patient, the presence of concomitant medical disease, season of the year, duration of hospitalization, seniority of the surgeon, and the type of suture material were not found to be significant factors. The author is less certain about the use of antibacterial agents, especially topical bacitracin, in preventing infection.

Most of the infections occurred in patients undergoing lumbar disc protrusion surgery. Surprisingly the author recommends excision and packing, and healing by secondary intention as the optimum method of treatment in these cases.

No details are given regarding the ventilation of their operating theatres, but reference is made to the use in other hospitals of 'laminar' ventilation (better named 'unidirectional flow ventilation'), which has superseded ordinary plenum systems. There is no mention of the order of the infected operation case in the operating list, or the day of the week, or the apparent source of the infection. Nor are we told if the infections appeared sporadically or as an 'epidemic'. There is scanty reference to bacteriological aspects and this is a notable fault of this otherwise valuable study, which includes a useful survey of the literature on the subject of post-operative wound infections in general, and in neurosurgery in particular.

P. HARRIS

BAYER-SYMPOSIUM II: NEW ASPECTS OF STORAGE AND RELEASE MECHANISMS OF CATECHOLAMINES Edited by H. J. Schumann and G. Kroneberg. (Pp. 301; DM. 48.) Springer: Berlin. 1970.

Book versions of symposia have, deservedly, gained a dubious reputation in recent years. Many are no more than ill-edited, overwordy collections of papers sold at an inflated price. This book, which comprises the papers given at a Bayer Symposium in October 1969 is, on the contrary, a model of what should be done. The concept that catecholamines are taken up as the intact molecule into the neurones which released them originated some 10 years ago; uptake into extraneuronal cells is an even newer idea. The rate of development has been extraordinarily rapid, reflecting the intense interest and, therefore, the number of workers engaged in the field. The interest stems not only from the important theoretical ideas involved but also from the widespread implications in clinical medicine. For example, the mode of action of many drugs used as antihypertensives involves uptake into the adrenergic neurone.

The present volume fills the need to bring workers up to date with these rapid recent developments in a compact, carefully edited series of papers. The contributors have been selected both as representatives of the most rapidly developing aspects of the field and for their individual authority. A short, edited account of the discussion following each paper provides a valuable counterpoint to the authors' thesis, underlining the areas still in dispute and posing the questions for tomorrow's research.

The book is well produced, including the electron-micrograph and coloured histochemical plates; and finally, the price is reasonable.

This is a volume which can be wholeheartedly recommended to every medical and biological science library

and to a much wider readership of individual medical and biological scientists, including senior undergraduate students.

J. S. GILLESPIE

PEDIATRIC NEUROLOGY By Ingrid Gamstorp. (Pp. xiii + 394; illustrated; £9.00.) Butterworths: London. 1970.

We have recently reviewed a number of books on paediatric neurology, reflecting the growth in status of this specialty in other countries and which will surely follow in Great Britain. Dr. Gamstorp is well known for her work on disorders of muscle. She is one of the distinguished few to have a disease named after her. It is, therefore, natural that the chapters on peripheral nerve and muscle are superb. The book is clinically orientated, being arranged according to the dominant symptom, such as convulsions, mental retardation, ataxia, involuntary movements, headache, etc., or in categories such as abnormal growth of the head, malformations, etc. There is a wide coverage but a book of this size cannot devote space to detailed description or review of controversial material. Indeed, the dogmatic approach, so satisfactory for the beginner, may be less acceptable to the experienced neurologist with a difficult paediatric problem. For instance, the presentation of the neurological complications of infections and immunizations is too brief. The most worrying problem for the neurologist with limited paediatric experience is the progressive neurological and mental deterioration, including necrotizing encephalopathy, but the descriptions are too short to be helpful. On the other hand, the examination of the newborn and older children and the use of ancillary methods of investigation are excellent.

The production is very good, well printed and with unusually good illustrations, some in colour. The book is assured of a welcome.

J. A. SIMPSON

HANDBOOK OF CLINICAL NEUROLOGY: Leucodystrophies and poliodystrophies. Edited by P. J. Vinken and G. W. Bruyn. Volume 10. (Pp. 699; illustrated; £23.30) North - Holland: Amsterdam. 1971.

'Today, there exists an extraordinary confusion with respect to the diagnostic implications of the term amaurotic familial idiocy and its subtypes, classified either eponymically or by the age of onset.' Thus Wolfgang Zeman introduces his chapter in Volume 10 of the *Handbook of Clinical Neurology*. This observation might justifiably be extended to all the conditions described in this volume devoted to the leucodystrophies and poliodystrophies. Even the original title '*leucodystrophies and lipidoses*' was considered to be inexact and was consequently changed during its preparation.

Most neurologists have a passing familiarity with these diseases and perhaps feel in view of their rarity and the absence of active treatment that this is all that is required or is justifiable. Furthermore, individual experience shows that standard classifications are either imprecise or too exclusive. One result has been a deplorable tendency to make qualified or hybrid diagnoses, adding to the difficulties of understanding and bringing the classifications into further disrepute.

An introductory chapter entitled concept, classification, and nosology of the leucodystrophies traces the development of thought in this complex group, quoting the original contributions and providing a full bibliography. There is a 30 page chapter on the biochemistry of normal lipid metabolism. There is a well-illustrated section on the electron microscopy of the lipidoses. This is proving to be particularly fruitful as the large lipoprotein molecules can now be identified visually.

The recent advances in molecular biology and lipid and protein chemistry have introduced pathological concepts of numbing complexity. The editors have given appropriate prominence to the chemical pathology, yet have maintained a conscious awareness of the clinician's experience, facilities, and role. The clinical applications are pre-eminent, yet the underlying neurochemistry presents a satisfying intellectual challenge.

IVAN T. DRAPER

ATLAS OF CEREBRAL ANGIOGRAPHY By Takayoshi Nomura. (Pp. 322; illustrated; \$22.50.) Igaku Shoin: Tokyo, and Springer: Berlin. 1970.

After a discussion of technique there is a 38 page section which describes with the aid of 17 diagrams the normal and pathological anatomy. This is followed by the atlas section which is flanked at each end by three foldout inserts showing the normal appearances alongside explanatory line drawings. This arrangement enables immediate comparison of the normal with any of the 212 full page illustrations. The detail of the illustrations is generally good, although the author's method of performing angiography is almost primitively simple.

Parts of the book are tiresome to read and difficult to understand because of the misuse of words. For example, on page 22 one reads; 'Chiefly it runs obliquely from the anteriorly downward and to the posteriorly upward, but occasionally takes the figure which turns back to descend.' The selection of cases appears to be rather unbalanced; thus in a large section on vascular diseases it is surprising to find no illustration of the frequently encountered collateral circulation via the maxillary and ophthalmic arteries. In the last section, the summaries of the clinical findings in the 117 cases illustrated do not contain sufficient morbid anatomical detail. There are 237 references.

J. LESLIE STEVEN

NEUROELECTRIC RESEARCH: Electroneuroprosthesis, electroanesthesia and nonconvulsive electrotherapy. Edited by David V. Reynolds and Anita E. Sjöberg. (Pp. 466; illustrated; \$27.25.) Thomas: Springfield.

This volume contains 45 papers selected from the 1969 conference of the Neuroelectric Society. The subjects range from the history of electrotherapy to tactile television, electroanesthesia, electrosleep, and measurement of current distribution paths in the brain. Science, pseudoscience, and mumbo-jumbo are intermingled throughout, and it is quite an interesting exercise sorting out one from another. The danger of this kind of collection is that some good ideas are lost in electro-confusion, to coin yet another new term.

R. G. WILLISON

LECTURE NOTES ON NEUROLOGY 3rd ed. By Ivan T. Draper. (Pp. 231; £1.50.) Blackwell: Oxford.

Dr. Draper's third edition of *Lecture Notes on Neurology* is a good book, reasonably priced, and clearly one to be recommended to students. It is not too long and is well written. It is a successful book and it would surprise me very much if Dr. Draper did not have the opportunity of producing many more editions.

There are a number of small points on which critical comment is necessary and which in subsequent editions the author might consider altering. There is an implication on p.16 that unsteadiness, worse when the eyes are closed, must be due to a posterior column lesion. The difficult problem of explaining the action of extra-ocular muscles is dealt with not very clearly and the figure (Figure 12) illustrating movements, though correct, could be confusing and, unfortunately, it is repeated as Figure 24 later in the book.

The pathology of tabes is described as involving destruction of the posterior root ganglion 'nerve cell bodies'. Most authorities seem agreed that such loss of cells as may be present is not enough to account for the degeneration in the posterior columns. In the section on syringomyelia it is a pity that recent ideas on the aetiology were not included, particularly in view of the therapeutic possibilities.

C. J. EARL

THE TRAUMATIC AMNESIAS By W. Ritchie Russell. (Pp. ix + 84; illustrated; £2.00.) Oxford Neurological Monographs. Oxford University Press: London. 1971.

Professor Ritchie Russell's monograph maintains the high standard and high degree of interest established by the other contributors to this series. His early work, founded on detailed studies of head-injured patients was published in the early 1930s. Since then he has gone on to develop his concepts of memory, learning, and amnesia in the light of experience and expanding biological knowledge. Some of the earlier papers are no longer easily available; annotated extracts from these, together with more recent contributions, are presented in this volume.

The style is literate and the content memorable.

IVAN T. DRAPER

VENTRICULOCISTERNOSTOMY: Long term experiences. By R. C. Cantu, J. J. Michelson, and J. C. White. (Pp. 138, 23 figures; \$12.25.) Thomas: Springfield, Ill. 1970.

This monograph contains a detailed description of a series of 54 patients treated by Torkildsen's ventriculocisternostomy. Thirty-nine of the patients were operated on because a neoplasm was obstructing the circulation of the cerebrospinal fluid; the longest survival in this group was 17 years. The good results obtained in nine patients with benign aqueduct stenosis are reported; the longest postoperative follow-up in this group is 27 years in a man who was aged 21 at the time of his operation.

A chapter by Dr. Paul New discusses and illustrates the radiological findings with great clarity. The authors stress the importance of first-class radiological studies in case selection by warning that a Torkildsen shunt will fail when the subarachnoid spaces are blocked - for