carotid sinus, and that the efferent pathway is not, or not solely, the cervical sympathetic nerves. The author may find that nervous control of the circulation in the brain is more widely accepted than he appears to expect, and it will be interesting to know whether his other views are confirmed as new methods for the study of brain flow become available.

J. SPALDING

SPONGY DEGENERATION OF THE BRAIN IN INFANCY By L. van Bogaert and I. Bertrand. (Pp. 178; 36 figures. 50s.) North Holland Publishing Company: Amsterdam. 1967.

The recognition of this familial disease as a distinctive pathological entity dates from the paper given by van Bogaert and Bertrand at the Paris Neurological Congress in 1949. In retrospect, it is probable that Globus and Strauss (1928) and Canavan (1931) had given earlier descriptions of the condition, but it is certainly unjustifiable to retain the term 'Canavan's disease' in present-day classifications.

This monograph contains a full account of the clinical and pathological features of the 26 examples of this disease which have so far appeared in the literature and the authors' personal cases are set out in considerable detail. Pathologists will be grateful for van Bogaert's account of many other rare encephalopathies of early life which are to be considered in differential diagnosis and the book will be a valuable source of reference both to clinicians and neuropathologists.

R. M. NORMAN

INTEGRATIVE ACTIVITY OF THE BRAIN By Jerzy Konorski. (Pp. xii + 531; illustrated. 135s.) The University of Chicago Press: Chicago and London. 1968.

Dr. Konorski's work on cerebral physiology is specially remembered for his interest in the time factors involved in the establishment of a memory trace. The student of memory mechanisms will, however, be disappointed by the pages devoted to this, for they contain only rather speculative explanations of the known facts. Thus on page 491 '... we shall hold the view that transient memory has a dynamic character depending on the activation of closed, self-reexciting chains of neurons, whereas the consolidation of memory is a quite separate and independent process whose intimate nature is still poorly understood'. The weakness of this volume is that the known facts of the problems discussed are not fully displayed to the reader, even in the realm of memory mechanisms. However, it provides a source of interesting theoretical interpretations which may provoke further useful experiment.

MYOPATHIEN IM KINDESALTER Vol. 18. Pädiatrische Fortbildungskurse für die Praxis. Edited by E. Rossi. (Pp. 142; 61 illustrations. Sw. F. 27.) S. Karger AG, Basel. 1966.

In this little volume are published a series of lectures on myopathy in childhood given in Freiburg in June 1965 as one of a series of postgraduate courses in paediatrics organized by the Children's Clinic of the University of Bern. The volume opens with a chapter by Becker on the

genetic aspects of muscle disorders in childhood, and subsequent chapters review the patho-physiology of human muscular dystrophy (Richterich), the clinical characteristics of myopathy in childhood (Demos), cardiac involvement (Weber), histopathology (Mumenthaler), electron microscopy (Mölbart), drug treatment (Beckmann), orthopaedic treatment (Taillard), and the differential diagnosis of the 'floppy infant' syndrome (Zellweger). Five of the chapters are written in German, three in French, and one in English. As a short review of current knowledge, intended for paediatricians and general physicians, the volume succeeds in its aim, but owing to the relative brevity and unevenness of the various chapters the book will be of comparatively little interest to British neurologists; to those with a particular interest in diseases of muscle a number of isolated observations in the chapters by Zellweger, Mumenthaler, and Mölbart will be of value. The remaining chapters contain little that is new and even the reviews of recent literature are somewhat incomplete; at a time when the proceedings of many large meetings and symposia devoted to muscle disease in its many aspects are being published, the appeal of this book will be very limited.

NEW CONCEPTS IN PAIN AND ITS CLINICAL MANAGEMENT

Edited by E. Leong Way. (Pp. xiv + 224; 51 figures. 64s.) Blackwell Scientific Publications: Oxford. 1967.

The title of this book is something of a misnomer, since it is not concerned with new concepts in pain so much as new applications of old concepts. The work represents the proceedings of a symposium held in San Francisco in 1966.

The first section is concerned with the anatomy and physiology of pain. Doctors Casey and Melzack present a conceptual model in which motivational and cognitive aspects of pain are emphasized rather than classical sensory mechanisms. The picture is useful, though the presentation is at times verbose.

The problem of addiction to effective analgesics looms large. Considering the history of the subject, even in recent years, many authors seem surprisingly optimistic about finding an effective non-addictive agent. Nothing new emerges in the assessment of pain relief, perhaps because the definition of pain still presents great difficulties. An essay by Dr. Bonica on the management of intractable pain is especially useful in the practical sphere. A short review of neurosurgical procedures is included.

The book will be of value to those working in pain clinics which are a growing feature in medical organization.

C. W. M. WHITTY

THE GROSS ANATOMY OF THE HUMAN BRAIN. A Manual of Dissection By W. Hewitt. (Pp. 170; 130 figures. 30s.) Pitman: London. 1967.

This students' textbook deals solely with the gross anatomy and dissection of the human brain, and though it illustrates, without explanation, some of the features of the brain-stem which may be seen by the unaided eye in unstained transverse sections, it does not consider some important pathways—for example, medial and lateral lemnisci—which may be dissected with ease. The

text also avoids reference to function, and thus the student using this book will require another text to make up these deficiencies.

The descriptions of the parts of the brain are brief and for the most part clear, and in some cases there are short explanations based on development. There are, however, a number of statements which are likely to lead to confusion. Thus the outer layer of the dura mater is stated to be endosteum or internal periosteum, and an extradural space is described as an anatomical entity, while the subdural space is dubbed 'potential'. The internal capsule is said to extend from the cortex to the crus cerebri, and the branches of the posterior cerebral artery entering the posterior perforated substance are said to supply the corpus striatum, though which part is not specified.

There are numerous line drawings, but some of these are so schematic or inaccurate that they are likely to be positively misleading to the uninitiated. Other illustrations are reproduced at such a small size that important details are obscured, and some structures are shown in entirely incorrect positions, even varying in adjacent illustrations.

The author has made a valiant attempt to present gross structure in a comprehensible form, but the usefulness of a book of this limited scope in a shortened medical curriculum is questionable, even if there were no grounds for criticism.

G. J. ROMANES

THE NEUROGENIC BLADDER Edited by S. Boyarsky. (Pp. xx + 306; illustrated. £5 16s.) Williams & Wilkins: Baltimore, 1967.

All medical problems slowly become more and more complicated and this report of an important symposium shows that the subjects considered require an amount of dedicated study which arouses the admiration of the reader. Thus the combination of uroflowmetry, cystometry, and electromyography brings an entirely new range of accuracy in determining the mechanism of bladder control in health and disease. The new methods of electrostimulation of the bladder provoked these discussions, and their further development is clearly to be of great clinical importance.

TOPOGRAPHIC BRAIN CHEMISTRY. By R. L. Friede. (Pp. xiv + 543; illustrated. 176s.) Academic Press: New York, 1966.

This is an important book. It brings together for the first time most of the available information on the histochemical and biochemical properties of the various anatomical structures (grey masses and fibre tracts) of the nervous system mostly of the commonly used laboratory mammals and man.

The author has himself made original contributions to an extraordinary number of the subjects discussed and therefore speaks with authority and critical judgement based on experience. The book contains chapters on topics such as the occurrence in the brain of oxidative and glycolytic enzymes, cytochromes and ATP, monoamines and acetyl choline, proteins, lipids, inorganic constituents, and so forth. Most chapters contain sections

on distribution of the materials under discussion in the nervous system (correlating histochemical and biochemical data), and changes during development and under pathological conditions. Thus the chapter on lipids has a valuable section on myelination and maturation of glia as well as a brief section on the biochemistry of demyelination. Throughout attention is drawn to species differences and similarities. There is also an interesting chapter on the capillary pattern in different anatomical regions of the brain.

This book contains a vast amount of information, critically presented, with thoughtful but not over-speculative comments on the interpretation of the data. It has an author and a subject index, and this and numerous cross references in the text make it easy to use as a source book.

SABINA J. STRICH

MODERN TRENDS IN NEUROLOGY Vol. 4. Edited by D. Williams. (Pp. ix + 293; illustrated. 75s.) Butterworth: London, 1967.

This volume contains 16 essays on various subjects of current interest, and most practising neurologists will find some that are useful to their work. The essay writers were chosen from among those 'whose authority carries with it clarity and brevity', and 12 of the 16 write from London.

THE APPROACH TO DIAGNOSIS IN MODERN NEUROLOGY Mount Sinai Hospital Monograph. Edited by M. Bender. (Pp. 186; illustrated. \$6.50.) Grune & Stratton: New York and London, 1967.

Many well-known and revered teachers of clinical neurology have attempted to write about their methods but the results are often disappointing. In this small volume, however, Dr. Bender has considerable success in transferring the genius of his clinical methods to the reader and all clinicians will learn from it.

PROCEEDINGS OF THE ANNUAL SCIENTIFIC MEETING OF THE INTERNATIONAL MEDICAL SOCIETY OF PARAPLEGIA, 1967. PARAPLEGIA, Vol. 5, No. 3. E. & S. Livingstone: Edinburgh and London.

This important conference resulted in a number of papers by experts from many countries of the world with regard to the organization of spinal units, and it is very gratifying that this subject has progressed so vigorously and successfully in the well-developed countries of the world.

ULTRASONIC TECHNIQUES IN BIOLOGY AND MEDICINE Edited by B. Brown and D. Gordon. (Pp. 263; 127 diagrams, 17 art plates. 85s.) Iliffe Books: London, 1967.

This is a technical guide for the hospital physicist and electronic technician. Diagnostic, surgical, and dental aspects are considered as well as a variety of biological applications.