the time when spectators paid a small sum to go and look at the inmates of Bedlam.

A. A. BAKER.

4. SUBNORMALITY AND CHILD PSYCHIATRY

The Biology of Mental Defect. By L. S. Penrose. Third edition. London: Sidgwick & Jackson Limited. 1963. Pp. 374. Price £2 2s.

Since its first appearance in 1949, this book by Professor Penrose has been acclaimed as a classic. It embodies his approach to mental subnormality as an exact biological science, based on objective observation and precise measurement whenever possible, with full use of special technical resources which have already provided many special contributions to the solution of aetiological problems.

Since the second edition of the book in 1953, sensational advances have been made in cytogenetics. The new discoveries in this field have had special implications for mental subnormality, and it is not without significance that mongolism was the first human condition discovered to be associated with autosomal trisomy. The book has been thoroughly revised (with the assistance of Dr. J. M. Berg and Miss Helen Lang Brown) and explains autosome and sex chromosome anomalies in clear terms with the aid of lucid diagrams.

As in previous editions, the importance of environmental factors has not been overshadowed by the author's genetical interests, and the book expresses a balanced and essentially practical outlook on problems of mental defect. Psychological and social considerations are given full scope, and there is a valuable section devoted entirely to diagnostic aids and treatment. This very readable and authoritative book is to be highly recommended to all concerned with the care and investigation of subnormal patients.

Valerie Cowie.

Speech and Thought in Severe Subnormality. By N. O'CONNOR and B. HERMALIN. London: Pergamon Press. 1962. Pp. 122. Price 25s.

In this book the authors report a series of experiments in which they studied speech and thought in severely subnormal patients. They were mainly concerned with one special group of these patients, imbeciles—defined as patients with I.Q.s 25-50—confined to mental deficiency institutions and mostly children. This book is an important contribution to our knowledge of the difficulties these patients have in thinking and learning, and it suggests how these defects may be diminished by the provision of

suitable experience; the authors' outlook is optimistic. The book itself is extremely condensed, as O'Connor and Hermalin not only report their own experiments but relate them to a clear and logical review of the literature.

Although they set out to investigate speech and thought in imbecile children, in some of their experiments they use normal children of comparable mental age, but chronologically of nursery or infant school age, as a control group. From this it follows that their findings have relevance for the development of speech and learning in young normal children, and this book is very suggestive reading for educationists and psychiatrists who make use of speech in their work with young children.

O'Connor and Hermalin are interested in development and learning from sensory discrimination to abstraction, or coding. They investigate the learning process systematically and this is reflected in the chapter headings: "Visual perception", "Some experiments on words and communication", "Thought and language", "Cross modal coding", "Recall and recognition". They specifically deny that they subscribe to any psychological theory, but their practical findings suggest how the views of Piaget and Luria may fit together. With Piaget and Luria they hold that there are two systems of learning, motor and verbal learning, and that motor learning precedes verbal learning in young children and in imbeciles. They would agree with Piaget that motor learning may continue to develop independently of verbal learning; but they would agree with Luria that verbal learning, or coding, is essential in order to attain the most efficient learning. They disagree with Luria's view that imbeciles are incapable of developing verbal coding, or a second signalling system, and that it is this absolute inability which categorizes imbeciles. In their experiments O'Connor and Hermalin found that although imbeciles had difficulty in complex learning if coding was built-in to the learning situation, they could make use of it and learn to apply abstract principles. The most efficient form of coding is verbal coding and at all levels, from the discrimination of visual shapes to the recognition of printed words, they found that if imbeciles were forced to use verbal coding, suited to their mental level, they could do so and learned more efficiently.

The method employed in these experiments was operant conditioning. The authors have not investigated the influence of the attitudes of adults on the learning of young children and imbeciles. They are extremely cautious in interpreting their findings. They are not attempting to describe a clear-cut programme for teaching imbeciles comparable to

published reading or number schemes for normal children. However, their book does provide a great deal of data which can be used as a basis for planned experiments at the daily living level. One of their practically useful findings was that non-mongoloid imbeciles are better than normal children in their kinesthetic and tactile learning.

This systematic investigation of speech and language in severely subnormal patients might well serve as a model for the investigation of speech and language in normal children. O'Connor and Hermalin point out the need for such research.

ELSPETH STEPHEN.

Education and the Handicapped 1760-1960. By D. G. PRITCHARD. London: Routledge and Kegan Paul. 1963. Pp. 250. Price 28s.

This book challenges comparison with Kathleen Jones' works on the history of progress in the treatment of mental illness. The procedures of dealing with handicapped children have followed a parallel course, if we substitute the word "education" for "treatment", and "school" for "hospital".

There was the same ignorance and superstition and the same occasional forerunner of enlightenment and compassionate treatment of the blind, deaf and mentally defective in the long history before organized facilities existed. The author takes his period of study as from 1760 to 1960. He makes brief reference to earlier provision but his main subject is the history of the public recognition of the special needs of these children in the nineteenth century. The mental defective child or adult was at first not distinguished from the insane. Crippled children and idiots were admitted to the same institutions, some of which survive, having contributed to our knowledge and understanding of the separate disabilities.

The problem of specialization and segregation remains. Education of the handicapped shares with treatment of the mentally ill the aim of integration of the affected individual into the community.

The 1944 Education Act, with its Ministerial powers to make subsequent regulations, has allowed for the provision of special educational facilities for eleven categories of handicap—all to be dealt with within the educational system. Psychiatrists have special concern for the educationally subnormal and for the maladjusted pupil, but it is necessary also to be aware of the provision for other categories of physical and sensory handicap.

There may be an advantage in the use of the word "handicap" to describe defects or disabilities due to inherent or acquired causes. The danger, however, is that these conditions may come to be looked upon

as permanent if the disposal or placement remains a purely educational one. It is true that the word "asylum" has been succeeded by the word "school" and "training" by "education", but there should also be a place for treatment. In this, the psychiatrist has some part to play along with other medical colleagues. Nevertheless, it is necessary for the psychiatrist to have precise knowledge of the statutory and administrative framework within which all provision must be channelled. We owe it to the fact that education for all children is compulsory that children may receive physical and psychological assessment through the School Health and School Psychological Services. The Education Authority has thus become the responsible organization.

In his final chapter, the author states (p. 217) "Section 34 of the Education Act of 1944 retained the principle that medical officers should have a say in the selection of children for special schools. There was, however, one major change. Prior to 1944 the medical officer, by the very act of certification, decided that a child should go to a special school. But Section 34 makes it clear that the decision must now lie with the L.E.A. and that the opinion expressed and the recommendation made by the medical officer are in the nature of advice" (my italics). We may think that this is regrettable but it is the present position.

Fortunately, decisions are usually made on the basis of consultation, and co-operation is made easier when the psychiatrist has some knowledge of the regulations which made the decisions possible.

For this reason alone, apart from the intellectual pleasure of seeing present provision against a historical perspective, this book is essential reading for psychiatrists working in child psychiatric or child guidance clinics.

J. H. KAHN.

Test d'imitation de gestes. Techniques d'exploration du schéma corporel et des praxies chez l'enfant de 3 à 6 ans. Par J. Berges et I. Lezine. Paris: Masson. 1963. Pp. 120. Price 33 NF.

In clarifying the development of gnosia, praxia and the body image in infants of 3 to 6 years, the authors have studied infants' ability to copy gestures of varying complexity of form and direction. Throughout they accept the general view of the maturation of the motor nervous system and also Piaget's theory that whereas the infant copies gestures by mimicking the movements involved (visuo-kinetic) the older child does so by forming and then acting upon his own mental image of a