Book reviews

NERVES AND NERVE INJURIES By Sydney Sunderland. (Pp. xv + 1161; illustrated. 250s.) Livingstone: Edinburgh. 1968.

Professor Sydney Sunderland's researches in relation to peripheral nerves and their injuries have adorned the pages of neurological journals for over 25 years, and his many admirers will be delighted to know of this monograph, which is by far the most comprehensive and authoritative work of its kind. Every neurologist, neurosurgeon and accident surgeon should have a copy, for he will often refer to its pages. This monograph provides the logical and impressive culmination to one facet of a life devoted to the advancement of knowledge and to the renown of Australian medicine.

W. RITCHIE RUSSELL

TECHNIQUE DE L'ENREGISTREMENT ÉLECTROENCÉPHALOGRAPHIQUE By M.-L. Hector. (Pp. xi + 205; 104 illustrations. F. 75). Masson et Cie: Paris. 1968.

The author is to be congratulated on producing an interesting and useful handbook for EEG recordists. Part I on the apparatus is written in elementary terms suitable for the beginner as an introduction to more advanced texts. Part II on recording-room practice, use of montages, and the standard examination of adults and children is excellent, reflecting extensive personal experience. Many experienced workers will spot valuable hints, particularly on the management of children. The final section on the interpretation of records and recognition, tracing, and cure of artefacts is very well done, but suitable for more sophisticated workers than Part I. One would endorse the repeated advice to continue recording for a reasonable time before stopping to correct apparent artefacts, and, indeed, the reviewer has to resist the temptation to quote many wise comments which are revealed only by careful reading. (Many of the most valuable are in the legends to illustrations). This section, and particularly the valuable atlas of 86 plates, is recommended to all workers in electroencephalography, medical as well as technical.

J. A. SIMPSON

ATLAS OF THE CENTRAL NERVOUS SYSTEM IN MAN By Richard A. Miller and Ethel Burach. (Pp. 144; illustrated. 90s.) William & Wilkins: Baltimore. (Edinburgh agents: E. & S. Livingstone). 1968.

In this superbly produced atlas are presented 38 transverse sections of normal brain and spinal cord at selected levels from the sacral cord to the anterior commissure. In each the principal structures are clearly labelled and there is a short and mainly anatomical commentary, although function is also briefly mentioned. The sections, which are prepared by the Weigert method, have been most successfully differentiated to show the

maximum details of nerve fibre tracts and nuclear masses. The second half consists of 26 sagittal sections of brain-stem which help to build up a three-dimensional picture. Although principally intended for medical students, an atlas of such obvious quality will have a valued place on the bookshelves of those who are concerned with any aspect of the structure and function of the nervous system, both normal and abnormal.

R. W. ROSS RUSSELL

PROGRESS IN BRAIN RESEARCH Vol. 22. Brain reflexes. Edited by E. A. Asratyan. (Pp. xv + 600; illustrated. 255s.). Elsevier: Amsterdam/London/New York. 1968.

This book is the Proceedings of an International Conference held in Moscow dedicated to the centenary celebration of Sechenov's famous book of the same name which included an early recognition of bulbospinal inhibition. Three symposia were held: (a) 'brain reflexes' and central inhibition; (b) general principles of self-regulation in cortico-subcortical correlations; (c) evolutionary physiology of the nervous system and brain ontogenesis. This form of publication, which is becoming more common, has the advantage of bringing together a distinguished international panel, but has the disadvantage of publication at an arbitrary time on a nominal theme of work which might otherwise have matured in the cask. Some papers are published in this way which would normally be rejected by a regular journal, but on the other hand the reader is privileged to have access to the reasoning and speculation essential to the scientist which would be out of place in a formal paper. This collection of ephemera is very helpful to other workers in the field, but newcomers would do better with a systematic monograph. Western workers will welcome the opportunity to learn of the work of Soviet scientists, but few of their papers provide sufficient detail of experimental techniques and quantitative results to permit critical assessment.

This book is a good example of its kind and will interest all working on cerebral physiology. The English translation is adequate with occasional lapses such as 'crust' for 'cortex' and 'facilitation' would be better than 'exultation' if less felicitous.

J. A. SIMPSON

PAIN Edited by A. Soulaïrac, J. Cahn, and J. Charpentier. (Pp. xii + 562; illustrated. 126s.) Academic Press: London and New York. 1968.

This book contains the proceedings of a Symposium on Pain organized by the Psychophysiology Laboratory of the Paris Faculty of Sciences. Of its 550 pages, basic neurophysiology occupies about 110; experimental procedures in animals and methods of measuring pain 113; biochemical aspects of analgesia 70; pharmacology

70; electrophysiological approaches 55; and clinical and therapeutic considerations 70. In our present state of knowledge this allotment of space is probably reasonable. The aim of the symposium is to review recent progress in the subject. Much of what is said is simply an extension and elaboration of what has been known for some time. However, some new hypotheses and ways of interpreting observations are proposed, and some new techniques are described. The 'gate control' theory of pain, put forward by Melzack and Wall, is novel and useful because it goes some way to explain a number of disparate observations on pain, and because it indicates further experimental approaches which may confirm or refute it. In papers by Lim and Guzman, Charpentier, and Romer a number of new procedures which attempt to measure and quantify pain are described. These are mostly, of necessity, based on measuring certain behavioural accompaniments of pain—both autonomic and motor. Nevertheless, they do provide some degree of measurement and the evidence suggests that what is called pain has a quantitative relation to the changes measured. Beecher also attempts a measurement of pain in man by a test based on exercise of ischaemic muscles. Here again some quantification is achieved. Another approach, mentioned in a short paper by Cohen, and likely to pay dividends in the future, is the study of the distribution of 'labelled' analgesic drugs in the nervous system and elsewhere. However, as several authors imply, pain is to some extent a learned response and a number of more diffuse factors—apprehension, attention, and aspects of the accompanying sensory situation, apart from a specific pain stimulus—may play a part in evoking response, which imposes further difficulties to measurement. Much of the work reported is based on animal experiments and transfer of the findings to man may be misleading. Nevertheless, quantitative methods in the study of pain and analgesia are valuable additions to technique, since pain all too easily becomes a subject of philosophical speculation. In the long run, however, it is a subject which can only be studied first hand in the human subject. The experimental model, even assuming that objective autonomic and behavioural changes have a direct quantitative relation to pain, is difficult to construct and of doubtful validity. Pain has to be studied in models provided by disease and injury in man. This book has much of interest to those working on the problems of pain, but it will only be an occasional source of reference for clinicians in general.

C. W. M. WHITTY

KLINISCHE ELEKTROENZEPHALOGRAPHIE. Lehrbuch und Atlas. By Walter Christian. (Pp. viii + 336; illustrated. DM 98.) Thieme: Stuttgart. 1968.

This beautifully produced, but necessarily expensive, volume is intended to cover the whole field of electroencephalography in relation to clinical practice. After the usual descriptions of the biological basis of the electrical activity of the brain and techniques of recording, there is a very full atlas of the normal EEG from infancy to old age and of abnormal records in a remarkably wide range of pathological conditions. The illustrative tracings

(bipolar recordings on 8 and 12 channel machines) are well chosen and well reproduced. A refreshing common-sense inspires the clinical evaluation of the records, especially in the section on epilepsy which itself occupies one-quarter of the book. The author has succeeded in producing an up-to-date and authoritative textbook of clinical electroencephalography.

LEHRBUCH DER NEUROLOGIE By Werner Schneid, H. H. Wieck, and S. Stammer, with assistance from K.-A. Jochheim, I. Seidenfaden, and E. Gibbels. (Pp. xvi + 796; illustrated. DM 79.) Thieme: Stuttgart. 1968.

Those already familiar with this excellent textbook of neurology, which first appeared in 1963, will not be surprised that its success has already called for a third edition. This new edition has been fully revised, particularly the sections on polyneuritis, muscular dystrophy, and the syndromes of stenosis of the carotid and vertebral arteries. More detailed description is now included on the techniques of cerebral angiography, echoencephalography, and radioactive isotope scanning of the brain. Recent advances in treatment are included in the sections on epilepsy and myasthenia. This edition fully deserves the same success as its predecessors.

HANDBOOK OF CLINICAL NEUROLOGY Edited by P. Vinken and G. W. Bruyn. Vol. 5: Headaches and Cranial Neuralgias. (Pp. xii + 414; illustrated. 301s.) North Holland Publishing Co.: Amsterdam. 1968.

This volume of a mammoth textbook in process of evolution is a fine collection of competent contributions; a high standard is set by the opening chapters prepared by H. Heyck and A. P. Friedman. Neurologists will find this an excellent work of reference and a decorative addition to their library.

APPLIED NEUROCHEMISTRY Edited by A. N. Davison and John Dobbing. (Pp. xi + 442; illustrated. 90s.) Blackwell Scientific Publications: Oxford and Edinburgh. 1968.

Clinicians will read with astonishment and admiration this fine record of current research into many baffling aspects of nervous system activity. Most of the chapters end with a summary and discussion which, on the whole, indicate the limitations and boundaries of present knowledge, and for these alone this volume should be widely studied.

CHOROBY MIEŚNI Edited by I. Hausmanowa-Petrusewicz. Państwowy Zakład Wydawnictw Lekarskich: Warszawa. 1967.

This volume on the myopathies and neuromuscular disorders, edited by Hausmanowa-Petrusewicz, begins with general introductory chapters covering such matters as electrophysiology, histology, histochemistry, electron microscopy, biochemistry, and genetics. Chapters on individual disorders follow. The outlook and presentation conform in general with that obtaining in Great Britain. There is perhaps one particular lesson for us to learn