BOOK REVIEWS


In the winter of 1959-60 Dr. Garland arranged at Leeds a series of lectures on various aspects of academic and clinical neurology and this book contains the 20 lectures. Apart from Dr. van Bogart, the authors are all from the United Kingdom. The lectures are in general reviews of subjects in which the author has shown especial interest or in which he has done original research and they cover a wide range of topics. They are mostly of high quality and will be of interest to workers in all branches of neurology. It is probably invidious to single out one chapter for comment but Dr. Henry Miller’s speculative article on leucoencephalitis is an outstanding contribution to thought on this controversial subject.

J. W. ALDREN TURNER


This book is in the best tradition of British neurological textbooks. The clinical descriptions are clear and the accounts of the anatomy, physiology, and biochemistry of the nervous system are well integrated with clinical phenomena. It is primarily written for senior students and general practitioners and it should be of considerable value to them but possibly the author has mentioned very briefly too many of the rarities of clinical neurology. His accounts of special investigations and the indications for them are good. In a short neurological textbook it is debatable whether a 14-page chapter on ‘Disorders of the Mind’ is worth including. It is reasonable to discuss the mental disturbances occurring in organic neurological disease but less than a page on mental deficiency and a page on schizophrenia can be of little value. The production of the book is good and the price reasonable, partly, no doubt, because the only illustrations are line diagrams.

J. W. ALDREN TURNER


The second edition of this book will be welcome to clinical neurologists. It provides a useful anatomical background to diagnostic problems. Subjects with problems shared between anatomy and physiology such as the reticular formation and the limbic system are adequately considered. Paragraphs on the functional significance of the anatomical facts are also a useful addition to the text. A large number of figures illustrating from actual sections the detailed structures and connexions at varying levels of the brain are included, many of these new since the last edition. The references are plentiful and in no way narrowly limited to anatomy. The book can be recommended. Its only disadvantage is its price.


The publication of these three monographs illustrates the renewed interest being taken in the angioarchitecture of the central nervous system. Each one reports extensive and detailed observations but each also has some extra contributions or observations of its own. All should be read by those who appreciate the great importance of the subject.


This book contains a great deal of useful information but the arrangement of the chapters is rather surprising. Neurosurgery comes first, followed by anatomy, vascular supply and physiology of the spinal cord, and then chapters on neuroradiology and genitourinary surgery. These last two sections are particularly authoritative. The book also includes sections on histopathology, rehabilitation of patients, and some discussion of the possibilities of regeneration of the spinal cord. Eleven contributors are concerned and the result is a useful, well-produced work of reference.


This is a first-class publication and a great credit to the sponsors, the American Physiological Society. The present volume contains chapters 59 to 81, and is concerned with modern knowledge of the higher cerebral functions such as learning, motivation, memory, consciousness, thinking, and speech: several chapters are also devoted to the chemical aspects of neuronal activity. Most of the contributors are well-known experts, so that this volume will be highly prized by those who are interested in brain mechanisms.


This monograph in the series of American lectures on
living chemistry aims at providing a brief survey of the underlying biochemical processes and metabolic reactions occurring in the brain both in health and in a number of diseased conditions. It is intended for both students of biochemistry and of medicine and for physicians. A monograph of this size clearly cannot be planned or written as a textbook of neurochemistry. Neither is it to be regarded as an introduction to the subject for those who have had only a meagre biochemistry training. But as a compilation in a single small volume of a very large number of the biochemical findings that have recently appeared, and are now appearing in an unmanageably large number of different journals, the authors are to be congratulated on the production of a book that is both brief and yet seems to provide a most useful background to current biochemical thinking in the field of nervous and mental disease, as well as a bibliography of 524 well-chosen references to original papers and reviews.

The energy metabolism of the brain is dealt with clearly and logically, and it is surprising how much the authors have packed into this chapter of 36 pages. The chapters on amine metabolism and on lipid metabolism are also useful summaries of rapidly developing fields. It is a pity perhaps that the organic diseases of the nervous system do not receive a fuller treatment, but despite this the authors have provided us with a monograph that is both informative and stimulating to any who are interested in the biochemical approach to nervous disorders.


This book approaches rather than arrives at the nature of sleep. However, the journey reveals much of interest. Naturally the activity of the fashionable reticular formation in sleep and arousal is discussed. The picture that emerges is of a stream of impulses passing to the cortex both in the classical spinocortical tracts and also in the brain-stem-cortical pathways which may themselves both receive and send collaterals to the other. That reticular formation stimulation can have both activating and inhibiting effects on the cortex seems proven, and the electrical effects are similar to those accompanying arousal and sleep. How and how far such mechanisms operate in natural sleep still remains to some extent speculative. Some evidence, presented rather too dogmatically perhaps, from experimental animals with extensive lesions at various levels of cerebrum and brainstem suggests that there may be separate reticular formation and cortical sleep systems.

The development of techniques for single neurone recordings has been applied to sleep. There is some increased variance of spontaneous response on waking. These studies offer wide possibilities for analysing such group neuronal activities as the alpha rhythm and other elements of the electroencephalogram. Here K complexes and alpha activity seem to be the hallmarks of arousal and alerting, and it is interesting that monotonous repetitive stimuli will after a time cease to call out alpha activity and the electrical picture of drowsiness will emerge. This has obvious importance for the performance of routine repetitive tasks.

On the more holistic side, the layman's observation is confirmed that significant stimuli can readily break through sleep, and it would seem that quite a range of perceptual differentiation is possible.

Dreaming also can be more effectively studied since it appears to be accompanied by recognizable E.E.G. changes.

The concept of sleep as wholly negative and inhibitory, a simple absence of activity, is being revised. It appears as a complex physiological process, possibly an integration of numerous processes.


This is a careful study of 100 necropsies in cases diagnosed clinically as cerebral ischaemia. It is a valuable addition to our understanding of cerebrovascular disease. Cerebral infarction is shown to be clearly associated with stenosis (atheroma and thrombosis) of arteries feeding the brain. It is of special interest that in many cases the site of such disease was the carotid sinus.

Evidence is presented that systemic factors such as blood pressure changes consequent on coronary occlusion or 'shock' may also play a part in cerebral ischaemia.

Some excellent diagrams showing the site of vascular stenosis and the site of cerebral infarction are included. Stenosis is often widespread in both vertebral and carotid circulations which make correction difficult; but there is some tendency for stenosis in the vertebral to result in posterior cerebral lesions and in the carotid to produce anterior lesions.

The authors' views on vasospasm are cautious as befits a morbid anatomical study. However, they suggest that this may occur when triggered by trauma such as the lodgement of an embolus. This monograph is a useful addition to fact and a brake on speculation.


The range of normal in the human electroencephalogram is still being established. The boundary between normal and abnormal is especially ill-defined in the infant. Dr. Fois' monograph is therefore especially welcome in English translation. Dr. Hughes' short volume also fulfils a need for the clinician, since English works on the electroencephalogram have tended to be lengthy and burdened with electrical theory. In this book he outlines the main clinical use of the electroencephalogram under the headings of epilepsy, local brain lesion, biochemical and psychiatric abnormalities. The danger of this approach is to suggest that disease entities have specific electroencephalographic patterns, whereas in fact the correlation
is more at physiological level. The author is aware of this difficulty and has produced a book which will be useful to clinicians not especially concerned with electroencephalography.

**British Medical Bulletin:** HUMAN GENETICS, Vol. 17, No. 3. (20s.) Published by the Medical Department, The British Council, London, September, 1961. This issue is concerned with a subject of rapidly growing importance. Papers on genetics, and particularly chromosome abnormalities, are appearing increasingly in general medical journals and they are often difficult for the average clinician to follow. This issue may help some to gain more from reading such contributions to genetical subjects. However, some simpler and more introductory paper might have included with benefit.

L. S. Penrose on mongolism and C. E. Ford on the more theoretical aspects of human cytogenetics will be welcomed by many readers. Fraser Roberts on multifactorial inheritance also introduces his readers to a problem of genetics currently controversial in clinical medicine. However, to get the best out of these papers, most clinicians would do well first to read Penrose’s ‘Outline of Human Genetics’ or Fraser Robert’s ‘Introduction to Medical Genetics’, both relatively short books.

**DIE CHIRURGIE DES NERVUS FACIALIS.** By Adolf Miehlke. Introduction by Prof. Paul Falk. (Pp. xii + 208; 45 colour and 53 text figures. D.M. 98.--) Munich and Berlin: Urban & Schwarzenberg. 1960. This book dzzls with all aspects of the surgery, and reviews the world literature of the affections of the facial nerve. Much of the work described is original but the author has made himself familiar with the work in other countries.

Bell’s palsy does not occupy a large part of the book. It is referred to as ischaemic facial palsy, thus assuming the ischaemic aetiology. On the subject of decompression of the nerve for this condition, world opinions are quoted, but no firm advice is given by the author. The sections on traumatic paralysis, dissection of the nerve in parotid tumour, on the re-establishment of nerve function, and on facial myoclonus are well documented and illustrated.

The English reader will find some colloquial German terms difficult, such as _Warzenfortsatz, Bogengang, Amboss_. This is certainly a beautifully produced book, and as Professor Falk says in the introduction, fills a gap in the German literature.

**BOOKS RECEIVED**

(Review in a later issue is not precluded by notice here of books recently received.)


**SPANISH-PORTUGUESE SOCIETY OF NEUROSURGERY**

The fourteenth meeting of the Spanish-Portuguese Society of Neurosurgery will take place in Oporto (Portugal) from 4 to 6 May, 1962. Team work in neurosurgery will be the theme. Members of other societies will be welcome and may present communications on the main topic or other subjects. Information from Dr. Corino de Andrade (Servicio de Neurologia, Hospital San Antonio, Oporto) or Dr. S. Obrador (Eduardo Dato 23, Madrid-10).

**INTERNATIONAL SOCIETY FOR RESEARCH IN STEREONECEPHALOTOMY**

An international symposium on stereonecephalotomy (stereotaxic brain surgery) was held at Temple University Medical Center, Philadelphia, on 11 and 12 October, 1961. Nearly 500 neurosurgeons and brain specialists attended, including speakers, exhibitors and guests from Argentina, Canada, England, France, Germany, Holland, India, Japan, Mexico, Peru, Scotland, and Switzerland.

The International Society for Research in Stereonecephalotomy has been founded and the following officers have been elected:

President: E. A. Spiegel (Philadelphia, Penna.)
Vice-president: T. Riechert (Freiburg, Germany)
Secretary-treasurer: H. T. Wycis (Philadelphia, Penna.).

The transactions of the society will be published in _Confinia Neurologica_ (Publisher: S. Karger, Basel, Switzerland). Further information may be obtained from Dr. H. T. Wycis, 3401 N. Broad Street, Philadelphia 40, Penna.)