revealing account of the attitudes adopted by both patient and doctor when clinical examination fails to show an organic lesion.

Over a third of the book is devoted to orthopaedic surgery in cerebral palsy. The first chapter of this section concerns early diagnosis and prognosis, followed by the treatment of equinus deformity and the management of hip deformities, and finishes with an excellent account of the place of reconstructive surgery of the upper extremity by Leonard Goldner. This section is the most significant contribution of the book, and all who have the care and management of these difficult problems will find much to interest them. This is a field of surgery in which a balanced judgement is so important, and all the authors write with the authority of long experience.

The rest of the book deals with miscellaneous subjects. They include an excellent account of tibia vara by Walter Blount, and a very clear account of the technique and problems associated with digital transposition for thumb loss.

The most controversial chapter describes the use of a plate and peripheral pins in the treatment of subcapital fracture by William Minor Deyerle. He makes a convincing case for the rigidity of fixation provided, but his stress on a valgus reduction is not without some danger to the blood supply of the head. The failure to differentiate between the grades of displaced fractures when discussing the results leave him open to criticism, and he rightly anticipates that the figures concerning bone union will be challenged. It is difficult to conceive union of this fracture occurring in any case in five or six weeks, and the number of cases developing avascular necrosis will almost certainly increase with a longer follow-up. Nevertheless the results are impressive and a tribute to the attention paid to accurate reduction and careful technique. His oldest patient was 108!

One chapter is devoted to original research on the mechanical stresses on lumbar discs. Following some earlier investigations on disc mechanics, a series of measurements were performed in the living in an attempt to assess the total load on the lumbar discs in various positions by discometry of the L3 disc in the sitting, standing, reclining and forward leaning positions. The pressure measurements in the nucleus pulposus show that with the subject tilting forward 20 degrees in the standing position and lifting 50 kilograms by his hands the third lumbar disc is subjected to a total load of 300 kilograms.

The author is to be congratulated on collecting together such an interesting series of articles and insisting on a high standard of illustrations. These are used very effectively in the chapter demonstrating manual muscle testing of the upper extremity.—Denys WAINWRIGHT.

Heritable Disorders of Connective Tissue. By Victor A. McKusick, M.D., Professor of Medicine, the Johns Hopkins University School of Medicine; Physician, the Johns Hopkins Hospital, Baltimore. Third edition. 10½ × 7 in. Pp. xviii + 499, with 190 illustrations, 2 colour plates and 12 tables. Index. 1966. Saint Louis: The C. V. Mosby Company. London: Henry Kimpton. Price £6 18s. 6d.

The appearance of a third edition of Professor McKusick's now classic *Heritable Disorders of Connective Tissue* is proof of its popularity and of the increasing interest taken in clinical genetics. This edition, which is the best to date, had been made necessary, first, by the remarkable advance in our knowledge of disorders of connective tissue since the appearance of the first edition ten years previously and, second, because several new diseases have been described with prominent manifestations in the connective tissue system. Homocystinuria, described first in 1963, and alkaptonuria, both inborn errors of metabolism, are awarded the recognition of separate chapters even though the primary genetic defect does not reside in the connective tissue. However, the effects on the connective tissue are so profound that the author is justified in including them as heritable disorders of connective tissue.

The introductory chapters are concerned with the definition of commonly used terms in clinical genetics and an account of the basic concepts of structure and biochemistry of normal connective tissue.

The orthopaedic surgeon who is occasionally confronted with cases of osteogenesis imperfecta, the Ehlers-Danlos syndrome, Hurler's syndrome, fibrodysplasia ossificans progressiva or epiphyseal dysplasia, will find this book invaluable. He will also be interested to read that Toulouse-Lautrec, thought previously to have had osteogenesis imperfecta, probably suffered from a "new" skeletal dysplasia, pycnodysostosis, which is characterised by fragility of bones and fractures with minor trauma, a receding chin and open fontanelles. The skeletal disorders known as the mucopolysaccharidoses are now clearly separated into six distinct varieties on the basis of clinical, genetic and biochemical findings.

There are numerous x-rays and clinical photographs which alone make this book invaluable. It is well produced and attractively presented and like the earlier editions will be widely acclaimed.—Norman C. NEVIN.