Breuer reflex to be unimportant in man except possibly in exercise, while in pathological states impulses from epithelial irritant receptors in the intrapulmonary airways and from juxtapulmonary capillary receptors may dominate in producing abnormal respiratory patterns. Investigations into the central control of breathing, facilitated by microelectrode recording of activity in individual neurones, reveal that, in addition to neurones firing with inspiration or expiration, there are neurones whose firing is more related to the change of respiratory phase and these may be significant in determining respiratory rhythm. The studies on normal and abnormal respiratory sensation stress that this results from the interaction of several afferent inputs of which the vagus is one, others including afferents from the chest wall and, of apparently greater importance, afferents in the phrenic nerve. This interaction is emphasized by the finding that vagotomy benefits only a proportion of dyspnoeic patients.

Thus both basic research workers and clinicians will find much of interest in this book. Moreover, each should gain greatly from the insight it affords into the ideas of those who approach the problem of breathing from different viewpoints.

N. JOELS

MUSCLE PATHOLOGY Introduction and Atlas By J. Bethlem. (Pp. 132; 78 figures in 32 colour plates; £3.80.) North-Holland Publishing: Amsterdam. 1970. In the last 20 years there has been an outstanding growth in knowledge about diseases of muscle. As the main flood of new descriptive work subsides, leaving the hard task of understanding, the time has come for the illustrative atlas and brief review. A number have come to our attention. This one, from the Laboratory for Neuropathology, Academic Hospital, Amsterdam, is by far the best. The illustrations, all in colour, are so well selected and beautifully reproduced that one has the immediate sensation of direct confrontation with the microscope. The 61 pages of text are a masterly condensation of the subject. The selected references are well chosen.

Colour printing is expensive but entirely justified in this small volume. The general pathologist or neurologist studying this book will rapidly learn the essentials of muscle pathology.

J. A. SIMPSON

CLINICAL NEUROSURGERY Edited by F. John. (Pp. ix + 370; illustrated; £7.) Butterworths: London. 1970.

This book of review essays should be considered against the background of the communications crisis in medicine, which is causing increasing concern. The pace of progress in medical technology has made it almost impossible to produce a comprehensive textbook that is not seriously out of date in parts by the time it is published. Formation of interdisciplinary teams leads to new work being dispersed more and more widely in specialist journals beyond the regular reading of any one clinical discipline. Conference proceedings abound, but they have not been refined by the editorial eye which acts as a watchdog for the journals which enjoy sufficient reputation to

allow them to reject material below a certain standard, and to demand modification of what they do accept. In this context the review article is assuming increasing importance and this book consists of 13 such chapters ranging over a variety of topics.

That on cerebrovascular disease (by McCabe) is an outstanding contribution to one of the most controversial fields in contemporary neurosurgery and with its 150 references it should become a standard source for a few years. Head injuries, intracranial tumours and infections, and paediatric neurosurgery are competently reviewed in varying styles. The next few chapters deal with what some neurosurgeons might still regard as minority interests but they promise to claim more attention as neurosurgical services in general become less austere and papilloedema, coma, or subarachnoid haemorrhage are no longer the only respectable reasons for admission to a neurosurgical unit. They deal with stereotaxis, surgery for pain, epilepsy, and for mental disease. The first chapter in the book deals with neuroradiology and is the least successful. It was probably a mistake to try to cover the field of neuroradiology in a chapter on its own, rather than in the context of the appropriate clinical problem. Moreover, this chapter includes too many brief and didactic statements which reflect personal views rather than current thinking in general. It is also dated in several of its comments.

There are limits to how much an editor can impose his wishes in a book of invited contributions. It might have been helpful to have indicated to authors how fully references were to be given (they vary from 5 to 150), and to insist on a uniform style (only some chapters give titles). Only an editor, too, might have pointed out how uninformative are whole brain sections in black and white as a means of conveying pathology—elsewhere in this book there are good examples of the value of line diagrams, which tend to be much more helpful.

BRYAN JENNETT

ELECTRICAL SIGNS OF NERVOUS ACTIVITY By Joseph Erlanger and Herbert S. Gasser. 2nd edn. (Pp. xi + 242; 113 figures; £3.60.) University of Pennsylvania Press: Philadelphia. 1968.

Early exploitation of the cathode ray oscillograph by Erlanger and Gasser laid the foundation to all our present knowledge of the electrophysiology of the peripheral nervous system. The 1922-1941 volumes of the *American Journal of Physiology* must be among the most frequently consulted in the library of a neurophysiological department and all senior workers treasured the synoptic review provided by the Johnson Foundation for Medical Physics of the University of Pennsylvania in 1937. Though much has happened since then and some of the work has required amendment, the present generation is indebted to David P. C. Lloyd for making this landmark in neurophysiology available again. This second edition has complete bibliographies of the works of both Erlanger and Gasser.

J. A. SIMPSON

ASSESSMENT AND TEACHING OF DYSLEXIC CHILDREN Lectures given at a training course organized by the ICAA Word Blind Centre for Dyslexic Children.