Book reviews

AN ILLUSTRATED HISTORY OF BRAIN FUNCTION By Edwin Clarke and Kenneth Dewhurst. (Pp. 154; illustrated; £5.50.) Sandford Publications: Oxford. 1972.

This beautiful book is a work of scholarship on a subject of dominant interest to all readers of this *Journal*. The annotations are brief but adequate to guide the reader through a pictorial survey of the evolution of concepts about the localization of brain function, from the earliest known illustrations of the brain to modern photographic methods of representation. One may doubt the necessity for an artist to provide a faithful replica of the brain when this served no obviously useful purpose. A modern textbook would not be illustrated with Renzo Vespignani lithographs.

The reproductions are extraordinarily clear (there is no acknowledgement of retouching) with the surprising exception of one modern photograph of the brain (Fig. 147). Radiographs are not ignored and the closing plates (radioactive isotope brain scans) are described in the last sentence as 'the most recent method of outlining the tissue of the brain'. After 23 centuries of slow development of the accurate delineation of the brain, it is rough on the authors that computerized transverse axial tomography should have appeared while their book was being published. But it is for the historical aspects that the book will be valued. It was, therefore, probably not a good idea to change the format completely for the final chapter on modern aspects of cortical localization. Though an accurate and interesting account of the impact of modern psychology on cortical localization, the chapter is so out of keeping with its predecessors as to suggest a return to the labelled boxes of the early localizers. However, the lesson of the whole book is that knowledge of function tends to precede detailed knowledge of anatomy (a hard won knowledge the modern student is in danger of losing). Could the same be true of acupuncture despite an 'anatomy' not dissimilar to that of mediaeval China?

J. A. SIMPSON

RECENT ADVANCES IN PARKINSON'S DISEASE Edited by Fletcher H. McDowell and Charles H. Markham. (Pp. 245; illustrated; price not stated.) Blackwell: Oxford. 1973.

The editors have gathered a distinguished team to

record the recent spectacular advances in Parkinson's disease. Medawar has aptly described successful research as 'the art of the soluble' and it is because of advances in some basic sciences that new insight into the pathology and treatment of this disease complex is possible. Little new information is available from the clinical field. For instance, the nosological position of arteriosclerotic Parkinsonism is still uncertain. Many workers feel impelled to deny its existence while others see no reason to reject a syndrome containing all or most of the elements of Parkinsonism resulting from ischaemic lesions of the basal ganglia merely because these lesions are not confined to a territory involved by other types of pathology.

Carlsson gives a brief but sufficient account of central monoamine neurotransmission and the pharmacological observations leading up to the introduction of levodopa, and Hornykiewicz then expands the subject with particular reference to dopamine and acetylcholine and the concept of a balance between these transmitters. The possibility that other chemical mediators are involved is stressed and this subject is dealt with in detail by McLennan. Poirer then gives an excellent account of the development of animal models for studies in Parkinson's disease which undoubtedly illuminate the tremor, and tone disturbances. But the recent experience of stereotaxic surgery has made it clear that akinesia is the most crippling part of the Parkinsonism syndrome and it is in this aspect that animal models are least satisfactory. It is, therefore, surprising that the book does not include human electrophysiological studies of voluntary movement. Forno and Alvard review the pathology of the disease, stressing Lewy body degeneration and Alzheimer neurofibrillary degeneration and their correlation with severity of neurone loss in the substantia nigra. They conclude that there are probably two types of idiopathic (? genetic and metabolic) Parkinsonism as well as the postencephalitic type. They also accept a number of unclassified cases in which the lesions appear to be 'extranigral'. Denny-Brown's views on the 'état criblé' are mentioned but the reviewers favour those authors who consider that the globus pallidus is normal. There is an interesting review of degenerative changes in the normal ageing brain.

The editors, with associates, discuss the diagnosis

of the syndrome of Parkinsonism and the clinical use of levodopa and Barbeau and his colleagues describe adverse clinical side-effects of this therapy (including a warning about the danger of levodopa in patients suffering from closed-angle glaucoma). Early experience of the combination of levodopa with a peripheral DOPA decarboxylase inhibitor is summarized. These chapters are good, but they leave the reader curious about the well-recognized oscillation in performance of patients who fail to respond to levodopa.

This book continues the tradition of excellence rapidly established by the *Contemporary Neurology Series* of which it is volume 8.

J. A. SIMPSON

EPIDEMIOLOGICAL PSYCHIATRY By B. Cooper and H. G. Morgan. (Pp. 211; \$12.50.) Thomas: Springfield, Ill. 1973.

This volume appears, rather curiously, in an American series entitled *Lectures in Living Chemistry*, whose editor claims, in his foreword, that it is 'charged with the *nisus élan* (sic) of chemical wisdom, supreme in choice of international authors, optimal in standards of chemical scholarship, provocative in imagination for experimental research, comprehensive in discussion of scientific medicine, and authoritative in chemical perspective of human disorders'. The reader should not, however, be misled by this egregiously misleading introduction. Instead, he should note that the joint authors, in their own brief introduction give a clear indication of what they intend to do and then proceed to do it. Their aim has been to present, for the benefit of medical and perhaps especially psychiatrist readers, a concise account of the development of epidemiology and of its special techniques of inquiry. These chapters are followed by three more, discussing the application of psychiatric epidemiology to the planning of mental health services, to the fuller understanding of clinical conditions and to the search for causes. The authors disclaim any attempt to cover the field comprehensively; in particular, they have refrained from reviewing the whole body of research on the epidemiology of particular conditions, such as schizophrenia or manic-depressive psychosis: nevertheless, they have in fact drawn most comprehensively on research published in Europe and America, as well as in the United Kingdom, as can be seen by scanning the 488 items of their bibliography. Their final chapter, entitled 'The impact of modern techniques' can be read with profit by every clinician, because it describes attempts to improve the reliability of psychiatric diagnosis, attempts which have had the useful 'spin-

off' of throwing new light on the processes by which clinicians reach their diagnoses, and of revealing ways in which diagnostic judgements can become involuntarily biased. Later in this chapter four pages are devoted to the use of biochemical tests in screening for mental illness. While recognizing their importance in certain forms of subnormality and in some toxic and infective psychoses, the authors acknowledge that there is a dearth of established biochemical correlates of most mental disorders. The chapter ends with references to the use of computers in data analysis, to multivariate analysis, and to mathematical models of disease, all of which are perhaps too brief to be very enlightening. In summary, this is a well-documented and clearly presented introductory textbook in its field which can be recommended to every psychiatrist who wants to know what epidemiological psychiatry is all about—and perhaps especially to every trainee aspiring to membership of the Royal College of Psychiatrists.

G. M. CARSTAIRS

BOOKS RECEIVED

- LESBIANISM: A STUDY OF FEMALE HOMOSEXUALITY** D. H. Rosen. (Pp. 123; illustrated; \$7.95.) Thomas: Springfield, Ill. 1974.
- NOT MADE OF WOOD** By Jan Foudraine. (Pp. 47; £5.00.) Meuthen: London. 1973.
- PROGRESS IN NEUROBIOLOGY VOL. 1** Edited by G. A. Kerut and J. W. Phillis. (Pp. 339; illustrated; £10.) Pergamon: Oxford. 1973.
- PROGRESS IN NEUROBIOLOGY VOL. 2** Edited by G. A. Kerut and J. W. Phillis. (Pp. 117; illustrated price not stated.) Pergamon Press: Oxford. 1973.
- PROGRESS IN EXPERIMENTAL TUMOR RESEARCH VOL. 1** Series editor F. Honburer. (Pp. 455; illustrated £15.40.) Karger: Basel. 1972.
- MEDICAL PRIMATOLOGY 1970** Edited by E. I. Goldsmith and J. Moor-Jankowski. (Pp. 997; illustrated; price not stated.) Karger: Basel. 1971.
- DISEASES OF THE NERVOUS SYSTEM** By W. B. Matthews and H. Miller. (Pp. 354; illustrated £3.75.) Blackwell: Oxford. 1972.
- ACTUALITÉS DE THÉRAPEUTIQUE PSYCHIATRIQUE** By P. A. Lambert. (Pp. 286; illustrated; 80F.) Masson: Paris. 1972.
- PSYCHIATRIE** By W. Schultz and R. Tölle. (Pp. 367; \$8.60.) Springer: Berlin. 1971.
- BRAIN UNIT ACTIVITY DURING BEHAVIOR** Edited by M. Ian Phillips. (Pp. 360; illustrated; \$15.75.) Thomas: Springfield. 1973.
- CISTENOGRAPHY AND HYDROCEPHALUS** Edited by J. C. Harbert. (Pp. 558; illustrated; \$44.50.) Thomas: Springfield, Ill. 1972.