BOOK REVIEWS.

_Pulmonary Tuberculosis_, by R. Y. Keers, M.D., F.R.C.P.(Edin.), F.R.F.P.S.(Glas.), F.R.S.E., and B. G. Rigden, M.R.C.S.(Eng.), L.R.C.P.(Lond.). Pp. 324. Price 24/-. Edinburgh: E. & S. Livingstone Ltd. 1953.

The past five years have witnessed a remarkable change in our attitude to tuberculosis, thanks largely to the introduction of effective antibiotic and chemotherapeutic agents and a real need existed for a comprehensive review of the subject and a critical appraisal of the many new theories and practices, particularly in regard to treatment. The arrival of the third edition of this popular textbook, which goes a long way towards fulfilling that need, is therefore most opportune. This edition has been extensively revised and re-written and the authors are to be congratulated on presenting such a wealth of essential and up-to-date information in such a relatively small volume.

The book is designed for students and practitioners but not a few specialists will profit from a study of its pages. Pathology and bacteriology are briefly but adequately dealt with. Epidemiology and symptomatology receive attention and it is pleasing to note that the diagnostic clichés so commonly passed down from textbook to textbook have been omitted from the section dealing with the examination of the patient. The importance of radiology in tuberculosis is recognized by dealing with it in a separate chapter and by the inclusion in the book of no fewer than 132 skiagrams which are well reproduced. The addition of line-drawings depicting the essential features of the new skiagrams is praiseworthy and the practice might be extended with benefit in future editions in respect also of the older skiagrams. Differential diagnosis, prognosis and complications are competently handled and an excellent chapter deals with treatment in considerable detail. The problems of after-care and prevention are briefly discussed and reference is made to some of the more recent social enactments relating to tuberculosis. It is to be regretted that the duties of the practitioner in regard to notification of the disease are not more fully explained.

The volume contains a few typographical errors. The following words, for example, have been mis-spelt: sanatoria (outside paper cover), identification (p. 6), insidiously (p. 222) and metastatic (fig. 91). On page 182 under the heading 'Resistance,' the word 'have' is used in mistake for 'has,' while on page 184 the first sentence in the paragraph headed 'Dosage' is clearly intended to read 'the drug is given by mouth, is highly soluble ...' etc. The skiagram in Fig. 79 depicting the lateral view of a bronchogram of the right lung has been reversed and is shown in the position commonly ascribed to left lateral radiographs. These, however, are minor faults and do not detract from the value of the book which on the whole is well produced and which can be recommended with confidence to undergraduate and post-graduate students.

BOOKS RECEIVED.

_Malaria Terminology_, by Sir Gordon Cavill, C.I.E., M.D., Paul F. Russell M.D., M.P.H., and N. H. Smellengrebel, D.Sc. Pp. 82. Price 5/-. World Health Organization. 1953.

_Epidemiology and Control of Endemic Syphilis_, by E. I. Grin. Pp. 96. Price 5/-. World Health Organization. 1953.

_Brompton Hospital Reports_, Vol. 20. 1951.

_Brompton Hospital Reports_, Vol. 21. 1952.

_Food Inspection Notes_, by H. Hill, F.R.SanL, F.S.I.A., A.M.I.S.F., and E. Dodsworth, F.R.SanL, M.S.I.A., M.Inst., P.C. Price 8/6. London: H. K. Lewis & Co. 1953.

_Disc Lesions_, by James Cyriax, M.D. Price 5/-. London: Cassell & Co. Ltd. 1953.

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sequelae Compression for arthrodesis substantiated can sound from of the articles stimulate such interest? finds the patient washing spice nor excused of case contributors. A historical survey obstetricians. It deals perhaps appear to have been rather sketchily treated. This is as aspects mensuration. It is have been better. Among many matters excellently dealt with it is difficult to particularize. The chapter on aspects and management of normal labour is however remarkable and it is probably safe to say that in no previous textbook have the more important aspects of this subject been so clearly and succinctly expressed in such a small space. Another excellent section is one devoted to the problems of breast feeding, this being particularly helpfully illustrated. One's major criticism is that the problems of cardiac disease in pregnancy appear to have been rather sketchily treated. The book might well be given a place in the library of the midwife, particularly perhaps the hospital midwife. It should certainly be read by all general practitioner obstetricians. It seems a pity that for such a good book the quality of the paper could not have been better.

The Medical Annual 1953, edited by Sir Henry Tidy, K.B.E., M.A., M.D.(Oxon.), F.R.C.P., and A. Rendle Short, M.A., B.S., B.Sc., F.R.C.S. Pp. 536. Price 27.6. Bristol: John Wright & Sons Ltd. 1953.

The seventy-first Medical Annual follows the now familiar pattern. The reviews of recently published articles of importance carry the authority of eminent contributors. A historical survey 'Medicine in the Reign of Elizabeth I' adds spice to already varied fare. A great deal of information is given, in limited compass, about a wide range of subjects of current interest; the reader desiring further information—and many of the articles stimulate such interest—finds the sources clearly indicated. The inevitable overlapping and repetition has been cut to a minimum. In the case of cortisone, the repeated warnings of its limitations and dangers may well be excused; as supplies increase control may become less effective. A previously unpublished report of a case of skin eruption due to iodine, in a patient also receiving penicillin, is included as one of four dermatological reviews; nor is the phrase 'some auricular fibrillation' particularly well chosen.

The concluding paragraph of the interesting article on 'Chapping of the Skin', repeats the suggestion '.....that local weather bureaux .....forecast the development of chapping weather and warn the residents, who could then postpone .....washing and cleaning ....'. Welcome news, perhaps, to the schoolboy!

Well produced, with some excellent plates, this publication has maintained the high standard of its predecessors.

Compression Arthrodesis, including Central Dislocation as a Principle in Hip Surgery, by John Charnley, F.R.C.S. Pp. xi + 261. Price 42/-.

Edinburgh & London: E. & S. Livingstone Ltd. 1953.

In 1948 Mr. Charnley stimulated interest in this country in the method of arthrodesis by compression. At that time he had arthrodesed fifteen knee joints for osteo-arthritis or fibrous ankylosis following on tuberculous arthritis. He obtained sound bony union in every case well within the optimum time, and despite criticism from some quarters the results of the operation in the knee joint have been substantiated by other surgeons who adopted his technique. The operation is now a standard procedure in a great many orthopaedic units; the case with which it can be performed, the certainty of the results and the absence of post-operative sequelae cannot, in our opinion, be obtained by any other means.
In this monograph the author analyses 100 knee joints arthrodesed by his technique and extends the Principle of Compression in Arthrodesis to include the ankle, shoulder and hip joints. To obtain bony fusion in these joints may prove difficult and the number of operative procedures devised to arthrodesed them is indicative of this fact. Even the most sceptical, therefore, cannot fail to be impressed by the figures tabulated in this volume.

'Forty cases of tuberculous arthritis of the knee joint were operated on by compression—osseous union was eventually achieved in all forty cases.'

'Twenty-four ankles arthrodesed by compression for non-tuberculous conditions without a single failure to obtain osseous union within six months.'

Compression arthrodesis at the ankle joint may be used to correct severe paralytic deformities of the foot—but whether it will ever be a popular method of obtaining fusion at the mid-tarsal joint is a debatable point. In the shoulder, always a problem joint where arthrodesis is concerned, six bony fusions were obtained out of eight cases subjected to operation. In the other two cases a firm fibrous union was obtained, claimed by the author to be as satisfactory as bony union. He claims that provided the centre of motion of a joint is destroyed, the concept of a fibrous ankylosis combined with a bone block makes it possible to use a fibrous ankylosis as a definitive end result.

It is well known that many attempts at arthrodesis end in fibrous ankylosis, but few surgeons regard such an ankylosis as a satisfactory end result—even in the presence of the stipulated bone block. In an attempt to explain the gratifying results of his operations, the author devotes a chapter to the Theory of Compression Arthrodesis. He is of the belief that compression stimulates osteogenesis and that the greater the pressure employed the greater will be the bone formation. Finally, in an experiment where it is assumed that movement is occurring at the site of arthrodesis he proves that bone formation is greatest of all where pressure is applied without immobilization.

As many readers are aware there is another school of thought which denies this theory and which believes that compression leads to bone absorption.

In a subsequent chapter entitled the Watson-Jones Denunciation of Compression in Osseous Union, the various theories to support this view are discussed at some length. The reader faced with the diametrically opposed views backed by authoritative writers may be confused and wonder what effect compression does have on these arthrodeses.

Professor Baker in an earlier chapter commenting on histological sections made on cores of bone removed from the line of union of a compression arthrodesis of the knee, has this to say:

'The union of the arthrodesis surfaces in these specimens shows the features of rapid healing of a completely immobilized fracture like that occasionally seen in an undisturbed impacted fracture, for example a Colles' fracture . . . .' The explanation of the rapid healing is clearly not the rapid production of a large amount of callus. The total mass of callus is small—less than that produced in many fractures at four weeks—but the conditions are such that this small amount of new bone is used to the best mechanical advantage . . . . The absence of cartilage or chondroid tissue is good evidence of immobility.'

We feel that this observation as to the nature of the union should help clear the air.

The final chapter on Central Dislocation as a Principle in Hip Surgery has much to commend it. At present the trend towards arthroplasty may be explained by the difficulties which beset the surgeon in obtaining a sound arthrodesis, especially the stiff painful knee, and the disastrous results which follow the failure to obtain sound bony union. Mr. Charnley holds out hope that this new principle will eliminate these difficulties.

This volume is like the rest of the author’s writings, stimulating and thought provoking, and the criticisms we have made do not detract in any way from its merits. The production is excellent, the diagrams and reproductions are of a high standard and make it an easy book to read.

Few of us can afford to be complacent about the results of arthrodesis and though we may not agree with the author’s views on some of the controversial aspects of his work, the value of his technique in the knee joint has been proved. No orthopaedic surgeon can afford to ignore this work: the young surgeon will learn from it the principles on which a sound arthrodesis must be based: it will make the more senior surgeon review his approach to the classical methods of arthrodesis commonly taught at present.