matic patient, now not only possible but essential in the management of families carrying the Wilson's disease gene, and with treatment which has been completely revolutionized by the introduction of penicillamine.

This book is a must for all working on metabolic diseases of the nervous system, for it shows what can be done for patients with metabolic diseases once the first vital clues on pathogenesis have been found, but for the practising clinical neurologist it is certainly not an essential addition to his library. He may, however, well find it intellectually stimulating to have for occasional reading. In all, a well-produced book for which the editors are to be congratulated.

J. M. WALSH


The German handbook has long earned the respect, if not always the affection, of the medical profession. Generations of pathologists have had good reason to be grateful to Henke and Lubarsch for starting their still unfinished compilation of pathological literature.

Now and again a chapter or volume appears in this work which rises above the standard of a meticulous and critical review of the literature, where the author draws on the wealth of his personal experience and produces an authoritative monograph often in a field inadequately covered elsewhere. The present volume on the pathology of the skull belongs definitely to this category. The skull is a no-man's land. Bony in structure, it is not strictly speaking part of the locomotor system and, therefore, outside the field of the orthopaedic surgeon and the pathologist interested in diseases of bones and joints. It is intimately connected with the central nervous system, the special sense organs and the upper parts of the respiratory and alimentary tracts. A large part of it is treated by the neurosurgeon who thrusts his problems upon a reluctant neuropathologist, unfamiliar with the specific problems of bone.

It was the late Robert Rössle who, when editor of Henke-Lubarsch, conceived the idea of devoting an entire volume to the pathology of the skull. He did not live to complete the task, but was fortunate in finding a worthy successor in Professor L. Burkhardt who wrote the entire volume with the exception of the chapter on injuries delegated to Dr. H. Fischer.

After the usual introductory chapters on embryology, comparative anatomy and general pathology, the author deals in succession with malformations, including those affecting primarily the central nervous system, the cranioostegenoses, other dysplastic conditions and the involvement of the skull in generalized congenital abnormalities of the skeletal system. This is followed by chapters on ageing changes, endocrine disturbances, nutritional deficiencies, Paget's disease, disorders of circulation and diseases of the haemopoietic system. Infections and neoplasms, primary and secondary, conclude Professor Burkhardt's contribution.

It has been the author's aim to avoid repetition and to omit subjects dealt with in other volumes of the hand-book. This has led to a very perfunctory treatment of the histology of tumours—a regrettable omission as not every reader of this volume has access to the complete set. A few pages of text and a handful of illustrations would have rectified this shortcoming without adding substantially to the bulk or the cost of the volume.

With Dr. Fischer's chapter we are on more familiar ground already covered in many treatises on forensic pathology. Needless to say, it is treated with the same meticulous attention to detail as the other chapters.

It is not an easy book to read, nor is it easy to find the right answer to any specific problem despite an adequate index, as the information required tends to get lost in a wealth of detail. Clarity is not easy to achieve in a work of this kind. The illustrations which include photographs of specimens, histological preparations, radiographs and diagrams, are of high quality throughout. The imposing list of references is marred by consistent misspelling of some well-known names, surely an avoidable error in a publication of this class.

These minor shortcomings do not detract from the value of this important contribution, which fills a major gap in pathological literature.

H. URICH


Drs. Lenman and Ritchie have written a very lucid and attractive account of clinical electromyography. It is not an exhaustive treatise but rather a practical guide which sets out the indications for electromyography, the techniques most suitable, and the relevance of the electrophysiological findings. The first half of the book deals with methodology and comprises not only electromyography itself, but also nerve conduction studies, strength-duration curves, tests of neuromuscular transmission and electrically induced reflexes; the technique of recording from single muscle fibres with intracellular micro-electrodes is described in addition. The remainder of the book is concerned with the application of these techniques to various disorders of nerve and muscle.

There are good sections on nerve trauma and nerve compression syndromes and on the electrodiagnostic findings in different types of peripheral neuropathy. Useful classifications of several types of muscle disease are given together with the characteristic findings in these conditions; separate chapters are devoted to the facial nerve and to the ocular muscles. The text is generously illustrated with photographs of oscilloscope tracings and the plates are of particularly high quality. In general the records are helpful though the demonstration of polyphasic potentials is sometimes unsatisfactory. The authors do not claim to provide a complete bibliography but even veteran electromyographers will be grateful for many of the three hundred well chosen references. On the whole there is very little to disagree with in the text, although occasional errors are evident—for example, the F reflex is mentioned twice instead of the H reflex (p. 57). Again, a sentence on p. 132 could be misconstrued to imply that all the acetylcholine released at an end-plate

Book reviews

111