

which the negative sites are occupied by Na and Ca ions. A detailed thermodynamic analysis shows that this model of the membrane can account for the electrical events of the equivalent circuit theory but, in addition, offers reasonable explanations for the abolition of the action potential by chemical and thermal means. Hodgkin (Sherrington lecture, 1961) was unable to account for the delayed cooling which followed the initial heat of the action potential, but this is predicted by the Tasaki-Teorell model.

The phenomena of the Hodgkin-Huxley membrane are continuous or kinetic; the Tasaki-Teorell model is discontinuous with two stable states, changing abruptly from resting to depolarized state caused by a 'phase transition' of the membrane macromolecules.

This exciting book will undoubtedly be valuable for the 'students and investigators' for whom it is written. The general reader is constantly aware of his lack of knowledge of thermodynamics and mathematics but careful reading makes it clear that a new and powerful weapon has been forged for the study of nerve excitation.

J. A. SIMPSON

AN ATLAS OF CLINICAL NEUROLOGY By John D. Spillane. (Pp. viii + 376; 477 figures. 70s.) Oxford University Press: London. 1968.

The author of this fine volume has been encouraged to present some of his extensive collection of clinical photographs for the benefit of those who aspire to be clinical neurologists. The result will certainly be helpful to many, but the reviewer would have preferred an exposition of the whole field of clinical diagnosis which is also illustrated by these photographs on perhaps a smaller scale.

Unfortunately, a picture rarely conveys the vital 'dimension' of movement, and, for this reason, it might seem preferable nowadays to prepare carefully edited films which illustrate all aspects of diagnosis and clinical examination. It may be hoped that Dr. Spillane's pioneer work in this volume will lead to a fuller study of the problems of educating young neurologists. The senior physician may often hope to transfer his acquired knowledge to the next generation in some useful form, but very few succeed in doing this by writing a book, or indeed by any method other than by demonstration in the clinic.

W. RITCHIE RUSSELL

INTRODUCTION TO THE ANATOMY AND PHYSIOLOGY OF THE NERVOUS SYSTEM By D. Bowsher. (Pp. viii + 180; 55 figures. 15s.) Blackwell Scientific Publications: Oxford and Edinburgh. 1967.

This is a useful little book to revise the anatomy of the nervous system, rather than to introduce it to those without previous knowledge. The text is clear and the diagrams are helpful. The outflow from the pallidum is not adequately described. The section on physiology is confined to the peripheral control of the lower motor neurone, and is oversimplified. The book is recommended

as a refresher course in neuroanatomy but not as an introduction to neurophysiology.

TRIARYL-PHOSPHATE POISONING IN MOROCCO 1959.

Edited by A. V. Albertini, D. Gross, and W. M. Zinn. (Pp. viii + 180; 69 figures, 36 tables, 1 coloured map. DM 20.) Georg Thieme: Stuttgart. 1967.

In 1959 in Morocco many thousand cases of paralysis developed in the course of a few months. Synthetic jet engine oil, which had become obsolete, was being sold to the poor as cooking oil, and this oil, which was designed to withstand the great temperatures of jet engines, contained triaryl-phosphate. This and allied compounds were the cause of the paralysis. The present book describes the experiences of the Red Cross team which assisted the Moroccan authorities in the major task of rehabilitation. They confirm previous findings that the first neurological symptoms are paraesthesiae in the lower limbs, and that as these go off in a few days, distal paralysis occurs in the lower limbs and may quickly be followed by distal paralysis in the upper limbs. The lesion is in the peripheral nerves, but the more severely affected cases may also have central nervous lesions. Electromyography, histopathology and, in two cases, necropsy examinations are described. It is disappointing, however, that the circumstances did not allow nerve conduction studies, and that the necropsy studies are very incomplete. About 72% of the patients were surveyed, and of those only 3% were in hospital two years later, though a further 11% had some disability, almost exclusively in the lower limbs. There are many authors and the standard of contribution naturally varies. This reviewer felt that the clinical sections were more in the idiom of physical medicine than of neurology. The printing is good and the illustrations clear, but the production was marred in the copy sent for review by the first 32 pages appearing in apparently random order.

J. M. K. SPALDING

NEUROLOGISCHE UNTERSUCHUNG UND DIAGNOSTIK IM KINDESALTER By Dagobert Müller. (Pp. xiii + 298, 61 figures, 24 tables, DM 80.) Springer: Vienna. 1968.

This is a remarkable volume which presents a vast amount of information regarding the diagnosis and investigation of neurological disorders in children. In parts the presentation is over-dogmatic and some of the statements regarding cerebral localization in Chapter II are not in accord with present day views.

SENSORY INHIBITION By Georg von Békésy. (Pp. x + 265; 188 figures. 81s.) Princeton University Press: New Jersey. 1967. Oxford University Press: London. 1968.

Dr. von Békésy's ideas are always original and stimulating. In these published lectures he provides a brilliant exposition concerning the dominating rôle of inhibition in relation to all types of perception. These will be avidly studied by all interested in the problems of perception.