

**GROWTH AND MATURATION OF THE BRAIN** *Progress in Brain Research*, Vol. 4. Edited by D. P. Purpura and J. P. Schadé. (Pp. 289, illustrated. 80s.) Amsterdam, London and New York: Elsevier Publishing Company. 1964.

Fourth in the series, 'Progress in Brain Research', this volume embodies contributions of a symposium on brain development held in Amsterdam in 1962. The research efforts of many countries are represented and each article gives signs of careful preparation, no doubt related to a high standard of editorial control. Experimental studies relevant to a variety of levels of organization, from the molecular to the multicellular, are formally presented, without dilution by those pointless reports of general discussion that mar the pages of many current symposia.

The book is clearly illustrated and impeccably produced.

M. KINSBOURNE

**CLINICAL NEUROLOGY** By Frank A. Elliott. (Pp. xix + 688; 171 figures. 87s. 6d.) Philadelphia & London: W. B. Saunders Company. 1964.

New textbooks are essential every few years to keep the subject alive. New editions are not enough: they tend inevitably to carry a certain inflexibility with them.

This book is a bold venture for one author. It attempts to cover the whole of neurology, including organic cerebrally conditioned mental disease, much of cerebral tumour material that is now neurosurgical, and a section on diseases of muscle which are by tradition regarded as neurological.

Although there is a welcome section on pain there is unfortunately no real consideration of intractable pain, which the neurologist meets constantly, if only with the patient en route to the psychiatrist. It is a pity also that migraine has been placed here, since this does not allow adequate consideration of the size and our fairly full knowledge of this problem. Sections on treatment take second place to diagnosis and pathogenesis, but where therapy is discussed it is generally up to date.

Much dead wood of 19th-century neurology has been pruned in this book and it is a useful introduction for student and resident. The omission of the usually inadequate sections on psychoneurosis and such specialized procedures as electroencephalograms and electromyograms, apart from the essential mention of them in diagnosis, is to be welcomed. Care has been taken over the references which are practical and up to date.

**THE OCULOMOTOR SYSTEM** Edited by Morris B. Bender. (Pp. xiv + 556; illustrated. 120s.) New York and London: Harper & Row. 1964.

In April 1961, a symposium took place in New York on the subject of the oculomotor system. After a comparatively long interval the contributions now appear in book form. The volume falls into two parts; chapters one to 11 and 21 deal with animal experimentation, and chapters 12 to 20 are concerned with observations on humans. The animal work, largely anatomical, has little relevance to neurological practice. Among the later

chapters there are, however, some contributions of outstanding neurological interest.

Jung and Kornhuber present results of electro-nystagmography on the staggering number of 13,000 patients. They are able to illuminate the classification of the nystagmus and make out a strong case for their method as an adjunct to neurological diagnosis. Hallpike reports an electronystagmographic study of the effort of optic fixation on the directional preponderance of vestibular nystagmus in unilateral cerebral disease and neatly resolves apparent contradictions between his results and those of the German workers. A general review of the effect of brain lesions on eye movements is given by Cogan. The book is well worth looking at for these three articles alone, but the reader will also find more of interest on subjects such as binocular fusion, position sense of the eyes, the stabilized retinal image, and the relationship of the E.E.G. to eye movements during waking and sleep.

M. KINSBOURNE

**APHASIA IN ADULTS** *Diagnosis, Prognosis and Treatment* By H. Schuell, J. J. Jenkins, and E. Jimenez-Pabon. (Pp. 428; illustrated. 90s.) London: Harper & Row. 1964.

Students of aphasia should not be distracted by the subtitle of this book which suggests an over-emphasis on therapy. The main and important contribution is provided by the close association of a speech pathologist, an experimental psychologist, and a clinical neurologist who are obviously intensely absorbed in the mechanisms concerned with speech in both health and disease.

The authors see five major trends in research in aphasia. First, the further study of aphasic responses; second, exploration of neurophysiological concomitants; third, the measurement and analysis of the free speech of aphasics; fourth, a study of aphasic language in terms of modern structural linguistics; and finally in the direction of statistical and mathematical treatment of data obtained from objective tests and free speech situations.

These aims provide the background for the observations and discussions reported here and they will be widely read with interest and advantage.

W. RITCHIE RUSSELL

**HORIZONS IN NEUROLOGICAL EDUCATION AND RESEARCH.** Under the sponsorship of Barrow Neurological Institute. (Pp. xii + 203; 70 figures. \$10.00.) Springfield, Illinois: Charles C. Thomas. 1965.

This is a useful small book in emphasizing the wider horizons of the neurological sciences. Some of the contributors derive a good deal from Harvey Cushing, who derived much from Halsted who, in turn, was indebted to Billoth and thus ultimately to the Wissenschaft movement in 19th-century Europe. The movement received its impetus, despite its name, as much from France as from Germany. It is entirely appropriate that a work concerned with the horizons of neurological education should have this background. It will be of occasional value and interest to the student of neurological science and biography.