1887 to address the Harveian Society in London. In the United States Virgil P. Gibney of New York adopted the teaching and John Ridlon came to Liverpool to watch Thomas at work, returning home a convinced disciple and propagating the ideas of Thomas and demonstrating the use of the splints.

The teaching however did ultimately find general acceptance, and that in a way that Thomas hardly expected. In 1864, at the age of thirty, he married Elizabeth, daughter of Robert Jones of Rhyl; the marriage was completely happy. Mrs Thomas was a woman of profound Christian faith whose equanimity enabled her to revere her husband's character and surround his physical frailty with maternal tenderness. They had no children but they adopted a nephew of Mrs Thomas, a youth aged fifteen named Robert Jones. He became an apprentice to his uncle and later entered the Liverpool Medical School as a student. He qualified in 1878 and became an assistant to Thomas upon whose advice he later proceeded to the F.R.C.S., Edinburgh. In a few years he was appointed Honorary Surgeon to the Stanley Hospital and in 1889 to the Southern Hospital where he built up an orthopaedic clinic which became world famous.

Robert Jones had an exceptional orthopaedic training by Hugh Owen Thomas from his youth upwards, and by his hospital staff appointments he was able to extend the boundaries of orthopaedic surgery so that he became recognised as the greatest of orthopaedic surgeons. It is to Robert Jones that we owe the perpetuation of the teaching of Thomas and the introduction of the splints to the whole profession. During the first world war he became Inspector of Military Orthopaedics and toured the Western Front giving demonstrations at casualty clearing stations in the use of the Thomas splints and particularly the caliper, which became a permanent part of war equipment.

Hugh Owen Thomas worked unceasingly in his practice for over thirty years and never took a holiday. It is surprising how his frail body stood up to such pressure. He engaged in busy general practice, and through heredity and inclination became absorbed in the study and treatment of skeletal disease and injury. No other surgeon took care of so many fractures and dislocations in a single year. He devoted his nights to the designing of splints and the writing of contributions to medicine and surgery. He was an outstanding pioneer of orthopaedic surgery. Much of his teaching is now part of regular orthopaedic practice and has lost its identity, whilst some has been tempered through inevitable scientific discovery.

Thomas, worn out by overwork, died at fifty-seven years of age on January 11, 1891. He had given his life to the crippled poor by whom he was loved and respected. The widespread grief manifested amongst all classes at Liverpool by his passing was a moving spectacle; thousands attended his funeral.

Mr Le Vay's book has the merit of combining a biography of Hugh Owen Thomas together with his essential teaching gleaned from a careful perusal of his monographs. This book should make a particular appeal to younger orthopaedic surgeons to whom this remarkable man is but a legendary figure. The author, although captivated by the sheer genius of Thomas as an original thinker in surgery, yet maintains a balanced perspective by criticism of his blindness or obstinacy in opposing some procedures of proved value. Mr Le Vay has attempted an analysis of the character of Thomas in explanation of the polemical nature of his writings, of his comparative isolation and his neglect of contact with other surgeons. Part of this attitude is to be attributed to the pressure under which Thomas worked and his complete absorption in the welfare of his patients.

The Life of Hugh Owen Thomas is strongly recommended to all who wish for more intimate knowledge of the man himself and of the profound part he played in the evolution of orthopaedic surgery. The work has all the pleasing features associated with a publication by Livingstone.—A. Rocyn JONES.

SIR CHARLES BELL, His Life and Times. By Sir Gordon GORDON-TAYLOR, *K.B.E., C.B., F.R.C.S.*, Honorary Consultant Surgeon to the Middlesex Hospital; and E. W. WALLS, *M.D., B.Sc., F.R.S.* (Ed.), S.A. Courtauld Professor of Anatomy in the University of London at the Middlesex Hospital Medical School. 9×6½ in. Pp. xii+288, with 49 figures and frontispiece, four in colour. Index. 1958. Edinburgh and London: E. & S. Livingstone Ltd. Price 42s.

Sir Charles Bell, a Scot, was one of many who came south to find fame in London. Primarily he left his alma mater to gain an outlet for his great abilities which had been sown and nurtured but not fittingly accommodated in Edinburgh. This book is the story of his life as seen by two of his countrymen who have trodden much the same road and whose names, like Bell's, are closely linked with the knowledge of anatomy.

Bell quickly won a unique reputation as an anatomist, not only because of his skill in this subject, but for his teaching prowess and for his ability as a physiologist and as a draughtsman. He was a pioneer in surgical anatomy and when he joined the famous school in Windmill Street, founded some

sixty-six years before by William Hunter, it prospered under his care. Bell was an able surgeon with a mind for philosophy, with the touch, the observation and the reassurance of a clinician and an attractive flair for teaching. This combination endeared him to his students and brought credit to the Middlesex Hospital, to which he was appointed in 1824. That the authors' sole object is to raise Bell to the status of immaculate genius is not apparent, for they are careful to temper this ascendancy with a touch of human failing.

As the story unfolds the reader is courageously taken aside to view for himself scenes of London a century and a half ago. A conducted tour through the anatomy schools of London includes not only an introduction to the famous anatomists of the day but also a peep at the body snatchers, the resurrectionists, the sack-'em-up men or what you will. There is a trip to the battlefield of Waterloo, hot on the heels of victory, where Bell found outlet for his surgical skill and humanity by working day and night on the wounded of both armies. Back in London one senses the eccentricity of the Georges, rubs shoulders with the regency bucks and press-gangs and is fortunate enough to meet many of the doyens of literature, art, music and drama and the leading men of politics, exploration and science. There is a vivid glance into the practice of surgery of the time and some thrilling moments are spent with Bell in the theatre, but inevitably one is led back to the sobriety of the dissecting room to witness the evolution of research into the structure and function of the nervous system, an endeavour which absorbed so much of his time and energy. The chapters dealing with this study are profound, because through Bell's research others were stimulated to enter the race to unravel the secrets of the nervous system and one is drawn inevitably into the acrimonious controversy as to who was the greatest genius of them all, Bell, Mayo or Majendie. Whatever his rightful due in this field, he emerges with at least the credit both of discovering the different functions of the spinal nerves and the creation of some immortal descriptions and paintings of the facial and other peripheral nerves. His achievements were in many spheres as he played the role of anatomist, research worker, surgeon, teacher, painter, philosopher and administrator, and in the final scene the authors leave no doubt of his greatness. "The place of Sir Charles Bell in the ranks of truly great ones of our profession is assured. Kindly, and in the best sense of the word, simple, he will be remembered as one who, loving his fellow men, laboured unceasingly in the relief of suffering; who, seeking to broaden man's comprehension of nature, met success with humility and adversity with fortitude; and in all things recognised a Power transcending that of the world."

His letters, addresses, scientific papers and descriptions of his paintings are listed in full in an extensive appendix. His introductory address on the opening of London University, discussing the difficulty of protecting the integrity of a university in a large metropolis, is a fine example of his worldly wisdom. Who better to have written this biography and given us the benefit of such able research, relevant knowledge and historical conception than Sir Gordon Gordon-Taylor and Professor E. W. Walls? This book is as delightfully written as it is pleasurable to read and an enjoyable reminder of some of the great characters of our British surgical heritage.—Philip NEWMAN.

RÖNTGENOLOGISCHE DIFFERENTIALDIAGNOSE DER KNOCHENERKRANKUNGEN.
By Hans HELLNER and Hanno POPPE, Göttingen, assisted by Ilse LOHSTÖTER. 11½ × 9 in. Pp. viii + 903, with 518 figures. Index. 1956. Stuttgart: Georg Thieme Verlag. Price DM 270.

This large volume considers the radiological differential diagnosis of bone disease. Of the 903 pages the greatest part is an atlas, arranged by anatomical areas, with profuse illustrations. Most of the radiographs are excellently reproduced, mainly in the negative. Each is accompanied by a brief case history and a discussion of the diagnosis. When generalised affections of the skeleton are present reference is made to illustrations of other parts of the skeleton elsewhere in the book. It is thus possible, when a film is difficult to interpret, to compare it with a number of lesions occurring at the same site. The remainder consists of a fuller discussion of differential diagnosis, a section of topographical charts of disease distribution, and an alphabetical encyclopaedia with very short summaries of the most important features and correlation of references in the text and illustrations.

Some of the material is unusual and excellent, but the English reader is liable to be confused by a considerable variation in nomenclature. The book is somewhat unbalanced. Tumours are represented in undue proportion, while the description and illustration of some well known conditions is scanty to the point of neglect. Scurvy, for instance, has no mention of the formation of subperiosteal haematomata. Only one osteoid osteoma is shown and this is, at least, atypical. Little reference is made to the work of the last ten years; and conditions like aneurysmal bone cysts, chondroblastoma and