BOOK REVIEWS


Many members of the Society of British Neurological Surgeons will recall the occasion at Trinity College, Dublin, when Sir Geoffrey Jefferson delivered his lecture on René Descartes. It gave us pleasure then to applaud the scholarship and to have demonstrated to us so vividly how wide the canvas of medicine can be. This lecture, and other general and philosophical addresses printed in the first part of this volume will attract a wide readership and are destined to have a permanent place in our medical reading. They reflect the extent of Sir Geoffrey’s contribution as an ambassador of neurological surgery. The next section of the book contains historical addresses, and the author’s articles on MacEwan, Horsley, and Cushing put the history of the young specialty of neurological surgery into perspective, and prepare for the third section which is devoted to formal clinical papers. The rapid development and drive of neurosurgery during these last 30 years can well be judged from these articles. Sir Geoffrey’s main interests have been the tentorial pressure cone (the 1937 paper is reprinted here), lesions of the sellar region, and the problems of subarachnoid haemorrhage and aneurysms. The papers on this last topic show the mature reflections on this difficult subject, together with the almost youthful enthusiasm for a fresh approach and the then new possibilities of surgical attack. Throughout the book and in this section, too, we are constantly reminded of how much in medicine we stand on the shoulders of those who have gone before.

In a characteristic little vignette at the end of this volume, Sir Geoffrey declares himself happy and to have had a happy life ‘as a by-product . . . of something that one does and is incapable of pursuing in itself’. We are also fortunate that in this country the developing years of neurological surgery also produced a great scholar surgeon who could write it down, make his own considerable contribution, and stimulate the young men of the future. Yes, a happy life.


Some of this book will be above the heads of clinical neurologists. Nevertheless, most clinicians will find parts of it written in terms which are familiar and relevant to interests of their own. Its main value lies in illustrating how modern scientific methods and ideas have been, and will be increasingly, applied to clinical problems. Much of it is devoted to cytochemistry and cytoanatomy, the results of electron microscopy and newer differential staining techniques being described. Increasing complexity of structure and function is the keynote that emerges. The book illustrates the point that science is international. Of the 11 contributors, four come from English medical schools and the rest from various European countries. It will be of value to those engaged in clinical research on the nervous system, the very full references in each section being especially useful.


This symposium was held at the 1958 annual meeting of the American Academy of Neurology, and is of course intended for the biochemist. The papers are excellently presented, and both papers and discussion are supported by an extensive bibliography and index. The techniques for investigating individual regions of the brain are quite remarkable, and even the microsomes themselves have been separately studied.

The wealth of specialized information is likely to leave the clinician bewildered, but he will find much of interest and encouragement in certain sections. Knowledge of the importance of specific nucleotides in lecithin metabolism and myelin formation brings hope for a new understanding of the demyelinating and degenerative disorders. There is little information about the derangements of metabolism in pathological material, but where this has been undertaken the results would seem to have immense importance to neurology and psychiatry. Interesting work is reported on the role of asparagine and glutamic acid inhuman epileptogenic cerebral cortex, and on the role of pyridoxine-dependent convulsions to gamma amino butyric acid formation in circumscribed areas of the brain.

Already, awareness of altered galactose metabolism (possibly dependant on uridine nucleotides) and phenylalanine metabolism has made inroads into the formerly barren field of mental defect.

Such is the growing importance of these two branches of neurochemistry, and the present book is a valuable and stimulating contribution.


The correlation of clinical signs with anatomical lesions is traditional in neurology. Hitherto such
correlations have been made in individual cases, or in groups selected on the basis of the site of the lesion. Neurology has been tardy in utilizing modern methods of experimental design and analysis, which eschew preconceptions, and seek to control and validate every step in the process of observation and deduction. This lacuna has been filled in a most efficient manner by the work of Dr. Teuber and his associates, which is reported in this excellent monograph.

They have concerned themselves here with punctate pressure, two-point discrimination, and point localization, making use of exact quantitative methods of measurement. They have obtained objective norms by testing a group of patients without brain wounds, and have thus been able to assess the significance of the deviations shown by their group of patients with penetrating brain wounds. The relationship of an abnormality in the test result to a lesion in a specific site has been ascertained by comparing it with the results obtained from lesions in other sites. The possible influence of such factors as intellectual deterioration, epilepsy, and dysphasia has also been evaluated. Thus in design and execution this study is a model.

The most astonishing finding was that the two cerebral hemispheres are not homologous with regard to the tests of sensation applied in this study. In the normal control group the sensitivity to punctate pressure was less in the right (preferred) hand than in the left. In the brain-wounded group, while defects in sensation in the right hand could be correlated with lesions of the opposite sensorimotor cortex, this was not so of the left hand. The evidence suggests that sensation is subserved diffusely in the right hemisphere. Moreover sensory defects in the left hand were often produced by lesions of the ipsilateral sensorimotor cortex.

Thus former analyses of the nature of sensory abilities and defects on an intensity-extensity basis, and previous attempts to relate these categories to complex tasks of discrimination, all of which were based on the assumption that the hemispheres were homologous, must be revised. But more important for neurology than the results obtained, is the lesson that historic methods must give place to modern techniques, and with them will go many of our cherished illusions about the brain and its function.


In order to determine whether a genetic factor might play some part in causing gliomas, the author ascertained whether the frequency of certain familial abnormalities is greater in the relatives of glioma patients than in a control group. The constitutional anomaly chosen for this purpose is called status dysraphicus, which comprises deformities of the sternum, kyphoscoliosis, myelodysplasia, an accessory proportion of span to height, and various deformities of palate, digits, limbs, hair growth, etc.

One hundred patients with verified gliomas formed the basis of the investigation; full details of the relatives—grandparents to grandchildren, brothers and sisters, aunts and uncles, nieces and nephews and cousins—were obtained and all those alive in the Netherlands were visited. There were 5,262 relatives, of whom 1,290 were dead; 3,557 were examined for stigmata of status dysraphicus and the findings classified. The control group consisted of the relatives (2,228) of 100 randomly chosen families, and these were similarly examined. Of the 1,290 dead relatives of the glioma patients, seven had died of glioma and in five others death was probably due to a glioma. Amongst the dead relatives of the control group there was not a single case of glioma. In the control group of relatives 7.8% show features of dysraphism; in the near relatives of the glioma group this proportion was 20.8%; among cousins it was 13.4%. The frequency of café-au-lait spots in the glioma group of relatives was much higher than in the controls. The findings, and the observations of other workers 'have led the author to the conception that gliomas are manifestations of an endogenous blastomatosis'.

This book records the results of much labour, involving personal travel, many thorough physical examinations, statistical evaluation, and the cooperation of thousands of individuals who might reasonably have wondered why. The book is well produced and written in an easy and interesting style in spite of the somewhat indigestible material; it includes an excellent review of other publications on this subject. Dr. Van Der Wiel is to be congratulated.


This small book presents the author's own experience of 49 cases of various types of tumour. It is well written, freely illustrated, and the clinical accounts of quoted cases are well documented, including the long-term results of treatment. A useful bibliography is given.

Considering its modest size, it is very expensive.


This is a fascinating study of the occurrence of essential tremor in a population of northern Sweden. The high incidence of the disorder in this part of the country and the rather stable population made the investigation very worthwhile from the genetic standpoint. Most of the families had dwelt in the area for centuries, the people were aware of the hereditary nature of the disease, and the concurrence data were obtained about the existence of the disease in ancestors, in two instances in individuals who had died over a hundred years before. The clinical description is thoroughly validated by the examination of 87 cases.


This is a study of two dwarfs of a rare type whose chief feature is that their proportions of skull, face, and body are those of normal adults despite their extremely small stature. They are born dwarfish and although
Virchow characterized them as "nanocephalic" or "bird-headed" it is worth noting that of the 15 well-recorded cases in the literature only 12 had the large protruding nose and only 10 the receding chin which together give a "bird-like" profile. Mental retardation was present but not found to drop within the range of microcephalic idiots, and congenital malformations were common. A familial tendency was noted: endocrinological tests were unrevealing, and endocrine therapy ineffective. The first purpose of the monograph is complete objective and numerical documentation, and the monograph accordingly comprises a mine of somatometric, cephalometric, psychometric, and other indices, yet data for the first dwarf extends only to the age of 9 years and for the second only from 14 to 35 months. As to pathogenesis, cellular haploidism is excluded by proof of normal blood and epidermal cell size, and the theory is advanced that a hypothetical gene operates by decelerated cell division both in the embryo and subsequently.


The author has been responsible for courses of lectures on perimetry, and this book is derived from those lectures. The author confines himself to the essentials of the subject, which are clearly expounded and simply illustrated. He has not added another to the detailed monographs on perimetry, but has provided an introduction to the subject giving a small selection of references for those who wish to pursue it further. It should prove a useful book to postgraduate students of neurology and ophthalmology.


Edited under the leadership of Silvano Arieti by a board consisting of Kenneth E. Appel, Daniel Blain, Norman Cameron, Kurt Goldstein, and Lawrence C. Kolb, this is the first ever American 'compendium of the current state of knowledge in every branch of this rapidly advancing science'. It is 'offered as representative of American psychiatry today'. This claim 'refers specifically to the receptivity to all possible approaches which is characteristic of psychiatry in the United States' and accordingly the subject matter ranges more widely than most if not all other English language texts.

The work is made up of contributions by 111 authors (three of whom died while it was in preparation) which are grouped into fifteen parts and 100 chapters with 141 illustrations. Part I begins with a short historical sketch of American psychiatry up to World War II by Nolan D. C. Lewis, followed by 'recent American psychiatric developments' by G. Mora, and contains chapters by B. Malzberg on statistical data and F. J. Kallmann on the genetics of mental illness; unusually there are also chapters devoted to the family and the community of the psychiatric patient and one on psychiatric interviewing separate from the psychiatric examination, an excellent idea which could well have been extended. There follow more orthodox parts on the psychoneuroses and allied conditions; the functional psychoses (largely by the editor in chief); psychopathic conditions; psychosomatic medicine which curiously omits a chapter on skin diseases and the mind, but contains K. Goldstein on functional disturbance in brain damage; childhood and adolescence, including separate chapters on juvenile delinquency and reading and learning disabilities; part 7, which ends Volume I, devoted to 'language, speech, communications', is introduced by J. Ruesch on communication theory, has a chapter on stuttering, and ends with T. S. Szasz on language and pain.

Volume II opens with more than 200 pages devoted to the usual 'organic conditions' illustrated with small-scale gross and large-scale microscopic appearances of abnormal brains; then follow parts devoted to 'the psychotherapies'; a separate part on 'psychoanalytic therapies' (note the plural), and one on the physical therapies with contributions by L. B. Kalinowsky, W. Freeman, and P. H. Hoch. The remainder of the volume is made up of miscellaneous items. Part 12 on the 'relations with basic sciences and experimental psychiatry' has chapters on neuroanatomy (J. Papez), neurophysiology (R. W. Gerard), neurology (S. Cobb), neuropsychiatry (L. Roizin), 'the biodynamic approaches' (J. H. Masserman), and pharmacologically induced psychoses (P. H. Hoch). Part 13 'contributions from related fields', deals with clinical and social psychology, mathematics and cybernetics, philosophy, and has chapters on psychiatric nursing, social work, and family care; and part 15 'legal, administrative, didactical, and preventive psychiatry', which naturally deals with these topics from the American standpoint, includes a chapter on forensic psychiatry by Winfred Overholser. Finally there is as complete an index as one could wish which runs to 111 pages. Each chapter has its own often extensive list of references: for instance that on neuropathology contains 280 items.

It is impossible to do justice to the enormous amount of information assembled in these volumes and the labour which must have gone into their making. In a work with so many contributors embracing a variety of disciplines and which attempts to be complete, some unevenness in standards is unavoidable. For example, statements like 'The nerve cell, with all its processes, is called a neuron', seem to be addressed to the layman, while few psychiatrists will be able to make out 'In discussing Vogt's pathoklisis . . . certain of the fundamental objections . . . could be overcome by the recently developed hypothesis of histometabolic dysregia'. Again a few contributions read as if their authors were trying to argue a case for their opinions and theories rather than giving a balanced and reasoned view, which may make it difficult for the beginner to form his own judgment. But this is perhaps due to the fact that psychiatry possesses a smaller body of knowledge derived from clinical observation and laboratory investigation than is generally realized; even much of everyday classification is subjective rather than objective and consequently uncertain and possibly ephemeral, quite apart from pathological formulations whether physical or psychological. Some chapters are
sufficiently complete to present a satisfactory expert view of their subjects against some which reach no higher level than that of a student's textbook.

Whether it is helpful theoretically or practically to regard schizophrenia, one of the central problems of psychiatry, as 'neurophysiologically . . . a process of functional dysencephalization', 'a disharmony of microscopic spatiotemporal patterns of activity in the neuronal network' only the future can decide. But such statements do show that psychiatry is in a state of uncertainty and flux and seeking help from an ever widening circle of ancillary disciplines. In the circumstances only a brave man would attempt a systematic presentation while there is so little fundamental knowledge to systematize. Dr. Arieti and his coeditors have sought to overcome this difficulty by opening their pages to representatives of all schools and approaches. Casting their net so widely has resulted in two unwieldy volumes which together weigh 10 lb. However, the student who invests in them at 20s. the pound is assured of much valuable material and will be reassured that mid-twentieth century psychiatry does not lack inventiveness of theory to overcome a shortage of fact.

BOOKS RECEIVED

(Review in a later issue is not precluded by notice here of books recently received.)


Seventh International Congress of Neurology and Fifth International Congress of Electroencephalography and Clinical Neurophysiology

The Seventh International Congress of Neurology will be held in Rome, September 10-15, 1961.

Topics for September 11 are "Neurologic disorders in porphyria, phenylketonuria, and galactosuria" (morning) and "Neurologic disorders related to liver diseases" (afternoon); for September 12 "Brain disturbances associated with cardiopulmonary disorders"; for September 14 "Aphasia".

Symposia will be concerned with "Lipids, Lipoproteins and their Metabolism" and with "Changes in Myelin" on September 13. A symposium on neurogenetic genetics will be held on September 10 in the morning jointly with the Third International Conference of Genetics (Rome, September 7-12, 1961). The other symposia will deal with neurological geography, history of neurology, and multiple sclerosis.

September 15 will be devoted to the communications on major topics, with the opportunity for audience participation. Registration fees are $15.00 (or equivalent in Italian lire) for active members; $10.00 for associate members; $5.00 for adjunct members.

All information from Dr. Giovanni Alema, Viale Università 30, Rome. For the symposium on neurochemistry, information from Dr. Armand Lowenthal, Secretary for Neurochemistry, within the World Federation of Neurology, 59, rue Philippe Williot, Berchem-Anvers (Belgium); for the symposium on neurogenetic genetics, from Prof. Luigi Gedda, Istituto Gregorio Mendel, Piazza Galeno 30, Rome.

The V international congress of electroencephalography and clinical neurophysiology will be held from September 7 to 13, 1961. The topics for September 7 are "Relation between unit activity and electroencephalogram" (morning), and "E.E.G. in phylogenetics", "Diffuse projection systems to cortex and their function according to animal species and cortical organization", and "E.E.G. and sleep" (afternoon). On September 8 a round table will be held on "Intracerebral electrography in man". In the afternoon G. F. Ricci and R. Hernandez-Peon will submit a report on "E.E.G. and physiology of behaviour" and G. G. Walter and Storm van Leeuwen on "The analysis of E.E.G. information". On September 9 the topic "E.E.G. of non-epileptic paroxysmal disturbances" will be presented in the morning.

September 16 is devoted to the meeting of the International League against Epilepsy in the morning and will deal exclusively with "Epilepsy in childhood".

September 11 and 12 are reserved for the joint meetings with the VII International Congress of Neurology, and September 13 is reserved for communications.

Registration and other fees are the same as for the Congress of Neurology. All information from Dr. Raffaello Vizioli, Viale Università 30, Roma.