Books received


New Editions


Book reviews

Amines and Schizophrenia.

The editors organized a Symposium for many leading workers in this field and have presented the papers and discussion as a book. Inevitably it contains articles which have been published elsewhere in similar form and also reviews of particular topics. No doubt readers will have their individual preferences amongst the various subjects discussed, but it is valuable to have gathered together a number of relevant aspects of biochemical research into schizophrenia (and there is frequent reference to affective disorders as well).

To say the least, it is intriguing that there should be amines in the brain playing a vital role in mental function and that there is a growing list of related amines, derivatives of phenylethylamine and tryptamine, which can cause somewhat schizophrenic-like mental disturbances. In his admirably succinct introduction Smythies outlines the catechol amine hypothesis, the tryptamine hypothesis and the hypothesis of a disordered biochemical process, i.e. transmethylation.

The reports by distinguished workers range from abnormal biochemical findings in mentally ill people to the delicately elicited responses to amines of single neurones in the limbic system of a cat. The discussions after the papers are lively. It is beneficial to witness experts seeking to explain the contradictory findings which so often appear as disillusional sequels to initial exciting reports, e.g. 'the pink spot'.

In Kety's useful summary he reminds us that none of the significant hypotheses considered in this symposium were proved—nor were any rejected—but they have inspired valuable projects and are still plausible hypotheses with heuristic value.

Pathology of Mental Retardation

The authors, a senior neuropathologist and a biochemist, offer a mature, considered approach to their subject based on their wide experience of mental deficiency, first at the Fountain Hospital and more recently at Queen Mary's Hospital for Children, Carshalton. The disorders dealt with are those usually encountered within the framework of mental deficiency hospitals in this country, with the emphasis there-
fore being on severe sub-normality. The first few chapters are devoted to aetiological considerations and here the authors' breadth of vision is immediately apparent as they present clearly and concisely but in detail the limited and sometimes conflicting evidence concerning the complex interactions of genetic and early environmental influences. An extensive and learned chapter on specific and non-specific aspects of cerebral pathology in sub-normality is followed by a brief cautionary review of non-specific biochemical abnormalities which reminds one of the parallel history of initial enthusiastic but inadequately controlled biochemical investigations of the psychoses which have also usually come to nought.

Subsequent chapters are respectively devoted to mongolism, hydrocephalus, in-born and acquired errors of metabolism, the lipidoses and leucodystrophies, aminoacidurias, neuromuscular disorders and miscellaneous conditions. Finally, an extensive fifty-page appendix provides information about the relevant techniques of biochemical and pathological investigations. This reviewer is not a specialist in sub-normality and cannot speak with that degree of authority. However, he has no doubt that this is a major book deserving to be read by all those interested in the complex origins of disease as well as it being an important work of reference for the expert.

The Mentally Abnormal Offender

This verbatim report has been published just over 1 year after the Symposium, and allows the reader to learn of the proceedings while the issues discussed are little changed by intervening events or publications. Chaired by Sir Charles Cunningham, a distinguished civil servant with long experience in these areas, the discussions centred round three themes: Antisocial behaviour and its treatment; associated social problems; and legal aspects. Predefinitions of 'mental abnormality' and of 'offence' were explicitly avoided. Nearly half of the speakers were from the United Kingdom; the United States, Denmark, Holland, Belgium and Sweden were also represented, but there was only one speaker from an Iron Curtain Country. The perennial conflict between the Law and Medicine, the antitheses which so often appear to exist between punishment, protection of society, and psychology, were not sought under the carpet, but it is to the credit of the speakers that in the absence of some personal information the reviewer was often unable to decide which of them were in possession of a medical qualification.

Unfortunately, it is not possible to extract from these proceedings any definite answers to questions which are in the minds of all of us doctors, who from time to time are concerned with offenders who may or may not be mentally abnormal: Can the offence be ascribed to psychopathology? Is psychological treatment indicated? How successful is it likely to be? What emerges clearly again and again is the need for further research, and occasionally a suggestion as to the form which further enquiries might usefully take. To the forensic specialist almost every word contributed by the speakers and the discussants will be of greatest interest. The average physician or psychiatrist, lawyer or sociologist will at least get some idea of recent trends in psychological penology and forensic psychiatry.

Without any judgment of special value, a few speakers dealing with specific subjects of interest to medical men might be enumerated. Kloeck (Holland) and Schipkowensky (Bulgaria) read papers on the relationship between the fundamental processes and criteria of abnormal thinking, indicated the far greater importance in this connection of affective as against schizophrenic states. Roth (U.K.) summarized the role of ageing and of the organic psychoses. Mental defect and psychopathy were dealt with mainly by Shapiro (U.K.) and Craft (U.K.). Several speakers made contributions to problems arising from the treatment of offenders in mental hospitals and special institutions—among them Stuerup (Denmark), McGrath (U.K.), Rollin (U.K.) and Gibbens (U.K.). There is a fascinating description of twin studies and their implications by Christiansen (Denmark).

Pathology Annual

The third in the now well established series of Pathology Annuals under the editorship of Dr Sheldon C. Sommers, contains chapters on malaria in Vietnam, the histological diagnosis of protozoal disease, histoplasmosis, enzyme cytochemistry, amyloid disease, sweat gland carcinoma, five chapters on various aspects of renal disease, two complementary chapters on chronic obstructive lung disease and emphysema and finally a chapter on the possible cause of non-remyelination in the human central nervous system. A critical review of the book would require almost as many specialists as there are chapters but to a general pathologist it would appear that most of the topics are of current interest and are well reviewed and documented. The volume is well bound and printed on a particularly pleasing paper. The illustrations are good though one wonders if the colour plate of photomicrographs of renal glomeruli is of any great help. With one exception the contributors are Americans (the editor is a Canadian) and most references are to American journals. As with other books, the cost is high and the price has increased by 23s. since last year, but the value is good and similar volumes will be looked forward to in future years.

Growth of the Nervous System

As emphasized by Sir John Eccles in his introductory comments as Chairman of this Symposium, the mammalian brain is the most complex organization of matter known to occur. In attempting to understand this organization, knowledge as to the way in which the nervous system is developed is clearly of fundamental significance, and this is the theme of this Foundation Symposium held in London in 1967. The contributions are collected into four sections, dealing respectively with the development of specific neuronal connections, the development of movement, the role of chemically specific signals in development, and finally 'trophic' interactions between the nervous system and peripheral structures. This is an important area of neurobiology and the papers presented at this Symposium reflect a number of directions in which the subject itself is developing.

Histotechnology Theoretical and Applied. Vol. 1

This is the first volume of a new two volume edition of 'Pearse'. It is planned to publish the second volume in 1970. It covers the general ground of the first part of the last edition including chapters on proteins, carbohydrates and mucosubstances, lipids and phosphatases. A large amount of new material is included particularly in the sections on immunofluorescence, carbohydrates and acid phosphatases. It is a comfort that the author now acknowledges reliance on others for some technical procedures, so rapid is the advancement in this field. The subsequent chapters on the technical methods are included in the appendix. The very high standard of previous editions is maintained and £6 10s. is not too high a price to pay for such an authoritative work.