Book reviews

THE SO-CALLED EXTRAPYRAMIDAL SYSTEM Symposium of the Sixteenth Congress of Scandinavian Neurologists. Edited by Sigvald Refsum, Hans M. Lørsius, and Pre Dietrichson. (Pp. 363; illustrated. 50s.) Oslo University Press. 1963.

This volume, which is a report of the 16th Congress of Scandinavian Neurologists, contains 26 papers on the extrapyramidal system. There are an additional 15 papers on a variety of neurological subjects. The first paper by Brodal argues that a segregation of pyramidal and extrapyramidal systems is no longer valid anatomically. Other papers are concerned with clinical syndromes, especially Parkinsonism, and discuss their pathogenesis, pathology, and medical and surgical treatment. It is interesting to note that successful surgical treatment seems to follow lesions involving the capsule, and that even when these seem relatively extensive they may not cause paresis. This confirms the views of other workers. Experimental work in animals, attempting to assign precise functions to the basal ganglia, is also reported. The rather striking conclusion of one worker is that memory and emotion, rather than motor mechanisms, seem to be functions of the corpus striatum. The book will be useful as a source of detailed information drawn from personal experience on the subject matter of individual papers. No attempt is made to draw together the arguments and conclusions of the different authors.

THE CHEMICAL EXPLORATION OF THE BRAIN A study of cerebral excitability and ion movement. By Henry McIlwain. (Pp. viii + 207; 34 figures. 40s.) Amsterdam, London, and New York: Elsevier Publishing Co. 1963. This monograph is concerned with the biochemical aspects of cerebral excitability. In the earlier chapters some of the techniques applicable to the study of isolated cerebral tissues are described, the water and electrolyte composition is discussed, and the lipid and protein components of the brain are considered in relation to cell membrane structure. In the final chapter the author describes and critically discusses various investigations into enzymic mechanisms proposed for active cation transport across membranes, with particular reference to neural tissues.

In addition to constituting a stimulating review of this field of neurochemistry, this book contains much which will be of value to workers concerned with other problems of membrane biochemistry.

CLINICAL EXAMINATIONS IN NEUROLOGY, 2nd ed. By members of the Sections of Neurology and Physiology, Mayo Clinic and Mayo Foundation. (Pp. xxi + 396; 76 figures. 59s. 6d.) Philadelphia and London: W. B. Saunders Co. Ltd. 1963.

The first edition of this useful book appeared in 1956. It consists essentially of an account of the methods of clinical neurological examination used at the Mayo

Clinic. The methods of examination are closely described, in particular the testing of individual muscles, but not much attention is given to the interpretation of the results. This edition contains new chapters on the examination of infants and children and on neurological radiological procedures but otherwise there are only slight changes from the earlier edition.

J. W. ALDREN TURNER

THE BASIS OF CLINICAL NEUROLOGY, 4th ed. By Samuel Brock and Howard P. Krieger. (Pp. 616; illustrated. 112s.) Baltimore: The Williams & Wilkins Company. London: Baillière, Tindall and Cox Ltd. 1963.

The first edition of this well-known book, which appeared over 25 years ago, presented an account of the then current knowledge of neuro-anatomy and neurophysiology which might be helpful for the better understanding of clinical neurological problems.

Knowledge has, however, changed so much since then that the production of new editions becomes a very formidable task, and the reviewer feels that this has not here been very successfully achieved. It would really have been better to allow this text to lapse.

W. RITCHIE RUSSELL

ULTRASTRUCTURE AND METABOLISM OF THE NERVOUS SYSTEM Vol. 40. A.R.N.M.D. Edited by Saul H. Korey, Alfred Pope, and Eli Robins. (Pp. 456; 88 figures, 57 tables. 136s.) Baltimore: The Williams & Wilkins Company. London: Baillière, Tindall and Cox Ltd. 1962.

This symposium was held in New York in December 1960, and maintains the high standard set by previous Proceedings of the Association for Research in Nervous and Mental Disease. With few exceptions the papers are of a very specialized kind and of little clinical interest. It was a laudable project to bring together at a joint meeting the two disciplines of electron microscopy and biochemistry, but in point of fact very little common ground has been shown to exist between them, except in the remarkable contribution of Fernandez-Moran on the enzyme assemblies in mitochondrial membranes. Many of the papers are valuable review articles, that by G. W. Harris on neuro-endocrine relations being of wider medical interest than most. An excellent feature is the pertinent discussion printed at the end of each contribution.

THE EVOLUTION OF THE HUMAN BRAIN By Gerhardt von Bonin. (Pp. xiv + 92; 7 figures, 24 tables. 37s. 6d.) Chicago and London: The University of Chicago Press. 1963.

This essay is written for the 'Scientist's Library: Biology and Medicine' by a well-known authority on the structure of the brain. His knowledge also of anthropology enables him to assess the true value of the often exaggerated