

Two sections were devoted to biochemistry and immunology; the principal subjects here were the structure and behaviour of the myelin protein and the electrophoretic analysis of the cerebrospinal fluid protein. In the section on epidemiology the contributors dealt with the incidence of multiple sclerosis among immigrants from high to low risk areas in the world.

These are subjects which are of the greatest interest to neurologists and their presentation in a form which can be digested at leisure is especially welcome.

In the style of such symposia, the discussion after each paper is reprinted. What may have been enjoyable and instructive at the time does not reproduce well in print and some of the participants appear to have been distinctly petulant. A brief summary or comment by the session chairmen might have been more effective. The editors and publishers must be congratulated on producing this account of an interesting meeting so promptly.

IVAN T. DRAPER

MUSCLES—TESTING AND FUNCTION. 2nd ed. By H. O. Kendall, P. Florence Kendall, and Gladys E. Wadsworth. (Pp. 284; illustrated; £9.00.) Churchill Livingstone: Edinburgh. 1972.

No extensive review of this type of book is required, but it is a pleasure to draw attention to an unusually good book on the testing of muscle function. Photographs of human muscles in action are excellent, well produced, and show what is intended and no more. They are accompanied by unusually lucid drawings and a very adequate though brief text, which includes useful hints on isolating the muscle under test as well as sufficient anatomical information to satisfy all clinical requirements. Many of the manoeuvres were unfamiliar to me and will be particularly valuable in the EMG laboratory. Important errors in testing some muscles are illustrated. Terminology is according to the third edition of *Nomina Anatomica*. The authors make modest claims for the book, but this is one to keep and use long after more pretentious books have been discarded.

J. A. SIMPSON

ANALYSIS OF BIOGENIC AMINES AND THEIR RELATED ENZYMES Edited by David Glick. (Pp. 350; illustrated; £8.25.) Wiley: New York. 1971.

This is a supplement in the series *Methods of Biochemical Analysis*. Since its biogenic amines include acetylcholine the title may be, if not inaccurate, at least incomplete but the likelihood of misunderstanding is small, so accustomed have we become to grouping these chemical transmitter substances as a distinct entity. The book deals with the measurement

of catecholamines, acetylcholine, serotonin, and histamine; their synthetic and degradative enzymes and their metabolites. Each chapter is written by a separate author but the imbalance inevitable with such a treatment is of little consequence since the book is not intended to be read in its entirety. This is essentially a 'Methods' book for workers wishing to measure one or other of these substances. For such, this book will be invaluable. It offers a selective, critical, and up-to-date description of the techniques available, an extended description of those used by the author with practical information on the likely sources of difficulty, and how to overcome these. A particularly welcome feature is the extensive bibliography.

In recent years interest in these transmitters has extended far beyond the limits of the neurophysiologist, neuropharmacologist, and biochemist. In medicine generally, and particularly in psychiatry, neurology, and anaesthesia, explanations of disease and of drug action are now possible in terms of these transmitters. For the new recruits this has brought to the field there could be no better introduction than the appropriate chapters of this book.

J. S. GILLESPIE

TREMORS AND TREMOROGENIC AGENTS By R. W. Brimblecombe and R. M. Pinder. (Pp. 196; illustrated; £5.) Scientifica: Bristol. 1972.

In the first third of this monograph the authors, one a neuropharmacologist, the other a medicinal chemist, review the definition, measurement and physiology of tremor. The origins of physiological tremor and tremor due to extrapyramidal and cerebellar disease are discussed, but 'although a large amount of information is now available, it is still not possible to make any categorical statements concerning the precise cause of the tremors'. Although physiological tremor is attributed to oscillation in the stretch-reflex servo-loop, no mention is made of the effects of vision or the introduction of visual delays on this phenomenon. In the remaining two-thirds of the book the authors expand at length on their own field of the pharmacology of substances that produce tremor. They attempt to classify the large number of known tremorogenic substances into those acting on cholinergic brain mechanisms (muscarinic and nicotinic agonists and anticholinesterases) and those acting by altering brain amines (neuroleptics, phenethylamines and indoles). In doing so they follow the presently fashionable concept of Parkinsonism being the result of imbalance between central cholinergic and aminergic function, and include a chapter on the biochemistry of Parkinson's disease. Although using this concept as a framework, the authors do not con-