spread across to adjacent bundles. The potential developed in the bundle controls the amount of smooth muscle contraction, and itself depends both on the number of nerves which are stimulated and on the frequency of impulses in those nerves. Transmitter action is probably terminated by diffusion of transmitters away from receptor sites, not by breakdown at the site as with somatic innervation. There may be several types of neuromuscular junction which still need further description by electron microscopy, as they are too small to be examined by light microscope. This book will prove valuable to those who wish to know the present position in this expanding subject.

J. M. K. SPALDING

CORE TEXT OF NEUROANATOMY By Malcolm B. Carpenter. (Pp. 269; illustrated; £4.25.) Churchill Livingstone: Edinburgh. 1972.

This book represents a welcome new trend. Textbooks intended for undergraduates have a problem of middle-age spread compounded by increasing numbers of 'essentials' for student digestion. Neurologists are well aware of the results of an expanding lesion in a non-expanding container. Headaches are too easily ignored until thinking stops and death is perilously near. Dehydrating the lecture-demonstration course is only palliative if textbooks grow to dimensions which make it impossible to read them through. When a book has to be used as a reference book it is no longer a textbook.

Professor Carpenter has produced a new book based on his well-known *Human Neuroanatomy* which is a welcome move to reduce the subject to essentials, and to reduce duplications (though Figures 8-5 and 9-4 are identical). There is an error of colour coding in Figure 3-25. Many teachers would still question whether 249 pages on neuroanatomy is appropriate but too much condensation makes an indigestible diet. This book seems about right. Illustrations (some borrowed from Mettler's *Neuroanatomy*) are well chosen.

J. A. SIMPSON

THE DIAGNOSIS OF STUPOR AND COMA Edited by F. Plum and J. B. Posner. (Pp. 286; illustrated; £4.75.) Blackwell: Oxford. 1972.

The contemporary social 'epidemic' of road accidents and self-poisoning makes the diagnosis of stupor and coma of vital relevance to doctors in accident and emergency departments and in acute receiving wards. Within our hospitals advances in cardiothoracic surgery, in prolongation of life in patients with chronic renal and hepatic failure, and

the resuscitation of victims of cardiorespiratory arrests makes this a matter of concern to many doctors outside the restricted field of neurosurgery and neurology. Indeed in Britain this problem lies largely outside the scope of traditional neurology, but when this book was first published in 1966 it marked the beginning of a new style of neurology which is steadily spreading in North America. This is concerned with the active management of the acutely ill in general hospitals. While diagnosis for the traditional neurologist is still more often an intellectual exercise than a prelude to action, the management of the patient in coma depends critically on an accurate assessment both of the primary cause and of the secondary processes which have been initiated. That is what this book is about. Because it avoids entanglement with therapy its message is clear and concise and it will not date. The stress is on bedside examination and it is a relief to open a book about clinical neurology which does not include a single radiograph or brain scan. Signs which are emphasized are those which became largely known from the first edition, namely those relating to brain-stem dysfunction (patterns of motor response, of respiration, and of ocular movements). The first four chapters deal with physiopathology of signs, with focal supratentorial and subtentorial lesions, with metabolic disease causing coma; the last two are new to this edition, concerned with psychogenic unresponsiveness and with the prognosis of coma.

This book is short, but within its terms of reference encyclopaedic; there are over 600 references which are right up to date. It is clear, yet scholarly rather than didactic. The ambiguities and difficulties implicit in the subject are never avoided and the text is enlivened by some 40 case histories, tersely told, well-dispersed through the book, and identified by smaller type. Many modern medical texts are irrelevantly over-illustrated, but this book contains only 24 figures, mostly line drawings or pathological specimens, and all of them helpful and necessary. The first edition began the *Contemporary Neurology* series (edited by Fred Plum and Fletcher McDowall) and the second edition is the tenth of these outstanding texts. It is a model of how a book should be written and proposes a pattern for the practice of neurology in our time. In short, this book is both a classic and a milestone.

BRYAN JENNETT

REVIEW OF ANATOMIC FOUNDATION OF NEURO-RADIOLOGY OF THE BRAIN 2nd edn By McClure Wilson. (Pp. 390; illustrated; £7.50.) Churchill Livingstone: Edinburgh. 1972.

The first part of this book describes the embryology of the brain and the main features of the gross