makes plain how much easier artificial respiration is when respiratory failure is due to neuromuscular disease than when it is due to disease of the lungs. The style is simple, almost conversational, and there are ample illustrations which serve to demonstrate graphically problems which may be difficult to describe succinctly in the text. Laplace's law governs the pressure inside a bubble which an alveolus closely resembles, and the surfactant, without which lungs will not expand, affects the working of this law in the lungs. The relationship can be difficult to explain, but the author achieves it well with a diagram of two hands squeezing two balloons. He has a similar facility for illustrating other problems. References for each chapter are limited but include most of the basic work. The book can be recommended as a valuable introduction to the subject.

J. M. K. SPALDING

NEURAL REGULATION OF FOOD AND WATER INTAKE *Annals of the New York Academy of Sciences* (1969), 157, 531-1216. Edited by Marc Krauss.

This volume is the result of a conference held by the New York Academy of Sciences in February 1967. There was therefore a delay of over two years in its production, which means that the volume starts by being somewhat out-of-date. The *Annals of the New York Academy of Sciences* have become recognized as important volumes as they bring together original contributions from very many authors in the field of the conference they report: this volume is no exception. It is a valuable collection of nearly 40 articles from workers in the field of animal neurophysiology related to food and water intake and their regulation, and will be an important source of reference for laboratory research workers with this interest. It is a pity that there is no author or subject index.

RALPH H. JOHNSON

OPERATIVE NEUROSURGERY Vol. 2. Posterior Fossa, Spinal Cord and Peripheral Nerve Disease. By Ludwig G. Kempe. (Pp. viii + 281; 290 figures; \$48.40.) Springer: Berlin. 1970.

Tradition decrees that textbooks of operative surgery should show idealized exposures with a complete absence of blood, fat, and fascia, and this is an impeccably produced book of that kind. The pictures are very clear with a liberal use of colour where necessary. The text is less happy both in arrangement and content. It comes as a continuous narrative before each set of pictures—many words could have been spared, and pages too, if the commentary had been fitted around the plates in place of legends. As to content, its dogmatism must limit the book's appeal beyond the immediate sphere of influence of the author, for we are offered no alternatives and no references to the literature. Moreover, the author has not been able to resist diversions into diagnosis, and in places even includes anecdotal references to individual cases. These are out of place in such a book, in which text should be kept to an absolute minimum. At its price, it is difficult to see it having a wide market, the more so as a third of this volume is taken up with surgery of peripheral nerves and the sympathetic chain—procedures not commonly regarded as neurosurgical, at least in Britain.

BRYAN JENNETT

SPINAL CORD INJURIES Edited by Daniel Ruge. (Pp. x + 226; 56 figures.) Thomas: Springfield. 1969.

This is a well-produced book covering most aspects of the multidisciplinary field of spinal cord trauma. However, it is not, as is mentioned in the Preface, 'a complete medical-surgical approach'.

Anatomy, physiology, and pathology of the spine in relation to trauma are discussed in a simple, brief way, and there are line drawings, but no radiographs or photographs. There is a balanced account of the main surgical aspects of therapy, although this reviewer feels that there are even fewer indications for laminectomy. The opinions of the 13 authors are not illustrated by statistics.

There are important chapters on some of the medical aspects of spinal cord injury, and on pain and spasticity. Rehabilitation receives the emphasis it deserves, and there is an excellent section on the management of the paralysed hand.

The book can be recommended as a suitable primer for all doctors involved in the field of spinal cord trauma, and indeed of spinal paralysis.

PHILLIP HARRIS

STUDIES IN NEUROLOGY By Sir Charles Symonds. (Pp. vi + 344; illustrated; £4.) Oxford University Press: London. 1970.

It is not clear whether it was just a happy coincidence that the publication of this remarkable volume of selected reprinted papers appeared just before the 80th birthday of Sir Charles Symonds. In any case, the Oxford University Press are to be congratulated on a most felicitous and appropriate accomplishment that compares well with the more ambitious volumes produced under the same title by Sir Henry Head in 1920. The book begins with a 23-page autobiographical introduction in which Sir Charles relates his early training in neurology, his stimulus from a meeting with Adrian in the first world war, his experiences in Guy's Hospital, his visits to Baltimore and Boston as travelling Fellow, early days on the staff of the National Hospital, his later interlude as consultant to the Royal Air Force, and his part in setting up the St. Hugh's Hospital for Head Injuries. There are lively reminiscences of Arthur Hurst, Adolf Meyer, Cushing, Holmes, Wilson, Cairns, Greenfield, and others. There is much of historical interest in this memoir of one who played a leading part in the development of neurological medicine as an independent speciality.

Sir Charles has chosen 21 papers and two memorial addresses (Greenfield, Russell Brain) to be reprinted. The choice is excellent, grouped under the several headings of vascular accidents, epileptic phenomena, head injury, venous thrombosis, headache, psychological disorder; with single papers on high spinal compression, vertigo and recurrent cranial nerve palsies. There is also a complete bibliography.

All the reprints are essays in the best style of English clinical investigation. A close analysis of symptomatology is pursued when possible to clinicopathological correlation. From an enormous clinical experience, well-edited case histories of evolving symptoms are selected to illuminate new aspects of pathogenesis. The classic papers on subarachnoid haemorrhage well illustrate the principle.

The same meticulous analysis led to the recognition of cerebral venous thrombosis, of high cervical compression and to the significance of the different sequelae of head injury.

Following his early training at Johns Hopkins with Adolf Meyer, Sir Charles continued a particular interest in psychological disorder. Indeed, for some nine years his clinic in Guy's Hospital was for both nervous and mental diseases. It was so successful that a psychiatrist (Gillespie) was ultimately appointed to take over the large sub-department of psychiatry. Though Sir Charles then continued in charge only of neurology, his special interest in psychological medicine enabled a fresh approach to be made to the difficult problems of delirium and confused mental states. The papers on traumatic mental confusion, on neurosis, and on memory disorder in this volume are in their way as important as those on subarachnoid haemorrhage. In the same vein, the analysis of the wartime problems of flying stress have many implications for the perennial psychoneurotic reactions of the peace-time clinic.

The author modestly remarks 'what I have written is mostly out of date'. He means that the conclusions are now well known. In fact, the collection is truly a classic, presenting in most accessible and readable form some of the best clinical neurological reporting of the last 50 years. The author's style gives these papers a freshness and interest that has not diminished with the passage of time. The experienced neurologist who has read the papers before will find again many fascinating details and much stimulating discussion. For the young physician in training these essays in clinical investigation will make him aware of many nuances of neurology.

D. DENNY-BROWN

THE MECHANISM AND MANAGEMENT OF HEADACHE By James W. Lance. (Pp. 167; 45s.) Butterworths: London.

This book summarizes some useful facts about headache and particularly about migraine. Some new views on the etiology of migraine, and specially its biochemical accompaniments, are discussed. The practical application of a number of remedies, both old and new, are also illustrated. To many practitioners and neurologists a recurrent problem is how far and when to investigate persistent or episodic headaches. This question is also dealt with in a useful and common-sense fashion: with due regard to the guidance to be gained from an adequate history of the complaint. In general, the book is a useful addition to knowledge based on the personal experience and research of a well-known neurologist. It should appeal to his colleagues as well as to general practitioners and students.

C. W. M. WHITTY

GENERAL ANAESTHESIA AND THE CENTRAL NERVOUS SYSTEM By Leonard C. Jenkins. (Pp. x + 544; illustrated; £8.) Williams and Wilkins: Baltimore. 1969.

There are now many text-books on general anaesthesia and most make some reference to the central nervous system. The author is to be congratulated on producing one that can be read with pleasure and returned to many times thereafter, for solid information.

In the short compass of a little over 500 pages, Professor Jenkins covers the basic sciences and clinical considerations necessary to practising anaesthetists. In his preface he expresses the hope that several sections may also be useful and informative to physicians practising general and specialty surgery, and medicine. Its value to the undergraduate is problematic.

The contents are divided into five sections. Anatomy and physiology, pharmacokinetics, special techniques, hypoxia and anaesthetic management, all concerned with their relationship to and effect on the central nervous system. The references at the end of each chapter are particularly extensive and should prove very useful.

This entire volume is orientated to make the reader consider and evaluate the effect of drugs and anaesthetic techniques on the central nervous system. Whilst this is of importance to the anaesthetist practising neurological surgery, its value becomes obvious in all other branches of surgery, once the contents of the book are read and appreciated. With the exciting and significant developments in recent years and much yet to be discovered, the presentation of facts will also prove of value to the wide range of physicians and surgeons whose interest lies in the central nervous system.

This well-illustrated book is easy on the eye and demands no great muscular activity to handle.

The publishers, Messrs E. & S. Livingstone Ltd., earn our gratitude for introducing this valuable newcomer to the United Kingdom, even at the price of £8.

Certainly, it well deserves to be included in every reference library.

PHILOSOPHY AND MEDICINE By E. K. Ledermann. (Pp. xix + 180; 58s.) Tavistock Publications: London. 1970.

To a large extent today's physician has replaced the priest and minister, and his attitude towards his patients has needs acquired a measure of spiritual responsibility. Dr. Ledermann's book arrives opportunely and should be welcomed by practitioners of medicine, particularly psychiatrists, to strengthen or negate their practices by a strict examination of their beliefs and their foundations. These are only to be found in an explicit demonstration that practice and belief have their roots in and stem from a particular brand of philosophical conviction of which the practitioner may be entirely unaware.

At the outset the author sets his face against the mechanistic-determinist philosophy and argues for a holistic teleological approach. In psychiatry he favours the existential point of view as against the behaviourist. In this he bases himself largely on Kantian philosophy, which he presents briefly, but very adequately for his purpose, and on the exponents of modern existentialism and of phenomenology. Karl Jaspers has influenced him, and it is pleasing to find this great philosopher restored to his proper—that is, eminent—place as the first exponent of existentialism in modern psychology and psychiatry. Many authors have paid scanty attention to Jaspers and appear to believe that existential psychology derived from the ontologies of Heidegger and Sartre alone. Jaspers knew well that even his own views had been preceded by those of Kierkegaard and Nietzsche.