Cancer in Childhood and Youth. By SIGISMUND PELLER. (Pp. xii + 291; 29 figures. 42s.) Bristol: John Wright. 1960.

Although the title might suggest a wider field, this book is a thesis on the causation of tumours in childhood.

The opening chapter summarizes the distribution of cancer in children and in adults. To account for the striking differences, the author advances the hypothesis that the neoplasms of early life are induced during intrauterine life by 'cancerogens' transmitted across the placenta and subsequently disseminated by the foetal blood stream. The restricted period of carcinogenic exposure explains the age incidence of tumours in early life, whilst the mode of distribution could account for the sites affected. The remainder of the book is largely devoted to an elaboration of this concept, by analysis of available statistical data accompanied by numerous excursions into embryology and other fields.

Cancerogens, once they have entered the foetal circulation, act first and foremost on the vascular endothelium which 'generates lymphocytes through some period of embryonal life'. Thus (according to the author) 'it is evident why a systemic form of neoplasia—leukaemia—is the predominant form of cancer in childhood, and why the predominant form of leukaemia is lymphatic'.

Considerable evidence is amassed to show that in the foetal heart the caval blood streams do not mix appreciably. The result is that the cranial end of the body receives blood which is richer in oxygen, nutrients—and cancerogens. In this is seen an explanation of the incidence of brain tumours in childhood, ranking next to leukaemia. The fact that the bulk are located in the hind brain is accounted for by highly theoretical considerations of blood supply. At this juncture the author raises the démodé theory of cell displacement as a sort of Aunt Sally, and proceeds to demolish it by mathematic calculations based on quite fictitious parameters.

When brain tumours are excluded, the suggestion that there is a crano-caudal gradient of tumour incidence rests on dubious grounds. Thyroid cancer is alleged to be far less rare than is usually assumed, and on the basis of a compilation of relevant literature in 1905 bone malignancies are stated to be most common in the head and neck. The high incidence of neuroblastoma in the adrenal is supposed to be due to the liberation of 'cancerogens' in the breakdown of the intermediate ('foetal') cortex, though this does not account for the relative incidence of extra-adrenal neuroblastoma in various sites. The frequency of nephroblastoma is attributed to the fact that immature (and hence 'cancerogen-susceptible') tissue is present in the kidney through the greater part of gestation. Precisely the same observation might have been advanced in respect of the brain.

To the reviewer, this book seems to contribute little of value in what is an important field of research, despite the obvious industry of the author. Both speculation and logic have a legitimate role in biological inquiry, but over-indulgence in either can lead one far from reality. Occam's razor is an indispensable research tool.


Paediatricians and psychologists, some of whom are psychiatrists, differ in some respects in the treatment of children. This partly because general practitioners refer different problems to them and partly because of a difference in their training. Even so there is much in common. Throughout the book one gets the feeling that the paediatrician is out to learn avidly from the psychologist or psychiatrist. Conditions like constipation, recurrent pain, suppositories, etc., the crying infants all have organic and psychological causes. It is important to be able to establish the diagnosis and furthermore to be sure that treatment has been satisfactory. In the descriptions there might be more precision. For example, in the section on recurrent pains in children, it was late in the discussion that Dr. Apley, who read the opening paper, told us that approximately 50% of the organic cases had renal disease (reminding me of Sir Robert Hutchison's remark to me in the Membership that I was like an old lady who put everything important in the postscript). In other words the busy general practitioner, paediatrician or psychologist who reads this book has a lot of sifting to do. Much chaff has been blown away. Apologies for lateness, superfluous phrases of speakers introducing themselves, congratulations and thanks are examples of words which could be cut out thus reducing the high price. Similarly, many of the speakers would probably have gladly accepted the editor's offer to convert their extempore speech into concise English.

The corn that remains after the sifting is good. The clue to a child's illness may be found by delving into the family history, for imitation of others including animals is frequent. If the chapter on 'Learning theory and personality development' is hard reading, it is fully repaid by the stimulus provided and shows that there is much to apply from study of basic psychology. A special word of praise must be given to Anna Freud for answering paediatricians' questions.
BOOK REVIEWS

Organic illness is diminishing. The well-nurtured child often presents psychosomatic problems. Clinical and psychiatric views must be correlated. The book convinces one that the good doctor must understand psyche and soma.


The first edition of this well-known book was published in 1945 and a new edition has appeared almost every three years. The whole book has been revised and the chief alterations are to be found in the chapter on complications, so that sections on atelectasis, kernicterus, staphylococcal infections and antibiotics have been rewritten, as also the chapter on mortality due to prematurity.

There are eight chapters dealing with definition and characteristics, management and care, hospital care, home care, clothing, feeding, complications liable to occur in the premature baby, and prevention of mortality due to prematurity; and finally there is an Appendix with statistics from the Sorrento Maternity Hospital. The titles sound simple, but there is a wealth of information, and for those who want more there are good references at the end of most chapters. This book is small, well printed and very easy to read, and reasonably priced; and all those many people interested in and working with small babies should possess this new edition.

Since it is hoped that there will be new hospitals, it would be most helpful if someone like Dr. Mary Crosse would devote a chapter to the problem of the creation of a new premature or special baby care unit, perhaps in the next edition.


This excellently produced book contains over 100 scientific papers from 40 countries, presented at an international goitre conference. As indicated in the title, the stress is heavily on research; and nowadays in the thyroid field that involves the use of isotopes, mainly I^131. Paper after paper deals with some investigation carried out with this material, and this makes for difficult reading by those unfamiliar with the necessary techniques. A great deal of the work is concerned with the biochemistry of the iodine-containing compounds present in the thyroid, and this is welligh unintelligible except to the experts who use this vocabulary as an everyday tool. The book is intended for specialists and for them it will be invaluable. No need to search the 'relevant literature', it is all here. A good deal of the research reported is repetitive; and this enhances its value to the expert, for similar results obtained from three or four widely separated countries are very unlikely to be at fault. It is a measure of the complexity of the subject, that, in spite of the massive endeavour herein documented, so much still remains to be discovered, e.g. we still do not know just how thyroxin exerts its specific effect.

There are a few papers of interest even to the clinical paediatrician: two of them are on simple goitre with congenital deafness (Pendred's syndrome); a perplexing contribution on the persistence of hyperthyroidism even after complete destruction of the pituitary; a study of exophthalmos in Graves' disease, demonstrating that thyrototoxicosis and the eye changes are entirely independent of each other; an interesting series of papers on endemic goitre from different regions: Sheffield, Argentine, Switzerland, Jugoslavia; a collection of 556 thyroid carcinomata in children, and a couple of fascinating (but difficult) articles on endemic cretinism, which show that lack of iodine and aplasia of the thyroid are by no means the whole story and that some cretins are actually euthyroid.

In addition to the scientific contributions, the book includes the presidential address, an historical survey by the late president of the American Goiter Association, and the Dunhill Memorial Lecture. This latter, by Sir Geoffrey Keynes, is a labour of love and a joy to read.


In order to keep its public abreast of recent developments in therapeutics, the British Medical Journal has for some time contained a weekly contribution dealing with some aspect of newer drugs and their administration. These have now been brought together in one volume obtainable for 35s. Without being exhaustive, the contributors have contrived to cover a large section of the treatment of medical conditions. This collection of papers, therefore, will find a ready public which can bring itself up to date with the minimum of trouble on the treatment of a great number of conditions with many therapeutic agents. Of particular interest to paediatricians are articles on 'Sedatives for Children' by R. S. Illingworth, 'Pneumonia in Children' by W. F. Gaisford, and 'Paediatric Prescribing' by the latter. While they will not benefit in their speciality by reading the article on 'Prescribing for Old People', they will, nevertheless, in most of the sections find a great deal that bears on their subject or which has direct application to children and childhood diseases.


This book from the Gothenburg obstetric hospitals illustrates the benefits of sharing a complex problem between various disciplines. Four differently treated large groups of pregnant diabetic women are compared; the best results, both for mothers and children, were obtained by team work, with consistent and strict supervision and meticulous control of the diabetic state.