pictures which convince. An interesting chapter summarizes the conclusions from experiments with electrical models of the circle of Willis, showing the anticipated redistribution of flow when obstruction is imposed at various sites on the afferent side and when peripheral resistance is likewise varied. There follow a number of chapters reporting work already published on the effect of controlled ventilation on angiography, the effect of angiography on blood flow, and the comparison of angiographically estimated circulation time with blood flow methods, and a heat clearance method. Under 'New Techniques' very specialized methods are described and considered in considerable detail, most of them even today confined to their inventors or their own departments.

There is much of interest in this book, if only in the ingenuity of the gadgetry, and references are fairly generous. Although there are 38 authors from various countries the number of centres represented is much fewer, because a few laboratories each had several representatives at the discussion. None of the editors is a native English speaker and it is hardly surprising that the prose is sometimes a little tortuous and occasionally mystifying.

BRYAN JENNETT

AMPHETAMINES AND RELATED COMPOUNDS An International Symposium. Edited by E. Costa and S. Garattini. (Pp. xiii + 962; illustrated; \$32.00.) North-Holland Publishing Company: Amsterdam. 1970.

The medical profession is intimately associated with the problem of amphetamine abuse, both as the body expected to produce a solution and, less happily, as being at least partly responsible for the present magnitude of the problem. A solution will come only with more information and a better understanding of the sociological and pharmacological basis of the phenomenon of drug dependence. There is, therefore, a need for an authoritative, concise description of the action of the amphetamine group of drugs, the extent to which their various central and peripheral effects can be separated in newly-synthesized drugs, and the dangers of dependence on these new variants. This is not that book. Not that it lacks authority; on the contrary, it suffers from an excess of them. In 58 chapters, 122 contributors, and 960 pages, almost all is said that could be said about amphetamines.

The book is the collected separate papers given at an international symposium held at the Mario Negri Institute, Milan, in 1969. There is little evidence of editing in the interests of uniformity of treatment or balance or elimination of repetition. Though papers are grouped into sections, there is still considerable repetition—for example, structure-activity relationships stray far beyond their opening section, and the interaction with biogenic amines is a recurring theme in every section. To some extent, repetition is both unavoidable and desirable, but in this instance it has resulted in a volume which, regarded as a book, is quite indigestible.

Having made these criticisms, it should in fairness be said that this collection of papers represents an invaluable reference source, essential for anyone working in this field. Many of the individual articles are excellent,

bringing together observations at present scattered in the literature, and combining these with unpublished work. In summary, this is a book for aficionados and libraries, but hardly one which could be recommended for the average medical practitioner in any branch of medicine.

J. S. GILLESPIE

A PHYSIOLOGICAL APPROACH TO CLINICAL NEUROLOGY

By James W. Lance. (Pp. xi + 246; illustrated; £4.20.)

Butterworths: London. 1970.

This small volume has some admirable qualities. It is in the classical tradition of neurology by relating clinical signs to disturbances of normal physiology. This is very successful in the chapters on motor control, which are very well done, incorporating the author's own valuable contributions. The quandary of order of presentation is not solved. To present the physiology in logical order it is necessary to distribute the material on Parkinsonism over three chapters.

Sensory functions are less well covered and the role of the cortex surely requires more space than it is allocated. The physiological approach to neuromuscular transmission and muscle disease is quite inadequate. Many illustrations are of poor quality. These criticisms must be made of a book with this title and cost, but it does have some outstandingly good parts which make it worth buying.

J. A. SIMPSON

BRAIN MECHANISMS AND BEHAVIOUR By J. R. Smythies.

(Pp. vi + 186; illustrated; £2.) Blackwell: Oxford.

1970.

This book is mainly about the limbic 'system' of the brain, and summarizes its anatomy, its electrical activity, and the effects of ablation and stimulation. Dr. Smythies has been thorough and critical in reading the literature of the last decade on these subjects, and has set out his knowledge in an orderly way. I found his book easy to read, accurate where I already knew the subject-matter, and interesting where I did not.

G. S. BRINDLEY

BREATHING: HERING-BREUER CENTENARY SYMPOSIUM A

Ciba Foundation Symposium. Edited by Ruth Porter.

(Pp. 402; £4.) Churchill: London. 1970.

In 1868 Hering and Breuer showed in their paper 'Self-steering of respiration through the vagus nerve' that mechanical changes in the lung can initiate nerve impulses which reflexly modify the pattern of breathing. The centenary of this event provided an appropriate occasion for this symposium reviewing present knowledge of this aspect of respiratory control. Participation in the symposium of both physiologists and clinicians was also appropriate, since Hering was essentially a physiologist, Breuer essentially a physician. Its inter-disciplinary nature is reflected in the main topics, which include the afferent pathways from the lungs and their reflex effects, the origin of the rhythmic respiratory drive, the role of various afferent pathways in respiratory sensation, and the application of these findings to patients with breathlessness.

Vagal block experiments show the classical Hering-