younger rivals. Some of the sections have not been revised to emphasise modern radiological experience, in others the latest references are fifteen or more years old, suggesting that nothing worthwhile has been reported in the interval, and in the earlier sections the use of B.N.A. classification anatomical terms (superseded in the 1930's), e.g., unciform for the hamate, will limit its popularity. Despite the good paper, some of the illustrations show detail poorly. This is evident in Professor Middlemiss's otherwise instructive chapter on the haemopoietic system. This may in part be due to regrettable continued use of positive radiographic illustrations.

These comments are made with regret because this is a good book which could have been excellent. The quality of production is excellent and it should certainly be included in all orthopaedic and radiological libraries. At £11, these days, it is very good value.—Dennis STOKER.

Muscles. Testing and Function. By Henry Otis KENDALL, P.T., Formerly Director of Physical Therapy Department, Children's Hospital School, Supervisor of Physical Therapy with Baltimore Board of Education; Florence Peterson KENDALL, B.S., P.T., Faculty Member, Department of Physical Therapy; and Gladys Elizabeth WADSWORTH, Ph.D., P.T., Associate Professor, Department of Anatomy, School of Medicine, University of Maryland. Second edition. 28.5 × 22 cm. Pp. ix+284, with figures, many in colour, and some tables. Index. 1971. Edinburgh and London: Churchill Livingstone. Price £9.

The first edition of this book appeared in 1949, when poliomyelitis was widespread in the United States and Europe and detailed assessment of muscle function was an important part of its management. The prevalence of peripheral nerve injuries in the second world war added further to its usefulness at that time. Spina bifida and traumatic paraplegia maintain the need for muscle testing, and the publication of a second edition is as welcome today as was the first edition twenty-two years ago. Though primarily directed to those concerned with physiotherapy and kinesiology, it has always been a unique reference book for the orthopaedic surgeon faced with the need to make his own assessments in the field of peripheral paralysis.

The second edition retains all the useful material and illustrations of the first edition, with some new contributions, partly by the new third author in the field of anatomy. The first chapter is a clear and useful account of the principles of manual muscle testing, indicating its value and describing the assessment of muscle power in terms of the gradings indicated by Lovett, the Medical Research Council, and their own somewhat over-elaborate method. Chapter II describes joint movements and includes a section on normal and abnormal postures that seems rather out of place. It was surprising to find that shoulder movements are not recorded in terms of scapulo-thoracic and scapulo-humeral components and that inversion and eversion of the foot are not considered for the hindfoot and forefoot separately. Chapter III, devoted to peripheral nerve and nerve root innervation of muscles, is comprehensive but tends to bewilder rather than help the reader in a difficult part of the subject.

Chapters IV to VII are the main substance of the book. Beautifully illustrated descriptions of the action of each muscle and the ways in which it can be tested are given, with a brief account of the muscles attachments and nerve supply. Some useful diagrams to illustrate the effects of muscle contracture are included, with special reference to the interpretation of contractures of the trunk and hip muscles in various combinations. In this aspect, this book continues to be a unique contribution to medical literature which will recommend itself to all orthopaedic surgeons and physiotherapists engaged in the management of neuromuscular disease.—W. J. W. SHARRARD.

Praktische Anatomie. (Practical Anatomy.) **Bein und Statik.** (The Leg and Posture.) Edited by J. LANG and W. WACHSMUTH. Volume I, 4th part. Second edition. 33 × 25 cm. Pp. xii+473, with 373 coloured illustrations. Index. 1972. Berlin, Heidelberg, New York: Springer Verlag. Price DM 640; U.S. \$ 202.90.

The simplest and perhaps the easiest way of describing this book is to say that it is a combination of Spalteholz's *Hand Atlas of Anatomy*, Jamieson's *Illustrations of Regional Anatomy* and Cunningham's *Manual of Practical Anatomy*. Even comparison with these sound stalwarts scarcely does justice to this magnificent volume. Its size and weight render it unfit for anything but the study desk, but once in place and under a comfortable light, quality and variety of interest make it difficult to leave. It commences with a general description of body types and then passes on to muscular anatomy, the size of page permitting the lower limb to be illustrated in full length. Illustrations of the dermatomes show comparisons with the cat and the monkey. The femoral nerve stretch test and the effect of various muscular paralyses are illustrated.