BOOK REVIEWS


This volume is made up of the collected papers and discussions of a Symposium sponsored by the World Federation of Neurology in 1963. It must have been a most stimulating meeting for the participants, because not only were their numbers kept small (26) but the content of the papers and the discussions showed several interesting trends. The studies of the changes in structure and in function of the brain have recently gained impetus from various causes, more especially since the techniques of the neurophysiologists have been turned loose on human and animal problems not strictly within the narrow province of the 'pure' neurophysiologist. Perhaps this is best exemplified by the chapter by Dominick Purpura on the 'Relationship of seizure susceptibility to morphologic and physiologic properties of normal and abnormal miniature cortex'. This worker's approach to the problem of seizures is broad and catholic so that he can write with equal intimacy of the details of synaptic contacts in electron micrographs, patterns of dendrite branching in Golgi preparations of neurones, and the significance of electrical activity in cortex and hippocampus. This correlative approach to brain development forms the central chapter of the symposium, and approximates as far as is possible to the ideal approach, for each single technical study inevitably leaves the reader with a sense of incompleteness. Grafstein's chapter on the 'Post natal development of the Corpus Callosum in the Cat' shows how the use of electrical methods can demonstrate lack of homogeneity in the myelination of fibres in the corpus callosum, and thereby emphasize problems of morphology and cell relationships that cannot be high-lighted by any other method. The use of the 'spreading depression' phenomenon for studying the development of neuroglial function (Bures, Fifkora, and Mares), and correlation of such findings with assessment of cytoplasmic volume and electrolyte content of neuroglia (Schade) in both normal and anoxic brains, is an exciting approach to elements hitherto only capable of being studied under the microscope, or by crude and indirect chemical methods.

A good part of the book is taken up with electroencephalographic observations on young animals and humans, particularly in relation to seizure activity. The parameters of normality in this field are less clear than one would wish because of the limitations of the technique. Their analysis is important and must go on for practical clinical reasons, but the final interpretations will be dependent on the critical results of the experimentalist working on well-defined experimental systems.

This book is recommended to anyone interested in brain function whether they have personal experience of the techniques or not. It will certainly be of interest to those handling brain-damaged and epileptic children, and it is hoped that in it even the neuropathologist might find instruction.


Any work on paediatric neurology invites comparison with Frank Ford's monumental and highly personal volume on the same subject—a book that transcends its title to furnish an outstanding text of general neurology as well as of paediatric nervous disease.

Dr. Farmer's book is different but entirely admirable. The work of 13 authors, it is nevertheless much shorter than Ford and lacks the revealing clinical vignettes that make the larger volume so readable. The present work is, however, clearly written, elegantly produced, and superbly illustrated. The editor's preface suggests that it is intended for medical students, hospital residents, and practitioners, but it must be doubted whether many British medical students will read and fewer still purchase any volume on paediatric neurology. Nor is the present work sophisticated enough for the professed neurologist. Its use seems to be mainly for the clinical paediatrician, for whom it certainly provides an attractive up-to-date and well-documented guide to a field that is sadly neglected, especially in Britain. Many of the contents of Pediatric Neurology are of course covered by any of the standard neurological texts, but the authors, most of whom hail from the University of North Carolina School of Medicine at Chapel Hill, are both experienced and articulate, and the work abounds in evidence of the close clinical observation which characterizes the best paediatric practice.

If only as a valuable epitome of recent literature and for its treatment of the newer biochemical approaches to neurology this book should be in the library of every