He analyses the results of conservative and operative treatment in the light of follow-up examinations performed more than ten years later. He compares these results with comparable results by other surgeons, to obtain which he has submitted the literature on conservative treatment and operative treatment to exhaustive analysis. He also gives a valuable history of the treatment of tuberculosis of the knee. Thus, much of the work consists of a mass of detail: and it becomes a little difficult to see the wood for the trees. But answers to certain questions emerge, and these are so important and are so well authenticated that Dr Mortens's effort is amply rewarded.

The questions that Dr Mortens sets out to answer are whether conservative treatment of the disease in children gives good results or whether excision is preferable in some. If so, what are the risks of shortening or deformity? About adults he discusses whether excision should be performed early or late. By conservative treatment he means bed rest in an open-air hospital, splintage (which seems to be less rigidly applied than here) and actinotherapy for which the Finsen Institute is famous and which is used to the full. Sixty-two children received conservative treatment only: twenty recovered with a good range of movement and little damage to the joint; seven others had a range of movement varying from 40 degrees up to 140 degrees; thirteen got bony ankylosis; seventeen developed fibrous ankylosis; three patients died; and in two the disease did not heal. Of fifteen children who had resection after conservative treatment fourteen developed bony ankylosis; three children who had primary resection did badly. Dr Mortens goes on to discuss resection in childhood and finds that bony ankylosis can usually be obtained though it takes longer to develop than in the adult. The lowest age limit set for excision is nine years. Notable shortening did not often occur in cases in which there had been little destruction of cartilage or erosion of bone, but he found that it was common after excision of joints that had suffered gross destructive change. Yet these are the joints for which excision may particularly be required; but there is less risk of shortening if excision is performed when the lesion is healing. Dr Mortens would favour also excision if the disease is still active six or seven years after the onset. He considers deformity after excision to be a more formidable complication than shortening. To avoid deformity the limb must be fixed in full extension at operation. Many patients must wear a splint for three or four years after operation, and others must have a tenotomy of the flexor tendons. It is clear that Dr Mortens has no enthusiasm for the treatment of tuberculosis of the knee in children by excision, and from his research he finds no encouragement to depart from conservative treatment as a routine measure. For adults, on the other hand, conservative treatment is recommended only if it does not interfere with their wage-earning capacity; excision is the method of treatment recommended if the general condition of the patient is satisfactory and the disease in the joint not very active.

In the chapter on pathogenesis Dr Mortens retains the distinction between a primarily osseous and primarily synovial type of lesion, but admits that the disease is present in both bone and synovial membrane as soon as it becomes recognisable. The joint lesion is regarded as part of a haematogenous infection, in which tubercle bacilli are deposited in the latent form in various parts of the body, and the development of overt lesions is governed by circumstances that determine tissue resistance. Associated pulmonary tuberculosis was especially common.

There is much else in this book that repays study. There are questions to ask Dr Mortens: for example, whether constitutional treatment can safely be curtailed in adults, in whom the incidence of associated lesions is so high; and whether the prognosis for associated pulmonary tuberculosis is improved by operation into a tuberculous joint. There can be no doubt about the merit of this outstanding contribution to the literature of skeletal tuberculosis.—M. C. WILKINSON.

OSTEOPATHIE RARE. By C. CASUCCIO. Libero docente di Clinica Ortopedica nell'Università di Bologna. Primo aiuto dell'Istituto Ortopedico Rizzoli. Prefazione di F. Delitala. 10 × 7½ in. Pp. xii + 545, with 292 figures. Index. 1949. Bologna: Edizioni Scientifiche Istituto Rizzoli. Price 5500 Lira.

This exhaustive study of the rarer diseases of bone, excluding infections and neoplasms, is based on the vast material provided by the Institute Rizzoli and a very wide study of the relevant literature in all languages. Like Ludin, Casuccio classifies the diseases as either atrophic or hypertrophic and sclerosing. This method has considerable disadvantages, but none will be satisfactory until more is known of the etiology and pathology of these conditions. There is some lack of balance in the amount of space given to the description of various diseases. For example, the epiphyseal changes in cretins receive but brief mention, while eosinophil granuloma occupies nineteen pages, excellently illustrated and documented. Again, some of the chapters contain a conglomeration of conditions which, in this country, might not all be considered closely related. The radiographs and histological plates are excellent and together with the description present a clear picture of the conditions and what is known of their etiology, pathology, course and treatment. This book is a mine of information and provides knowledge that could otherwise be obtained only with great difficulty from original sources in many languages. The style is clear and the Italian intelligible to the reader with the slightest knowledge of the language. The bibliography is comprehensive,

excellent, and exceptional in that the full title of the original article is mentioned. This is a valuable and unique book of reference on an important but complex subject.—V. H. ELLIS.

This monograph is based on a comprehensive study of the uncommon skeletal affections included in the great collection of documented material now available in the Rizzoli Institute. A wide search of the literature has also been carried out, and the ample bibliography shows that full recognition has been paid to the contributions of others on this subject. The work bears the imprint of the famous Bologna School of Orthopaedics. The author has adopted the convenient method of classifying skeletal disease under two main categories: 1) atrophic lesions (osteoporotic; osteolytic; and dystrophic); 2) hypertrophic lesions (hyperostotic; osteosclerotic; osteoplastic). Each skeletal disease is presented in clear and simple language with the clinical, radiographic and histological features described in proper perspective. The format of the volume is admirable. The author is to be commended for producing a work of reference which all orthopaedic surgeons will find of the greatest assistance.—Harry PLATT.

AN ATLAS OF TRAUMATIC SURGERY. By JOSEP TRUETA, M.D., Barcelona; D.Sc. (Hon.), Oxon.; F.R.C.S. (Hon.), Canada. Surgeon, Wingfield-Morris Orthopaedic Hospital, Oxford. 10 x 8 in. Pp. viii + 150, with 188 figures. 1949. Oxford: Blackwell Scientific Publications, Ltd. Price 30 s.

The development of the closed plaster technique in the treatment of open injuries is closely associated with the name of Trueta. Like many other orthopaedic surgeons who were impressed by the work of Baer and of Winnett Orr in the later part of the First World War, he introduced the technique into his civilian practice, and then, in the Spanish War of 1936-38, he was able to apply it on a big scale to the treatment of war wounds. The results he achieved were outstanding, and the publication of his book "Treatment of War Wounds and Fractures" at a most opportune moment in 1939 was followed by the general adoption of the ideas he had so ably advocated. In the recent war, as a member of the surgical staff of the Wingfield-Morris Orthopaedic Hospital, Oxford, he was able to continue working along the same lines, and his present book is the record of an achievement no less remarkable than the first. "An Atlas of Traumatic Surgery" is a straightforward narrative and pictorial record of the progress and treatment of forty patients with compound fractures and large wounds of the upper and lower limbs chosen from 127 serious casualties treated since the day of the landing in Normandy. As the hospital included a peripheral nerve centre, most of the injuries were complicated by peripheral nerve injuries. No attempt is made to describe details of technique, and the text consists of unvarnished extracts from the hospital records; the reader is therefore free to form his own conclusions, and he cannot fail to be impressed by the magnificent results that were regularly achieved. The book, however, is not only a record; it is also a challenge, for the author states in his preface, "It is primarily to meet the need of these future workers of a new generation that this book is published, although it is hoped that it may be of interest even now, as a record of clinical experience, by providing material for comparison of results for those still facing similar problems." The difficulty of judging honestly the results in the treatment of major injuries is notorious, and it is impossible to set the performance of one surgeon against that of another because the precise conditions can never be known. It is, however, noticeable that, although treatment was carried out at a time when delayed primary and secondary suture were in common use, they were performed on a minority of the larger wounds in this series. It is also apparent that re-excision of wounds was frequently required—it may be because the primary forward surgery was for some reason below the usual standard. But even should some other surgeon claim better or quicker results, this would in no way detract from Trueta's achievement. He has done fine work and given us a magnificent permanent record of it, a record of lives saved and desperately mangled limbs restored to useful function; and any surgeon of the present or a future generation should be proud if he can do as well.—Philip WILES.

FIG. 139

Condition of the wound and fracture on admission, twenty-five days after injury. The great muscular loss makes it very difficult to maintain the fragments in correct position.

FIG. 144

Almost two years after injury the condition of the limb is knee flexion 80 degrees. One year later is 105 degrees.