

Book reviews

ESSENTIALS OF NEUROLOGY 2nd ed. By J. N. Walton. (Pp. xix + 435; illustrated. 35s.) London: Pitman. 1966.

The first edition of this book appeared in 1961. The author presents in 10 readable chapters the cardinal clinical features of disorders of the nervous system, the general principles of diagnosis and methods of investigation. There follow nine chapters devoted to concise descriptions of specific disorders. Treatment is dealt with in the final chapter which the reviewer found in every way up to date and thoughtful. It seems a sensible way of dealing with what there is of therapy in neurology.

The most obvious feature of the book is that the author has managed to condense his material without sacrificing style and presentation. Indeed it is packed full of information and reads pleasantly. It is free of the outmoded notions and references which sometimes clutter and overload older neurological textbooks. It may be recommended to the student seeking an introduction to neurology. There are ample guides to further reading. For thirty-five shillings it is very good value.

One minor criticism: on pages 27 and 158 a description is given of the Babinski reflex response. It is said that this is characterized by dorsiflexion of the great toe and plantar flexion and fanning-out of the other toes. This may well confuse the student, because he may deduce that reflex dorsiflexion of the great toe was not, by itself, enough to warrant the use of the term. Abduction or fanning of the other toes is by no means constant. Generations of students have found difficulty in interpreting what they observe on stroking the sole of the human foot, in health and disease. But there should not now be confusion about what actually constitutes the Babinski response.

J. D. SPILLANE

MALFORMATIONS ASSOCIÉES DE LA TÊTE ET DES EXTRÉMITÉS
By P. Tridon and M. Thiriet. (Pp. iv + 230; 26 figures. F.40) Paris: Masson et Cie. 1966.

This monograph gives a good clinical account of the various syndromes involving associated malformations of the skull, face, eyes, and limbs. Chapters on the embryology of the limbs and on experimental teratology are included.

The book may be recommended as a book of reference to paediatricians and to specialists in mental deficiency who are likely to encounter these rare conditions and whose duty it is to label them correctly.

The photographs are good and there are nearly 500 references.

R. M. NORMAN

ADVANCES IN TERATOLOGY Vol. 1. Edited by D. H. M. Woollam. (Pp. 297; illustrated. 100s.) London: Logos Press and Academic Press. 1966.

This is the first volume in a new annual series devoted to

the study of foetal monsters and disorders in structural organization. Penrose discusses the cause of Down's syndrome and Lyon gives an interesting account of X-chromosome inactivation in mammals and the mosaic theory which already appears to have relevance in muscular dystrophy and must be considered in the so-called abiotrophies of the nervous system. There are also reviews of the teratogenic effect of viruses, azo dyes, ionizing radiation, and drugs. An interesting account of immunological aspects of developmental biology by Brent makes it clear that antigen-antibody reactions may be important in normal embryogenesis. The book is well produced but it has little for the neurologist. It is a useful source book for those with special interests such as the experimental production of meningocele and similar deformities.

J. A. SIMPSON

LE SOMMEIL DE NUIT, NORMAL ET PATHOLOGIQUE: ÉTUDES ÉLECTROENCEPHALOGRAPHIQUES Society for Electroencephalography and Clinical Neurophysiology of the French Language. (Pp. 391; illustrated. F.85) Paris: Masson et Cie. 1965.

Perhaps because of its apparent simplicity in health electroencephalography has tended to be ignored by physiologists, and in consequence it has developed largely as an aid to diagnosis, in particular of epilepsy. 'Sleep' recordings are very commonly taken but to no other end than the immediate diagnostic problem. That during natural sleep in the healthy a number of different 'patterns' could be observed was an early observation, but this was exploited as a measure of 'depth' of sleep rather than as of interest in its own right. As so often happens, a critical observation was long ago available but ignored (Klaue, 1937) and awareness of the scientific interest of E.E.G. phenomena in sleep essentially relates to the past dozen years.

This volume begins with a characteristically matter-of-fact introduction by Fischgold and an excellent chapter on recent observations on the physiology of sleep by Jouvet, whose own contribution to the advance of this subject has been second to none. A large part of this chapter is devoted to 'paradoxical' sleep (Jouvet lists 23 synonyms for this state at the end of the chapter, and, as he says, the list is incomplete) the main phenomena of which appear to relate to the pontine level of brain function. The interesting changes in proportion and periodicity of paradoxical sleep from one section of the vertebrate phylum to another and with development from the newborn mammal to the adult are also described. Several chapters follow on sleep in the premature and normal newborn child and in the young and old adult (the association between rapid eye movements and dreams appears to persist beyond the 100th year), others on various 'polygraphic' studies and one (by Oswald) on depth of sleep. The section on 'normal' sleep concludes

with an almost overdisciplined—but very useful—chapter by Gastaut and others on non-epileptic episodic phenomena.

The remainder of the volume is largely concerned with a number of studies of sleep in epileptics, most of which are essentially laboratory reports of interest to the student of epilepsy rather than to the general reader. A final chapter reviews briefly the few publications on sleep in mental illness and goes on to give the authors' own experience in a number of patients with various delirious states.

This is a book which can be recommended not only to those whose main interest is in clinical neurophysiology but also to anyone who has an interest in the state in which he spends a great part of his life.

M. V. DRIVER

NEUROSCIENCES RESEARCH SYMPOSIUM SUMMARIES Vol. 1. (An anthology of work session reports from the Neurosciences Research Program Bulletin.) Edited by F. O. Schmitt and T. Melnechuk. (Pp. xx + 570. \$7.50.) Cambridge, Mass. and London: Massachusetts Institute of Technology Press. 1966.

This volume of symposium summaries has been aptly described as an 'interdisciplinary communication'. It contains concise, highly specialized reports from experts in biophysics, chemistry, neuroanatomy, physiology, and psychology on current thinking and experiment in relation to the functions of the central nervous system.

A wide range of topics is covered, ranging from detailed observations on cell structure and metabolism to discussions of the relevance of mathematical theory and computer simulation techniques for problems of memory and information processing.

This succinct form of reporting is particularly valuable for the specialist who wishes to keep abreast of developments in the neurosciences. It provides both a critical appraisal of current theories and original speculations for future experimental enquiry.

LEHRBUCH DER NEUROLOGIE 2nd ed. By Werner Scheid. (Pp. xvi + 776; 266 figures. DM.79.-) Stuttgart: Georg Thieme Verlag. 1966.

This textbook is beautifully bound and produced and superbly illustrated; as a book it is a thing of beauty. As a textbook it is logically though traditionally constructed with successive accounts of individual neurological disorders following upon the usual introductory chapters. These early chapters deal with such topics as history-taking and examination, principles of diagnosis and ancillary investigations; there are also full commentaries upon 'syndromes' of motor weakness, sensory impairment, spinal cord disorders, disorders of speech, of the extrapyramidal and cerebellar systems, of psychopathology, autonomic disorders, and the like. Although lack of familiarity with the language made it difficult for this reviewer to appreciate delicate nuances of meaning or to assess the book's literary merits, it appears to be both comprehensive and clear, and to compare favourably with some of the comparable medium-sized text in the English language. It should find favour with German-

speaking physicians and neurologists though it is plainly too weighty for the undergraduate. A short but well-selected bibliography is given at the end of the volume and is divided into sections, each referring to individual parts of the text. Not unnaturally, references to the German literature predominate but some leading works in the American, British, and French sources are included. There is a very complete index.

PATHOLOGY OF THE SPINAL CORD By J. Trevor Hughes. (Pp. ix + 196; 60 figures. 40s.) London: Lloyd-Luke (Medical Books) Ltd. 1966.

This short textbook aims to provide a concise descriptive account of spinal cord pathology for neurologists, neurosurgeons, and others who care for paraplegic patients. These readers will find this a helpful work. Space is given to the commoner disorders, and especially to those fields in which the author has made original contributions. Other subjects are touched on with copious references. They may find it frustrating to read statements such as 'the controversy about nomenclature and the separation into two types . . . has been admirably reviewed by . . .' without any indication of the nature of the controversy or the conclusion of the reviewers.

Some guidance on the differential diagnosis of motor neurone disease would be useful, and carcinomatous myelopathy should find a place. Spinal cord injury is well covered, but there is no account of Schneider's central cervical cord injury. Hydatid disease is discussed on page 88 but the heading has been omitted and there is no reference to it in the index.

The book is unlikely to meet the needs of the general pathologist trying to identify an unfamiliar disease of the spinal cord, and will not satisfy the neuropathologist, but the selection is, on the whole, judicious for the reader-ship aimed at.

J. A. SIMPSON

SPEECH DISORDERS: APHASIA, APRAXIA AND AGNOSIA 2nd ed. By Lord Brain. (Pp. 201; 25 figures. 47s. 6d.) London: Butterworths. 1965.

This new and slightly enlarged edition of Lord Brain's admirable little book will be welcomed by all interested in aphasia and kindred disorders. The main changes comprise a new chapter on current views on aphasia, which provides a useful survey of the ideas of Bay, Luria, and others all too little known in Great Britain, and an expansion of the chapter on handedness and cerebral dominance to take account of important recent studies, in particular those utilizing the technique of intracarotid injection of sodium amytal. The chapter on language and speech disorders in children has been re-written; developmental dyslexia, for instance, now receives more adequate coverage. Unfortunately, little attempt has been made to bring the chapters on agnosia and apraxia more fully up to date or to indicate lines along which the study of these disorders might profitably be taken. One or two small errors in the first edition, *e.g.*, Malaas for Morlaas, remain uncorrected.

It has been said of the study of aphasia that never in the history of medical endeavour have so many words been written about so few. It is to Lord Brain's eternal