instance, do not need little pictures to understand an exercise, nor does a physiotherapist. If, moreover, one turns to the chapter on the Orthopaedics of Infantile Paralysis one wonders whom the little sketches of operations would assist. One wonders also, I must say, why the originators of these operations are not mentioned. I do not suppose for a moment that the author of the section wishes to pass off an obvious Dunn's operation or Lambrinudi's or Hoke's as his own. There are some good sections, particularly the one on organisation of measures to combat poliomyelitis, and perhaps one should not grumble too much, because after all the pages are cut.—Bryan McFARLAND.

THE MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS. By J. Albert KEY, B.S., M.D., Clinical Professor of Orthopaedic Surgery, Washington University School of Medicine; and H. Earle CONWELL, M.D., F.A.C.S., Associate Professor of Orthopaedic Surgery, University of Alabama. Fifth edition. 10×6 in. Pp. 1,232, with 1,195 figures. Index. 1951. London: Henry Kimpton. Price £5, 15s.

The fifth edition of this well known and standard American text-book of fractures has been extensively revised since the last edition in 1946. It is disappointing therefore to find certain defects persisting. Although the illustrations have been reduced in number, there are still too many poor reproductions and too many photographs illustrating matters of little or no importance. It is disappointing too to find advocacy of the treatment of fractured metacarpals and finger phalanges by banjo and other straight splints. It is surely accepted now that this leads to stiffness of joints in poor position; capsulectomy is a poor substitute for correct treatment. Patellectomy for fracture is considered a rare necessity, a view with which most surgeons would disagree. Arterial obstruction as the basis of Volkmann's ischaemic contracture is not adequately discussed and never seriously considered as the primary lesion. Griffiths's work on this merits greater attention.

Despite these imperfections, difficult to avoid in so large a work, the general matter is well arranged and produced. The assessment of principles and techniques is eminently sensible and balanced. This is a most useful reference book.—J. I. P. JAMES.

L'OSTÉOTAXIS. By Raoul HOFFMANN. 9½×6 in. Pp. 161, with 63 figures. 1951. Paris: Editions Gead. Price, paper cover, Frs. 1,250; cloth cover, Frs. 1,600

This book, with a preface by Professor Merle D'Aubigné, gives details and sixty-three clinical examples of a new method of external fixation of fractures that has something in common with the methods of Roger Anderson and of others using similar apparatus.

First a special guide is laid upon the skin and its correct position fixed by the insertion of needles down to the bone. Several partially threaded nails are then passed through holes in the guide and punctures in the skin, and drilled into the bone by a brace. There is an ingenious arrangement for fixing the pins into the two cortices of the bone to the correct depth. The pins in each fragment are locked together by an insulated metallic clamp at a distance from the site of fracture. The illustrations show as many as five pins in each fragment of a fractured femur. In all, as many as twenty-six perforations of the skin down to the bone may be required for this achievement. The two blocks of pins are locked together by a connecting bar when approximate reduction has been achieved by manipulation. To allow accurate reduction in a second stage with fluoroscopy, the connecting bar is first loosened and then refixed. Distraction or compression of the fragments may also be achieved by a screw apparatus which can be fastened to the blocks of pins. The author is prepared to make further adjustments of position up to three or four weeks after application of the apparatus, which he calls the *tuteur transcutané*. Variants of the method are used for the mandible, and the complete outfit comprises many different pins, blocks and connecting bars. The method does not always supplant, but may supplement, open reduction. The apparatus is removed when the fracture is clinically solid, and the periods of fixation are shorter than might be expected.

The results are difficult to assess, as there are no radiographs after reduction or union, or of the pin sites, and the case reports seldom give an accurate measure of joint movements, such as knee flexion after femur fractures. This form of fixation is considered suitable for all the long bones, including phalanges and clavicles, with closed and open and infected fractures. The author is aware of the possibility of pin sepsis, and the clinical histories include many examples; but no serious sequelae are mentioned, except perhaps one death from tetanus in the treatment of a closed