Book reviews

BRAIN HYPOXIA Edited by J. B. Brierley and B. S. Meldrum. (Pp. 320; illustrated; £4.50.) Clinics in Developmental Medicine No. 39/40. Spastics International Medical Publications. Heinemann: London; Lippincott: Philadelphia. 1971.

It used to be possible to keep in touch with recent advances by subscribing to a journal and attending the meetings of a professional society. This is no longer adequate for the advanced worker who can not afford to wait for published results and continuous bibliographic searches, and who requires more detail than is appropriate to the paper read at a normal meeting. The proliferation of esoteric groups and symposia is inevitable. The outsider may deplore the conference proceedings published at a later date but it is absurd to criticize them for not being something else. They are not textbooks or definitive papers but reports of work in progress communicated to colleagues from many countries. These ephemera are extremely valuable to other research workers, and to those directly involved who want to know what is going on.

If a Rothschild client were to commission neurological research the subject of brain hypoxia would be one of the first. This Carshalton Symposium, organized by the Medical Education and Information Unit of the Spastics Society in association with the Medical Research Council, is one of the best in this rapidly advancing field. It is beautifully produced with succinct editorial introductions to each section.

J. A. SIMPSON

ATLAS OF THE ULTRASTRUCTURE OF DISEASED HUMAN MUSCLE By W. G. P. Mair and F. M. S. Tome. (Pp. 249; 84 plates; £4.50.) Churchill Livingstone: Edinburgh. 1972.

The amazing post-war advances in knowledge of diseases of the muscles continues unabated but emphasis has shifted from clinical description and classification through enzymology and electromyography to histochemistry and ultrastructural studies. In a rapidly advancing field it is always difficult to know when the state of the art justifies production of an atlas or textbook to supply the requirements of new entrants. The time for an atlas of ultrastructure is well chosen, though inevitably the stop-press news (such as the end-plate in myasthenia gravis) is missing. The authors of this splendid book from the National Hospital, Queen Square are to be congratulated on the technical perfection of their pictures. They are well chosen and concisely

annotated. The text is a model of brevity, conveying all the essential information clearly and succinctly with well-chosen references. The plates are better than a journal can normally achieve and the difficulties of publication should not be underrated. The publishers have maintained their usual high standard at a cost which, for a work of this kind, must be considered modest.

J. A. SIMPSON

NEURORADIOLOGIC ANATOMY: A Stereoscopic Atlas By R. S. Leighton. (Pp. 340; illustrated; £25.50.) Churchill Livingstone: Edinburgh. 1971.

The author has prepared several plastic casts, appropriately coloured, of the cerebral arteries, veins, ventricles, and cisterns, and has photographed these casts from various aspects. To correlate with these there is a series of stereoscopic radiographs derived from clinical and necropsy subjects. The book contains 112 full-page line drawings of each view of the casts and 42 illustrations of the radiographs, all clearly keyed to the 154 stereoscopic transparencies which are mounted in 22 Viewmaster reels. In addition, there is a 12-page section dealing with variations of the cerebral vasculature and miscellaneous matters not completely demonstrated elsewhere in the atlas. Also included are a list of 78 relevant references and an anatomical index to the transparencies. The reels can be used in a small individual viewer but a stereoscopic projector and spectacles are available for group teaching.

The preparation of casts of the cerebral structures is an exacting task, and fragility hinders their use as teaching aids. The author is to be congratulated therefore, both for producing casts with such satisfying detail, and for choosing this method of making them widely available. Although the price may appear to be disproportionately high, the book is of immense educational value and is recommended to all interested in the radiological anatomy of the brain.

J. L. STEVEN

PROGRESS IN NEUROPATHOLOGY, Volume 1 Edited by H. M. Zimmerman. (Pp. 316; illustrated; £10.80.) Heinemann: London. 1971.

This is a collection of 12 chapters written by various authors or groups of authors, the majority in the United States. A reader attracted by the title might expect each essay to be a review of progress in some main area of neuropathological research in the last

decade. Not so, workers have been given a free hand to write on disparate topics, probably of their own choosing. The result is not a record of progress, but is nevertheless of value; it is more like a *Festschrift* in providing a forum for lavishly illustrated and sometimes lengthy papers which might not otherwise see the light of day.

Electron micrographs figure prominently in several papers. Asao Hirano shows that with good technique the demonstration of fine structure of tissues long fixed in formalin can be well worth while. There are two chapters on myelin, one by Moshe Wolman dealing with basic structural and chemical aspects and the other confined to observations in border disease of lambs, where a significant myelinolytic artefact (in epon- but not araldite-embedded tissue of affected animals) is discussed. The blood-brain barrier is dealt with at length by Joseph C. Lee with valuable discussion leading to a multiphasic concept of its nature. The barrier is also studied by Klatzo and his colleagues in the shark, because injury to the brain which normally breaks down the barrier and allows the spread of dyes from the circulation does not do so in this fish.

Virus studies are represented by an interestingly written paper on parvoviruses and their relationship to defective development of the cerebellum through an affinity for replicating cells. There is a useful paper on the gangliosidoses (Tay-Sachs disease and late infantile lipidosis) in which the chemical bases of these two disorders, now known to be systemic, are clearly described. Other subjects covered are systemic lupus erythematosus and the relationship of its immunological abnormalities to the vascular lesions of the central nervous system, hypertrophy of the olives as a relatively common necropsy finding in elderly patients, the fine structure of intercellular contacts in gliomas, and a comparison of axonal reactions in peripherally projecting and centrally directed neurones. Leopold Liss contributes a cautionary tale concerning tissue culture of the cerebellum used to study the cytopathic effect of noxious substances, by illustrating a wide variety of pathological changes in control material.

Those interested in the pathology of the nervous system will wish to browse through this book in the library; there is some gold to be found, and many references.

D. G. HARRIMAN

THE SURGICAL CONTROL OF BEHAVIOUR Edited by A. Winter. (Pp. 90; illustrated; \$8.00.) Thomas: Springfield, Illinois. 1971.

This slim volume represents the proceedings of a symposium concerning the surgical treatment of mental illness and pain. The publisher's claim to

'delineate the anatomic and neurologic basis for psychosurgery' falls short of a comprehensive survey of the work in this field, and in addition to a limited selection of topics, the bibliography is inadequate. Of the reviews presented, only that by Mary Brazier of the Brain Research Institute is worthy of mention and deals with the use of depth recordings in temporal lobe disorders, a field of research which is in its infancy in British clinical neurology and neurosurgery. Dr. Beecher Scoville gives a very brief historical review of the many operations that have been performed on the frontal lobes for the control of disorders of behaviour. His conclusions, together with those of others contributing to the symposium, indicate that this form of surgery is chiefly for the treatment of chronic tension states and depression, but not for psychopathic disorders or intractable pain. This is in agreement with current British practice, but many would disagree that patients with pseudoneurotic schizophrenia or various forms of drug addiction are suitable for this form of treatment. Ablation of the amygdaloid nucleus in patients with behavioural disorders where aggression is prominent is a subject of great interest, but unfortunately Dr. Shatin and Dr. Winter give only a very limited picture of this rapidly developing field of surgery.

This collection of papers will have little appeal to the serious student of psychosurgery and indeed one hesitates to recommend it to any class of reader.

M. R. BOND

MANUEL ELEMENTAIRE DE NEUROPATHOLOGIE R. Escourrolle and J. Poirer. (Pp. 204; 225 figures, F.49.) Masson: Paris. 1971.

This is a useful introductory textbook of neuropathology, written in a simple style which should offer little difficulty to those with a working knowledge of French. The principles of the pathology of the central and peripheral nervous systems, together with a section on the pathology of skeletal muscle, are set out in a clear and attractive manner, well illustrated by photographs and supplemented with a number of useful diagrams. Some sections are open to criticism. There is little indication of the relative frequency of intracranial neoplasms. Microglioma is not mentioned, and pituitary tumours are not well described. The sections on cerebral trauma and on the neuropilidoses are sketchy and the chapter on infectious diseases is perhaps scanty for so large a topic. Some of the macroscopic pictures of the brain are too small and are sometimes unclear. Lack of clarity of detail also afflicts some of the histological pictures, which are all in black and white. Diagrams are a strong point of the book and offer much useful information. The tables of topographical classifica-