techniques. Neurologists may be particularly interested in the account of over 10,000 cases of spinal anaesthesia without any major neurological sequela being discovered, and in the plea from the same series of cases for a good technique of lumbar puncture to reduce the incidence of post-spinal anaesthetic headache.

J. M. K. SPALDING

A TEXTBOOK OF PSYCHOLOGY, By Donald Olding Hebb (Pp. xvi + 353; 102 figures, 40s.). Philadelphia and London: W. B. Saunders. 1966.

Professor Hebb's theoretical contribution to psychology has long been appreciated but his gifts as a teacher are perhaps not so well known in Britain. This revised edition of his textbook, however, shows the care which he has devoted to the provision of a thorough grounding in physiological psychology.

It contains a brief description of the structure and function of the central nervous system, an excellent review of learning theory, and interesting data on motivation: the chapters on intelligence and emotion are less comprehensive. The range of discussion is wide, including an account of the refractory period of the neurone on the one hand and comments on altruism in the chimpanzee and in man on the other. Hebb does not omit data (*e.g.*, the fading phenomenon observed with solid figures) which cannot be explained by his own ingenious cell-assembly hypothesis, and, by his meticulous exposition of this and other topics, trains the reader in the use of the experimental method.

The student is explicitly helped to assimilate the main points in each chapter by a brief review and a few carefully-chosen references. The deceptive simplicity of the prose stems from the clarity of the thinking. The book, therefore, is an invaluable guide not only for students of psychology but also for medical practitioners and for specialists in related fields. It clears away many of the vague, philosophical generalisations that have for so long obscured the subject and gives it at once a more limited and a more exacting definition within the framework of the sciences.

FREDA NEWCOMBE

A MANUAL OF LABORATORY STUDIES IN PSYCHOLOGY By B. Heckman and R. Fried. (Pp. xiii + 207. 20s.) New York: Oxford University Press. 1965.

Thirty laboratory experiments in psychology, using students, rats, and children as subjects, requiring the minimum of equipment, and illustrating problems of learning, motivation, perception, personality, and maturation, are set out with full instructions and comments. Most laboratory courses have evolved over the years, and reflect the preferences and established habits of the organizer: those who have to introduce such a course should examine this book closely, for it is excellent in providing interest, instruction, and theoretical background.

R. T. C. PRATT

TRANSFORMATIONS Change from Learning to Growth By W. R. Bion. (Pp. 183. 25s.) London: William Heinemann. 1965.

This individual consideration of the processes involved in

psycho-analysis will be of great interest to those concerned with the nature and theory of the treatment: but it is not easy reading.

ADMINISTRATIVE THERAPY: THE ROLE OF THE DOCTOR IN THE THERAPEUTIC COMMUNITY By D. H. Clark. (Pp. xi + 160. 25s.) London: Tavistock Publications. 1964. We are witnessing at the present time another of the periodic revolutions in attitude towards the chronic psychiatric patient. The authoritarian mental hospital produced in its inmates a reaction to its social structure that rendered them unfit to resume their place in the outside world. Administrative therapy aims to use our increasing knowledge of social science to provide a social structure that will enable patients to re-acquire the social skills of the outside world.

Dr. D. H. Clark's book is based on his own pioneering experiences at Fulbourn Hospital, and was written in a reflective year when a fellow at the Center for Advanced Study in the Behavioural Sciences at Stanford, California. It is a most excellent account of the philosophy and practice of administrative therapy, clearly written, illuminated by instances of difficulties encountered and overcome, enthusiastic, yet humble, and full of mature wisdom.

R. T. C. PRATT

MENTAL DEFICIENCY, 2nd ed. By L. T. Hilliard and B. H. Kirman. (Pp. viii + 714; 120 figures. 100s.) London: J. & A. Churchill Ltd. 1965.

The Mental Health Act (1959) has intervened between the first (1957) and second editions of this book: the consequent changes are, however, confined to matters of detail rather than outlook, since the work of the authors from the late Fountain Hospital determined in no small part the changes for mental deficiency enshrined in the Act. The whole field of mental deficiency is covered, including the pathological aspects (Crome), the increasing number of metabolic syndromes, and the problems of the adolescent and adult defective. The social aspects are considered by contributors who have themselves made great advances in the field, for example, education and training (Norris), employment (O'Connor), and psychological aspects (Tizard). Equal attention is paid to theoretical contributions, and to practical advice ('It is never justifiable to hurry when feeding a patient who has difficulty in swallowing'). This wide approach that has revolutionized the care of mental defectives is now described and documented in this excellent book, and the philosophy and practice of the authors again made available to wider audiences.

R. T. C. PRATT

SLOW, LATENT, AND TEMPERATE VIRUS INFECTIONS. NINDB MONOGRAPH No. 2. Edited by D. Carleton Gajdusek, Clarence J. Gibbs, Jr., and Michael Alpers. (Pp. 489; illustrated. \$6.75) U.S. Department of Health, Education and Welfare (Public Health Service). 1965.

When in March, 1954, the late Dr. Björn Sigurdsson

delivered three lectures to the University of London, later published under the title 'Observations on three slow infections of sheep', he opened up what may well turn out to be a new vista in virology. In drawing attention to a new class of 'slow' virus infections, he laid the foundation for a good deal of the work reviewed in the present volume. The list of mammalian and avian viruses demonstrating slow, latent or temperate behaviour (the latter term has been taken over from phage studies) given on pages 7 and 8 is now a formidable one.

The immediate stimulus for this workshop-symposium arose from Dr. Carleton Gajdusek's continuing interest in kuru, a strange, rapidly fatal, familiar degenerative disease of the central nervous system (characterized by trembling and cerebellar ataxia) and limited to some 12,000 native New Guinea Islanders (since diminishing in number) usually referred to as the Fore people. Papers presented revealed considerable divergences in view about the histopathology of the disease. Thus, whilst Dr. Igor Klatzo likened the condition to a Creutzfeld-Jakob type of degeneration in its widespread neuronal degeneration (including the vacuolation so characteristic of scrapie) and 'the lack of any well-defined systemic pattern of the disease' and was supported in this view by Dr. Meta Neumann's studies, Beck and Daniel classed both scrapie and kuru as a 'system' degeneration in which cerebellar pathways were affected (though 'non-specific' accompanying changes might obscure the picture).

Excellent accounts of the many remarkable properties of scrapie 'virus' were presented and make an interesting approach to the most recent claim that the 'virus' does not contain nucleic acid!

Much interesting discussion took place and has been faithfully and fully recorded in this handsome presentation. Its freshness and spontaneity has been excellently preserved and gives a most valuable insight into the doubts and difficulties which hide (like the latent viruses themselves) in the minds of the most critical research workers.

Since this discussion, an important development has taken place in that kuru has been transmitted to chimpanzees by the Bethesda workers and its true status as a slow 'virus' infection enhanced.

The topics considered by the workshop fell under seven headings:— (1) Human nervous system diseases of suspected viral aetiology; (2) Slow and latent virus infections of man; (3) Serological, immunological and hypersensitivity reactions in subacute and chronic disorders of the central nervous system of animals and man; (4) The virology, pathology and epizootiology of scrapie; (5) The virology, pathology and epizootiology of Aleutian disease in mink; (6) Virology of visna and other slow and

latent virus infections; (7) Genetics in the pathogenesis of subacute and chronic virus infections. In addition, an important bibliography is included as a separate section. Under these rubrics a great deal of experimental work is described with animal 'model' diseases for slow virus infection in man. Full accounts of Aleutian mink disease from Drs. Gorham and Leader and their colleagues and the chronic disease following lymphocytic choriomeningitis virus infection in mice (Hotchin) were given. Amongst so many interesting papers presented it is perhaps invidious to single out contributions but some had wide implication, *e.g.*, the 'Latency of infections with Simian Virus 40 and Adenovirus, Type 12' by Bernice Eddy; and others broke new ground in presenting ideas which might well be seminal in the next decade or two, *e.g.*, Dr. Wallace Rowe's contribution on 'Persistent viral infection without production of infectious virus'; and Dr. Frederik Bang's paper on 'Genetic and cellular factors in resistance to virus diseases', especially in view of the extraordinary findings and theories now current in the field of bacterial genetics.

The book is beautifully produced and illustrated and makes fascinating reading for all who have an interest in what promises to be a most fertile new extension of virology.

E. J. FIELD

CSF DYNAMIC DIAGNOSIS OF SPINAL BLOCK. THEORY AND PRACTICE OF ELECTROMANOMETRICS. By Olof Gilland. (Pp. 175; illustrated; Sw. Kr. 45). Stockholm: Almqvist and Wiksell, 1966.

Modern devices make it possible to record pressure changes in the cerebro-spinal fluid with great accuracy and this monograph is a valuable source of information to all who wish to study the possibilities of such procedures.

THIRD INTERNATIONAL CONGRESS OF NEUROSURGERY

The Third International Congress of Neurosurgery will be held in Madrid from 23 to 26 April 1967. On 27 April there will be a meeting of the neurosurgeons of the Spanish- and Portuguese-speaking countries and on 28 and 29 a further meeting has been arranged in Lisbon. On Saturday, 22 April, the Third International Symposium on Stereoccephalotomy will take place.

Further information may be obtained from Dr. G. Dierssen, Apartado de Correos, P.O.B. 6176, Madrid.