

## Book reviews

**ANATOMY OF THE NORMAL HUMAN THALAMUS** By A. Dewulf. (Pp. 196; illustrated; £9.50.) Elsevier: Amsterdam, 1971.

This beautifully illustrated volume is the product of a prodigious amount of detailed work by the author. A normal human brain was placed in a giant macro-tome and 5 mm slices made in the coronal plane at an angle of 68° to the intercommissural plane. From these Nissl and myelin preparations of the thalamus were made at 1 mm intervals and photographed in a reference grid, and reproduced at ×12 magnification. One hundred and twenty-five microphotographs at ×400 magnification illustrate cells in all the zones of the thalamus listed, and at 1 mm intervals. Measurements of neurones and microneurones were made and percentage distributions of different sizes for all zones are given in histograms. From the photographs of the Nissl preparations four eminent neuroanatomists made line drawings to illustrate their own concepts of the different zones, together with their individual nomenclatures. The differences are as wide as would be anticipated. Subsequently a discussion was recorded between these anatomists, and Hassler and the author, in 1963. Although division based on function and the fibre connection was considered as important, nevertheless a standardized nomenclature was agreed upon, of those zones recognized by all the contributors, but apparently based on morphological criteria only. This is illustrated by a series of line drawings at 1 mm intervals, and is a simplified version of the Hassler system. Areas of contention such as the 'Zentralis' zones, and sub-divisions of the dorsal part of the lateral region, and its oral nuclei have been dropped. It is surprising to see no demarcation between Vpm and Vpl. It is doubtful if this will be the last word on the subject, however. One criticism is that a suggestion is made on page x where it is stated that 'if some disagreement persists on nomenclature or boundary of a nucleus it is at least possible to specify the exact localization of a lesion'. This presumably refers to measurements from reference points so that a lesion may be related to a gridded photograph in the atlas, and takes no account of the known nuclear variabilities related to given reference points.

The author, his colleagues and the publishers are to be congratulated on this beautifully produced book.

JOHN ANDREW

**ESSENTIALS OF NEUROLOGY** By J. N. Walton. 3rd edn. (Pp. xix+482; illustrated; £3.50.) Putman: London, 1971.

The third edition of this justifiably popular synopsis of neurology, coming five years after the second, proves once again that some authors, of whom Professor Walton is an outstanding example, have the facility for writing about the same subject both *in extenso* and in *précis*, yet while using the latter form are able to maintain good style and stimulate interest throughout. The book has been carefully revised and brought up to date, and some of those clinical conceptions which were a little uncertain when it first appeared are now given in their right perspective. This applies particularly to the aetiology and surgical treatment of syringomyelia, the existence and management of low pressure hydrocephalus, and the importance of herpes simplex encephalitis and its treatment. The use of L-dopa is admirably outlined, though not all would dismiss it so summarily from the management of atherosclerotic Parkinsonism. Amantadine has not gained a mention, but one wonders by the next edition how many of the older remedies may have fallen into the background too. In so concise a book as this one feels that something important must have been overlooked. If this is so, this reviewer can only say that he completely failed to spot it. The edition should enhance the fine reputation of its predecessors.

EDWIN R. BICKERSTAFF

**KLINISCHE NEUROPATHOLOGIE** By Gerd Peters (Pp. 496; illustrated; DM. 98.) Thieme: Stuttgart, 1970.

This is the second edition of Peters's well-known textbook of neuropathology which first appeared in 1951. The new edition, again written by one man, contains considerably more text and there are more pictures; some sections have been rewritten. One feels the author's great experience in the field and the book, as far as it goes, inspires confidence. The illustrations are excellent. The subject is systematically covered in 50 chapters which include the pathology of the nervous system in diseases mainly involving other organs, in endocrine disturbances, etc. There is no discussion of the general reactions of nervous tissue to insults and subjects like Wallerian degeneration, chromatolysis, or gliosis are mentioned only in passing. There is a sort of token chapter on intracranial neoplasms in which only tumours of the meninges and craniopharyngiomas are dealt with.

The book has an old-fashioned tone. There are no electronmicrographs and that whole subject receives only scant mention. Topical diseases like kuru and scrapie in sheep are mentioned but no literature is given (the one reference to kuru quoted in the text

does not appear in the bibliography). One misses discussions of more modern techniques such as the use of radioactively labelled substances for studying, say, the morphogenesis of the nervous system. This 'out-of-date' impression is strengthened by a look at the bibliography: one chapter chosen at random has 81 references to papers written before 1960 and 18 to papers written since then. Twelve pounds seems rather a lot to pay for a textbook which badly needs a new edition.

SABINA J. STRICH

**HEREDITARY SENSORY RADICULAR NEUROPATHY** By David C. Wallace. Mervyn Archdall Medical Monograph No. 8. (Pp. 114; illustrated; price not stated.) Australian Medical Association: Sydney. 1970.

The author of this monograph is a medical geneticist at the Queensland Institute of Medical Research, Brisbane. It is based on his study of a very large family of whom he was able to trace more than 400 members. There were at least 42 individuals who had suffered from the disease and he personally examined 25 of them. There was one adequate necropsy. He found that the disease was inherited as a Mendelian dominant, completely penetrant in men, but incompletely so in women.

Data on eight generations were discovered. The majority were of short stature, many were athletic, one winning an Olympic Gold Medal. There was a great variation in the age of onset, rate of progression and severity of the disease. In about one in 10 cases there was motor involvement; muscular weakness and wasting. In others, motor nerve conduction studies were abnormal at a stage when there was no clinical evidence of motor involvement. Sensory loss was of glove and stocking distribution, usually dissociated, and not radicular in type. It was often present for many years before any trophic changes appeared. Deafness, when it occurred, proved to be due to hereditary otosclerosis and not to perceptible loss, as in the families described by Denny-Brown and Van Bogaert.

He speculates on the possible role of exposure to a cold environment, the effects of trauma, and the development of the characteristic and often mutilating trophic changes.

The genetic aspects of this large family are described in detail. There are some summarized case histories, a bibliography but no index.

This is the largest family with this disease that has been described and it certainly deserved documentation.

J. D. SPILLANE

**FUNDAMENTALS OF ELECTROENCEPHALOGRAPHY** By Kenneth A. Kooi. (Pp. 271; 98 figures; \$12.95.) Harper and Row: New York. 1971.

This book has merits. It errs on the side of being brief, it is well written and produced, and is up-to-

date in the fields that have particular interest to the author. Part I, dealing with basic electricity, instrumentation, and the biophysics of recording, is too short to be useful and is not more than an expanded glossary. Part II discusses the basis of EEG interpretation and is particularly good on spontaneous and evoked activity as recorded from the human scalp. It is disappointing to find no discussion of corticography, depth recording, and experimental epilepsy, although some review articles are referred to. The remainder of the text covers the main clinical conditions for which the EEG is used and the illustrations are well chosen. The sections dealing with paediatric and psychiatric disorders could, however, be expanded. The general impression is of a balanced discussion of all the subjects covered. The book will be useful for the many who need an introduction to the EEG as it is practised today, but who do not need to go very deeply into its problems.

J. A. V. BATES

**ÉTUDE EXPÉRIMENTALE DE L'HYPERRÉFLEXIE TENDINEUSE EN CLINIQUE NEUROLOGIQUE** By Paul J. Delwaide. (Pp. 324; 69 figures, price not stated.) Collection *Médico-Monographies d'Agrégés* Éditions Arscia: Brussels. 1971.

From Liège, Dr. Delwaide reports his careful studies on hyperreflexic states using well-known techniques such as H-wave facilitation-inhibition curves, vibratory and sinusoidal stretch stimulation of muscles. His findings in spastic states are in general agreement with those of other workers but his interpretation of inhibitory phenomena differs from that of the Australian school. As so much apparent disagreement in this field of clinical neurophysiology depends on apparently minor details of technique, it is valuable to have this monograph which provides the necessary detail.

This valuable book underlines the move away from the monosynaptic reflex by physiologists interested in muscle tone and its reflex control. The author draws attention to the importance of presynaptic group Ia afferent fibres in regulating the excitability of stretch reflexes.

J. A. SIMPSON

**FUNCTIONAL NEUROANATOMY** By N. B. Everett assisted by John W. Sundsten and Raymond D. Lund. 6th edn. (Pp. x+357, illustrated, £6.5.) Kimpton: London. 1971.

Dr. Everett took over the editorship of Buchanan's *Functional Neuroanatomy* in 1965 and has now produced his second (the 6th) edition of this book. He has retained the valuable concept of tracing the nerve tracts and pathways throughout the substance of the nervous system. The original spidery drawings of Professor Buchanan's day have been supplemented by bold new illustrations and a number of photographs of brain sections have been introduced