Book reviews

MODERN NEUROLOGY: PAPERS IN TRIBUTE TO DEREK DENNY-BROWN Edited by Simeon Locke. (Pp. xxi + 626; illustrated. 135s.) Little, Brown and Co: Boston, Mass. (London agents: Churchill). 1969.

Derek Denny-Brown's contribution to Anglo-American neurology has been unique, and it is only now, after his retirement from Boston City Hospital, that our full indebtedness to his leadership becomes evident. He was already an established authority as a young neurophysiologist when he turned seriously to clinical neurology in 1929, and his life-long habit thereafter has been to consider every case as both a clinical and a physiological challenge. He seemed to require little sleep and owing partly to his remarkable capacity for long hours of intensive work he succeeded in himself combining three major careers as a clinician, a research physiologist, and a teacher. In Boston from 1941 onwards, Denny-Brown has trained and inspired about 170 neurologists who now operate all over the world, and who in their turn are helping to ensure that American neurology continues to provide the best training there is to be had in this subject.

This volume is a wonderful testimonial to this great teacher and contains nearly 50 papers from 60 of his former students and colleagues, many of which reflect Denny-Brown's drive and dedication to the advancement of knowledge.

The volume has been edited with distinction by Dr. Simeon Locke and all neurologists will hope to acquire a copy. It is gratifying to know that Denny-Brown, although retired from the clinic, is to continue his physiological researches, and for these all his associates and friends will join to wish him every satisfaction and success.

W. RITCHIE RUSSELL

ACTUALITÉS NEUROPHYSIOLOGIQUES. 8th series. Edited by A.-M. Monnier. (Pp. 347; illustrated. 120 F.) Masson & Cie: Paris. 1968.

No introduction is required to this excellent French paperback series of neurophysiological reviews by distinguished contributors. The eighth volume contains 15 papers. Barker reviews motor nerve endings (intra- and extrafusal) and Granit discusses the control of motoneurone firing. On the sensory side, carotid chemoreceptors are reviewed by Eyzaguirre and Zapata, a mechanoreceptor by Szabo, and transmission of muscle stretch signals in spinocerebellar tracts by Jansen. Gordon has some interesting ideas on central mechanisms of somesthetic nuclei. Chalazontis discusses the role of intracellular oxygen in the control of the electrical properties of the nerve cell membrane. EEG workers will welcome Brazier on the electrophysiology of the human hippocampus and thalamus, Bureš and Burešová on cortical spreading depression, and Naquet and colleagues on a baboon model for the study of epilepsy. Neuroendocrinology is catered for by Perl on medullary

sympathetic reflexes, Faure on the effects of sleep and waking on gonadotropic function, and Feldman on the cerebral effects of adrenalectomy and corticosteroids. Cerf gives a useful account of functional studies of the cerebral effects of various antibodies.

The price rises steadily with each volume, but contemporary assessments by the leading workers in many fields of neurophysiology make this excellent series a 'good buy'. There are summaries of each chapter in English.

J. A. SIMPSON

HIRNMECHANISMEN UND VERHALTEN: ELEKTROPHYSIOLOGISCHE UND VERHALTENSUNTERSUCHUNGEN AN DER RATTE By L. Pickenhain and F. Klingberg. (Pp. 256; 73 figures, 4 tables. 82s.) Gustav Fischer: Jena. 1969.

Some consider that conditioned reflexes are of prime importance in understanding the mechanisms of higher nervous control. On the basis of apparently simple physiological experiments an elaborate system of thought has been erected. It has even been claimed that our 'voluntary' actions are merely conditioned reflexes. This view is a guess or perhaps one should rather say an absurd and ludicrous extrapolation.

In the East at least conditioned reflexes continue to attract a great deal of interest and studies inspired by Pavlov's work early in the century continue to occupy scientists in Russia and Eastern European countries. By contrast an analysis of the indices of the *Journal of Physiology* confirms how little interest these responses have elicited in experimentalists in the West.

This book, from East Germany, deals with the electroencephalogram in relation to conditioned reflexes of different types established in rats. Readings were successfully obtained from implanted electrodes in freely moving animals. The results are interpreted in terms of a three-phase hypothesis. There are stages of disturbance, adaptation, and good adaptation. It is surprising to see (Fig. 46) that the startle reaction to pistol shot may be seen with no electroencephalographic 'arousal'.

This work is in the nature of a collection of data about the responses of different cortical regions using macro electrodes. No single unit records are shown. The work is of only limited interest to clinical neurologists.

E. GEOFFREY WALSH

CONTEMPORARY NEUROLOGY SYMPOSIA NO. 2: MOTOR NEURONE DISEASES Edited by F. H. Norris and L. T. Kurland. (Pp. xiv + 407; illustrated. \$13.25). Grune and Stratton: New York and London. 1969.

The cause of motor neurone disease is unknown. There is no effective treatment. Yet research into this unpromising condition was boosted by the recognition of an inherited form in the Mariana Islands soon after the war.

The relationship between motor neurone disease and many of the disorders encompassed in this recently