NEURAL ORGANIZATION AND ITS RELEVANCE TO PROSTHETICS Edited by W. S. Fields. (Pp. 390; illustrated; \$17.95.) International Medical Book Corporation: London. 1973.

This volume, which is based on an undated Houston Neurological Symposium, covers a much wider field than its title would suggest, and includes neuromuscular stimulation, alleviation of pain, and the control of the urinary bladder. In spite of the statements in the first paper that 'the future holds no limits—the blind will see, the deaf will hear, the paralysed will walk and use their arms', one is rather depressed by the lack of impressive results. The strong impression which is gained is that most of the hardware described seems to take advantage of only one particular aspect or manifestation of neural arrangement or activity, rather than attempting to match the organization of the neural system. Electromyographic control of prostheses, for example, without the normal afferent is, after more than 25 years, still far from satisfactory and yet, as one of the contributors said, 'we are moving toward more and more complex types of myo-electric control without really solving the problems of multiple types of motor control, which are needed'.

The book is nevertheless a very useful collection of material and does reflect the state of the art, and although the references mostly relate to the individual papers rather than to the general aspects of each section, they would form a good basis for a literature search.

In general, the book is well produced but it is a pity that poor type is sometimes used, even in the preface, that the last 13 lines on page 387 have been transposed to the top of the page, making the panel discussion more difficult to follow, and that little editorial attempt seems to have been made to standardize the units used, with pps and pulses per second, with cps, cycles per second, Hz and Hertz, and with decimals and fractions all appearing. And I am sure Dr Pierre Rabishon (p. 27) spells his name Rabischong.

DAVID C. SIMPSON

THE NEUROLOGY OF GASTROINTESTINAL DISEASE By C. A. Pallis and P. D. Lewis. (Pp. 272; illustrated; £5.50.) Saunders: London. 1974.

This is the third book in a series edited by Professor J. N. Walton which is clearly going to be of greatest value, not only to neurologists, but also to those engaged in other branches of medicine in which neurological problems from time to time crop up. In Dr Pallis's and Dr Lewis's contribution we have a combination of readable text and extensive bibliography—quite an achievement by itself. Starting their account with descriptions of the mechanisms of

absorption and causes of malabsorption, they show how the complexity of these processes is now such that only the specialist can hope to master it, yet their exposition is admirably clear and wisely differentiates theories derived from experiment from facts proven in humans. Moving on then to vitamin deficiencies, this section inevitably deals largely with vitamin B12, perhaps too largely, for B12 has 67 pages and nearly 320 references, while thiamine warrants five pages only. After reading this section one is left without any vivid impression of the results of excessive alcohol intake, for instance, but a determination to avoid a diet of raw carp. The concise and informative chapter on folate deficiency presents the certainties and uncertainties of its influence on the nervous system in a manner of interest to all neurologists, though perhaps some of the older of us might have liked some reference in so comprehensive a book to the problems which beset clinicians dealing with subacute combined degeneration when folic acid first became available.

Of special value, because it is so difficult to find reference to this, is the section on the neurological complications of infective diarrhoeas (and their treatment or prevention) and the relationship between the pancreas and the nervous system. Here again there seems to be a little too much concentration on less-well-known features, for the islet-cell tumours receive only 16 lines of attention while 'pancreatic cholera' and non- β islet-cell tumours occupy three pages. Whipple's disease, which has intrigued so many people, is described in some detail, and this shows the neurological picture to be much more diffuse than some writers had suggested, and emphasizes how hard it is to differentiate from some of the manifestations associated with non-metastatic gastrointestinal neoplasm.

A final very interesting twist to the subject is given by describing disorders of the gastrointestinal tract in various neurological diseases, and here the authors will bring reviewers (such as myself) up short by stating that we may consider the energy expended in the book to be inversely proportional to the prevalence of a given disease, but that we should bear in mind that Chagas disease is the commonest disorder falling within the scope of the book. The justification for this remark shows that they are not writing for a parochial audience but taking a commendably world-wide view, for WHO estimates the disease in question that shows an incidence of over 7 million cases.

It must have been very difficult to decide what to put in, and what to leave out. The authors have overall achieved a good balance and everyone can learn a great deal about dimly remembered associations between the gut and the nervous system. This