

diffraction analysis, whether by X-rays, neutrons or electrons, is inadequate; but with few exceptions the quality of the articles and definitions is good at an intermediate level of knowledge. Most of the articles are less than 1,000 words in length although a few are much longer and some consist of brief definitions; but 89 pages out of a total of 886 (that is, 10 per cent of the volume) are devoted to a list of isotopes and their properties. This list is presented on successive pages and gives somewhat more information than the usual tabular form permits. I am not sure, however, that the middle of an encyclopaedia is the right place for it: there might be quite a demand for a separate booklet containing the information presented.

The *Encyclopaedia* has no index, and this at once raises the problem of how easily information is to be found. This has been tackled by entering terms in more than one word order with appropriate references, and by cross-references to related articles; but only partial success has been achieved, and I think that an orthodox index might well be included in any further edition.

I did not notice many misprints—"Van der Waals'" for "Van der Waals" on p. 82, and "Zircalloy" for "Zircaloy" on p. 108 are all I spotted—but I did notice in the symbolism a lack of conformity with the usually accepted conventions. Thus we find such symbols as ${}_{34}\text{Se}^{70}$ instead of ${}^{70}_{34}\text{Se}$ throughout, and $n/\text{cm}^2/\text{sec}$ instead of $n/\text{cm}^2 \text{ sec}$.

The volume is well produced, easy to read and easy to handle. It should prove to be extremely useful to those who wish to look up a point of interest without having to consult more weighty books of reference, and would seem to justify Dr. Kronberger's remark in his foreword that "its place is on the desk not on the shelf".

J. THEWLIS

ASPECTS OF CHILD PSYCHOLOGY

Readings on the Exceptional Child

Research and Theory. Edited by E. P. Trapp and P. Himelstein. Pp. xii + 674. (The Century Psychology Series). (London: Published by Methuen and Co., Ltd., 1962.) 55s.

THIS is an excellent hand-book edited by Trapp and Himelstein, both of Arkansas University. It contains forty-eight chapters divided into sections, and covers a wider field than the title leads one to expect.

The first section is concerned with studies of children of exceptional intellectual processes and discusses not only the mentally deficient but also the intellectually gifted. This is followed by a section on exceptional sensory and motor processes, which includes the aurally and visually handicapped, the speech handicapped, the brain damaged, and the physically handicapped. A final section is devoted to emotionally disturbed children. These sections are preceded by three introductory chapters which discuss, in turn, the incidence of exceptional children (in the United States), the functional classification of exceptional children, and the meaning of research. There are also two excellent indexes, one of names and one of subjects. In addition, each chapter has its own list of references, and although each is written by a different author, the book is well compiled with a sense of continuity throughout, and reveals careful editing.

The book's sub-title *Research and Theory* probably gives a fair picture of its contents. Most of the chapters are written by well-established authorities, but there are also accounts of original research not previously published. The editors state in the preface that this is a novel feature of the book, and that their aim throughout has been to include studies which will stimulate research. The main emphasis, in consequence, is on the contemporary scene, although occasionally a subject may be treated historically

because from this angle have branched many fruitful lines of investigation.

The mentally deficient child has received most attention, and seventeen chapters in all appear in this part of the book. One chapter of interest is that devoted to the concept of pseudo-feble-mindedness in which the work of the Clarkes is mentioned, one of the few references to British psychologists. The author of this chapter distinguishes two meanings of pseudo-feble-mindedness which are mutually exclusive. One occurs when a mistaken diagnosis has been made, the other is described as a condition of mental deficiency which can be ascribed to factors other than those customarily held to be the conditions of mental deficiency. The writer complains of the indiscriminate usage of this term, and the failure to separate these two meanings. Even in the same article or report they may be confused.

Other chapters in this section include a historical survey, the concept and classification of mental deficiency, and the measurement of rigidity. The latter by Zigler is a well-written and valuable study with a critical survey of the work of Lewin, Kounin and Goldstein. There are also chapters on different aspects of learning and of reasoning in the mentally deficient. The final chapter in this section considers the effects of a severely mentally retarded child on the family, an important consideration. These titles may serve to indicate the scope of this portion of the book.

Terman's longitudinal studies of the gifted child form the focal point of the next section, and a useful summary is given of this research. It contains an account of the data obtained at school age, and traces the careers of the children from school to their subsequent life-work and status at middle-age. The contributions provide supplementary interesting material on the educational and personal problems centring round the highly intelligent child. The attitude of teachers of gifted children is described as negative in some instances.

The deaf and the blind are adequately presented and point the way to further research. Writings on the brain damaged and on the physically handicapped occupy eleven chapters, all of them are absorbingly interesting and yield valuable information of recent studies. These include studies of disorders of conceptual thinking in the brain-injured child, and the use of certain perceptual measures of brain injury with mentally retarded children. Other relevant discussions, to mention a few of them, are concerned with the effect of distraction on the performance of brain-injured; concrete and abstract thinking in organic and non-organic mentally retarded children; motivation, adjustment and anxiety of cerebral-palsied children.

The final section (Part 4) of the hand-book gives some indication of the problems of emotional difficulties, and although there are only six chapters in this section, they provide interesting reading. School phobia is discussed as is also the use of tranquilizers. The present trends in schizophrenic research and its implications for childhood schizophrenia form the material of one contributor, followed by a separate discussion by a different author on the parental attitudes of mothers of schizophrenic, brain-injured, retarded and normal children. Other chapters in this section are equally important.

Considered as an entirety, this is a valuable book. The title is misleading because it is delimiting. The contents are more than readings; they are sources of information and incentives for research. The term 'exceptional children' has a wider connotation in the text than the generally accepted definition. This book can be recommended to all interested in children, and to professional workers of different disciplines. It will also serve as a guide to students in the fields covered in the text, and certainly will be a valuable addition to many libraries. It is also an excellent supplementary book to students of child psychology.

MARY COLLINS