectious diseases, e.g., enterica, cholera, plague, scarlet fever, diphtheria, whooping-cough, by vaccines or toxins is at present attracting much attention, and the methods in use are undergoing many changes. Dr. Fleming deals with these matters in an introductory chapter. He then describes the results hitherto obtained in the prevention of these infections, and also discusses the less certain procedures for the prophylaxis and treatment by vaccines of the common cold and other upper respiratory tract infections, acute and chronic rheumatism, furunculosis, B. coli infections, hay fever, and asthma. He devotes a chapter to non-specific vaccine therapy or "protein shock."

Both authors deal with their subject in a thoroughly practical manner, and discuss dosage, mode and frequency of administration, indications and contra-indications for treatment, &c. Practitioners will find this book a very useful addition to their library.

Ultra-Violet Therapy in Eye Disease. By Frank W. Law, M.A., M.D., B.Chir., F.R.C.S. London: John Murray. 1934. (5s.)

This small book reviews the experience of the author at the Ultra-Violet Light Clinic at Moorfields Hospital. It gives an analytical review of all cases treated at the clinic during the year 1932, and a minority of those treated in the three years preceding that period. It gives the methods of treatment adopted for both local and general treatment of eye diseases. In addition, the book contains a survey of some cases treated at the Radium Institute, and a review of the literature on the subject of x-ray and infra-red ray in the treatment of eye diseases. There is a bibliography extending in all to some 64 items.

The assessment of the effects of one non-specific method of treatment on a number of different conditions must always be difficult, and the author realizes that ultra-violet light cannot be more than an adjuvant to other methods of treatment, and, in his critical survey, dispels many of the clouds of enthusiasm which surrounded this method of treatment when it was first
Reviews

advocated. He says "that the impression made by his experiences upon the writer is that more has been claimed for this form of therapy than is justified—at least by his own results."

The Medical Annual, 1934: A Year Book of Treatment and Practitioner’s Index. Fifty-second Year. Bristol: J. Wright & Sons, Limited. London: Simpkin Marshall, Limited. 1934. (20s. net.)

The Medical Annual is well known to the reviewer, but this is the first occasion on which it has come into his hands for the purposes of review. The close examination thus entailed extracts nothing but praise. As a physician he can only approve of the numerous medical subjects dealt with by abstract and criticism, and his knowledge of surgery has been extended through similar abstracts. As a late general practitioner, he welcomes the mass of helpful information, readily tapped through the General Index, as well as the able article on National Health Insurance by Dr. E. Kaye le Fleming. As a worker he finds the bibliography helpful. The details concerning new drugs, appliances, books, and the lists of institutions finally render a well-printed and well-illustrated book an asset to any medical graduate.

Essentials of Infant Feeding and Paediatric Practice. By Henry P. Wright, B.A., M.D., Lecturer in the Department of Paediatrics, McGill University, Montreal. London: Oxford University Press. 1934. (12s. 6d. net.)

Although there are numerous text-books of paediatrics, few pay more than scant attention to the maintenance in health of the healthy baby. In this sphere Dr. Wright’s suggestions as to feeding, clothing, habits, exercise, &c., should be welcomed. The particular value of his advice is that it is the outcome of a wide experience of children, and is not a thesis in support of any particular "method."

The book is divided into three sections. The first gives a composite, yet easily followed, sketch of the physiological processes concerned in nutrition, and indicates the feeding régime of an infant on the breast and of one artificially fed. The care of the child is detailed from the hour of its birth onwards. This section is excellent.

The second section deals with the commoner feeding difficulties met with in infancy, their causes, and the reasons for the treatment recommended. The arrangement here leaves something to be desired in that the first cause of vomiting described is pyloric
Reviews

stenosis, of diarrhoea is coeliac disease, and of constipation Hirschsprung's disease—all relatively rare conditions.

Section III is admirable. Here are given briefly the preventive measures necessary for children in contact with infectious diseases; dosages of sera to be employed; some excellent diet charts; height and weight, and posological tables. Lastly, the index has been carefully prepared.

From the point of view of the expert, some of Dr. Wright's statements are open to question. For example, he states that small infants obtain exercise by crying, implying that this is beneficial; and that in "renal rickets" there is a marked retention of inorganic phosphates in the blood.

Such considerations do not detract from the value of a book which is written in agreeable and readily assimilable form, and which is—a factor of some importance—of moderate price.

Transactions of the American Surgical Association. Vol. LI.
Edited by W. E. Lee, M.D., Recorder of the Association.
London: J. B. Lippincott Company. 1933.

The present volume contains the papers read before the Association at the meeting held in May, 1933, under the presidency of Dr. Arthur Dean Bevan. The presidential address on the study, teaching, and practice of surgery contains much interesting matter regarding the evolution of surgery during the existence of the Association. Dr. Bevan concludes on a high note, in which he points the ideal of the thoughtful and conscientious surgeon.

The papers range over many different fields of surgery. The affections of the various digestive organs receive the lion's share of attention; but the thorax, the breast, the genito-urinary organs, and the central nervous system are by no means neglected. The importance of anatomy for the surgeon is expounded by Dr. Cheever, the title of whose paper, "Anatomy Eclipsed," is sufficiently startling to catch the eye of the reader. The papers are succeeded by a number of obituary notices of members.

The printing is clear, and the illustrations of an equally high grade. The volume will repay perusal by readers interested in the different subjects included.

Studies in Blood Formation. By T. D. Power, M.D., M.R.C.P., D.P.H., D.P.M. London: J. & A. Churchill. 1934. (8s. 6d.)

The studies are the results of research concerned with problems related to the treatment of insanity, and form an important
Reviews

collection to the much-debated question of haematogenesis. The results of various experimental investigations in rabbits using substances producing a leucocytosis or an erythrocytosis are discussed, and in each case the resulting changes in the blood picture and bone marrow are described. The effect of therapeutic inoculations of malarial parasites on the blood picture of the human subject is also fully described. Many of the conclusions reached regarding blood formation, however, are divergent from those of other experimenters in this field, and should stimulate further research. The author's style makes the subject-matter easy to read, though many of the points regarding the origin of the various blood cells might have been more clearly represented by a series of diagrams. A few coloured illustrations would also have been helpful in explaining the differences between many of the stages in the development of the cells. The preparation of the book has involved a vast amount of labour on the part of the author, and should serve as a most useful guide for workers in haematological research.

X-Ray and Radium Injuries: Prevention and Treatment. By Hector A. Colwell, M.B., Ph.D., M.R.C.P., D.P.H., and Sidney Russell, C.B.E., F.Inst.P. London: Humphrey Milford (Oxford University Press). 1934. (14s. net.)

Many communications and short papers have from time to time appeared in the medical press on the subject of radiation injuries, from both the experimental and clinical aspects. All too frequently the news of injury to, or even the death of, an early worker makes melancholy reading. The present volume condenses the writings on all radiation injuries, acute, chronic and late, into the brief space of 205 pages. For all its brevity the book gives a lucid and complete account of the subject, and the authors have taken great pains to procure full information from outside sources, evidences of which are copious references at the end of each section to British, Continental and American works.

The plan of the book is excellent. An introduction by Sir Humphrey Rolleston is followed by sections on radiation effects on each of the systems. Those sections on the skin, circulatory system and generative system are fuller than the others, and rightly so, from their importance.

The method adopted is to describe the effects of x-rays on each system and then to discuss prevention and treatment. Where radium happens to have an effect distinct from x-rays, this is described.

The doubtful practice of drawing conclusions from experiments on animals is not indulged in to any great extent. In general
Reviews

such references are only included where they appear to have a direct bearing on the effects on man.

On the subject of "X-ray Therapeutic Abortion" the curious statement is made (summarized from Stern, 1928): "(1) It is of great use where surgery is dangerous. . . . (3) . . . Failures may be eliminated. . . . (4) . . . No danger to the patient." One cannot help suggesting that in these circumstances it surely is of as great use where surgery is safe as when dangerous!

Therapeutic radiation of the pregnant uterus is condemned as involving danger of damage to the child, but it is difficult to agree with the authors' inference that ordinary therapeutic preconception irradiation may adversely affect children and even grandchildren.

One small point is that where "r" units (röntgens) are mentioned with reference to skin or other injuries it is not stated whether the dose administered is measured in air, or whether allowance is made for back scatter. There is a great difference.

The book is worthy of the highest praise, it is well written, carefully argued and annotated, and should be widely read. The main appeal will, however, be to radiologists.

Lord Lister, the Discoverer of Antiseptic Surgery. By C. J. S. Thompson, M.B.E., Hon. Curator of the Historical Collection of the Royal College of Surgeons of England. London: John Bale, Sons & Danielsson. 1934. (5s. net.)

This small volume of less than one hundred pages represents an attempt to supply the need for a short biography of Lister, for the use of students and general readers. In it are set forth chronologically the various stages in Lister's career. Beginning with the Quaker student at University College, the author finds space to describe the first operation under ether at University College, on a cold December morning in 1846, an operation at which Lister was present. The primitive furnishings of the theatre, the preliminary trial of the anaesthetic on the person of one of the stalwart hospital porters, the felling of the anaesthetist, and the porter's dash for the door lead up to the dramatic description of the surgeon (Lister) entering the theatre. The timing of the operation (amputation of the thigh), the rapid thrust and cut of the transfixion method, all over in 25 seconds, the patient's return to consciousness on the table, are enthrallingly told.

Lister's visit to Edinburgh, intended to be temporary but ending in his settling there, his transference in 1860 to the Chair in Glasgow, and his work in the old Royal Infirmary while in that post, occupy the next eight chapters, and carry us to his

126
Reviews

return to Edinburgh in 1869, to succeed his father-in-law, Syme. His continuation in the Edinburgh Chair of the work begun in Glasgow, and its growing recognition, are duly told. Then comes his return to London in 1877, as Professor of Clinical Surgery in King's College. His none too cordial reception in London is related, and contrasted with the enthusiasm which his discoveries excited in foreign schools; and the volume closes with a general appreciation of the man.

The story is delightfully told, and the author is to be congratulated on the work. It is free from the drawbacks which normally attend condensed books. On the contrary, it is readable throughout. The volume should be read by all medical students, and equally by their teachers.

NEW EDITIONS

Physiology. Catechism Series. Fourth Edition. Part I. Edinburgh: E. & S. Livingstone. (1s. 6d. net.)

Physiology is divided into four parts in the Catechism Series. Part I has just been revised and enlarged, and deals with Muscle and Nerve, the Circulatory System, Blood, and the Reticulo-endothelial System. The method employed in the Catechism Series is well known to every student. The answers are all brief, clear, and to the point. The arrangement in this volume is excellent and very comprehensive, and may be used equally well either for revision or for reference. This new edition will be welcomed by all students, to whom it can be very heartily recommended.

Synopsis of Hygiene. By W. Wilson Jameson, M.A., M.D., F.R.C.P., D.P.H., and G. S. Parkinson, D.S.O., M.R.C.S., L.R.C.P., D.P.H. Fourth Edition. London: J. & A. Churchill, Limited. 1934. (21s.)

This well-known Synopsis in its fourth edition, which now appears, has been largely re-written. The sections on practical chemistry and statistical methods which figured in previous editions have been omitted, and their absence has allowed room to be made for much fresh material with little increase in size. The arrangement has in addition been recast so that the new edition opens with public health administration and vital statistics, and proceeds thereafter to the infectious fevers, which are well presented. The section on maternity and child welfare contains all recent developments of importance. Personal hygiene and dietetics are set forth in an interesting manner, present-day knowledge of the accessory food factors being usefully summarized. The various foods are then discussed in order, with
Reviews

appropriate references to milk-borne disease, pasteurization, meat inspection, food poisoning, and food preservation. Ventilation, lighting, water supply and sewage disposal receive due attention. Sanitary Law concludes the work proper. An appendix deals, among other matters, with meteorology. The fourth edition fully maintains the high standard set by its predecessors. It is, like them, to be cordially recommended to students preparing themselves for the Diploma in Public Health or Degrees in Sanitary Science.

The Practice of Surgery. By Russell Howard, C.B.E., M.S. Lond., F.R.C.S., and Alan Perry, M.S. Lond., F.R.C.S. Fourth Edition. London: Edward Arnold & Co. 1933. (30s. net.)

The fourth edition brings this popular work up to date. It remains essentially a student’s text-book, and from that point of view it gives all a student requires. There comes a time in the life of all text-books when the choice of new material, and the discarding of old, presents a real difficulty. On the whole the choice has been well made, but the following points call for modification. Surely the fixing of fingers, that occurs in Sayre’s method of treatment for fractured clavicle, is not the best that can be devised? Again, it is time that the Middeldorpf triangle were forgotten; its use in fracture of the humerus leads to internal rotation of the distal fragment and so to limitation of external rotation after union. In explaining the use of a Thomas arm splint for fractures of the shaft of the humerus it is stated “note that the forearm is fixed in supination”; now, with the arm in supination, the “carrying angle” at the elbow comes into being, and any extension in that position produces a compensating angulation at the site of fracture. This difficulty disappears with the forearm in the semi-prone position. The time has come when it should be definitely stated that Volkmann’s ischaemic contracture can occur without the use of splints or bandages. No mention is made of the posterior tibial fragment so generally present in fracture-dislocation at the ankle, and which is so frequently a great hindrance to complete reduction. In the same connexion it is almost impossible to maintain the foot at right angles with a Dupuytren splint. In the treatment of diverticulitis the excellent results of saline lavage are not mentioned; this is always worth trying before colostomy is thought of.

The printing is generally good, but there has been a mix-up of type on page 172 in the first line of the tannic acid treatment of burns. The illustrations are excellent, but the legend under the radiogram on page 743 should be corrected—ascending should
Reviews

be descending colon. And why put Plate VIII, showing cystoscopic views of the bladder, in the middle of the section on the breast?

These are minor blemishes, many of which may still be a matter of opinion. As a whole, the book offers the simple direct teaching so valuable to the undergraduate.

The Science of Signs and Symptoms. By R. I. S. McDowall, D.Sc., M.B., F.R.C.P.Edin. Third Edition. London: William Heinemann, Limited. 1934. (21s. net.)

This book has been enlarged and brought up to date, and many chapters have been remodelled. It was primarily intended for medical practitioners, and is probably of value to them, as it affords them an easy way of keeping abreast of modern physiology with reference to clinical medicine. It suffers, however, from a certain vagueness, which makes it very difficult to get full value out of facts which it certainly does contain, and for this reason is scarcely a book to be recommended to students.

Manual of Determinative Bacteriology. By D. H. Bergey. Fourth Edition. London: Bailliére, Tindall & Cox. 1934. (27s.)

The classification of bacteria is now in a much more satisfactory state than it was ten years ago, and for this Bergey's Determinative Bacteriology is in part responsible. This latest edition has been enlarged by almost 100 pages, about 50 new species of bacteria are included, and recent advances in classification have been incorporated. One can criticize only those parts of the book dealing with bacteria with which one is familiar. In this respect the streptococcus family requires further revision and modification, e.g., it is not usual to recognize specific types of the haemolytic streptococcus causing puerperal sepsis or erysipelas, even if a scarlatinal species be accepted. Streptococcus fecalis does not belong to the "viridans" group, as it rarely produces green pigmentation, while S. mastitidis is truly haemolytic. In the lacto-bacillus family no mention is made of Döderlein's vaginal bacillus, while B. bifidus is placed among the bacteroides as a strict anaerobe; among the corynebacteria, the recent work of McLeod and his co-workers on the different types of diphtheria bacilli is not included. However, in spite of these defects, the book serves as a useful reference, and should be present in every bacteriological library.