

of the lamb, using the then new technique of cine-angiography, and much the same methods have now been used in these human foetal studies and with a very similar physiological pattern emerging.

The rapid, complex, and interdependent sequence of changes that takes place immediately following birth, however, though now moderately well understood in the lamb from the work at Oxford of Barclay *et al.* and later of Dawes, urgently required defining in the human, if only to provide clinicians treating sick newborn babies with a rational basis for their efforts. It can be said that the Swedish workers have gone far towards clarifying what happens at birth to the systemic circulation. The clinically important matter of shunts through the foramen wall and ductus is, for instance, most effectively illustrated here. The lesser (pulmonary) circulation, however, still remains more elusive and at the moment stands out as the most obvious challenge to physiologists in this field.

Although only 49 pages long, the book contains hardly a wasted word and certainly no uninformative illustration, and it seems likely that despite its modest size this splendid monograph will take its place beside the two earlier classics of foetal physiology, those by Barcroft and by Barclay, Franklin, and Prichard.

Pediatric Therapy. Edited by HARRY C. SHIRKEY. (Pp. 1144; 343 figures + 51 tables + table of dosages. 123s. 6d.) Saint Louis: C. V. Mosby; London: Henry Kimpton. 1964.

This book aims to cover the whole range of the therapy and management of paediatric illness. It is edited by Prof. Harry C. Shirkey, the Director of the Children's Hospital, Birmingham, Alabama, and primarily a pharmacologist, who has enlisted the aid of 71 collaborators. As might be expected from this, the emphasis is pharmacological and certainly the quality and standard of the sections dealing with drugs are of great value and interest. With so many different authors it is not surprising, however, that there is on occasion a lack of balance in the amount of space allotted to different subjects: for example, the treatment of enuresis is covered in less than 2 pages whereas the chemotherapy and radiotherapy of neoplasms takes 38 pages, and the management of haemostatic defects 13 pages—albeit an excellent chapter in its own right. The psychological aspects of enuresis and abdominal pain scarcely receive a mention (constipation is stated to be the commonest cause of abdominal pain in children), while the psychological aspects of obesity are mentioned at great length and the impression is given that diet is of practically no importance, and no diet sheet is given. Individual authors have obviously been given a free hand to present their own views, for in the section on nutritional therapy, which precedes that on obesity, the author advocates an exactly opposite régime in the management of obesity, recommending a strict diet and saying that psychotherapy is of no proven value. The authors of the chapter on diabetes mellitus advocate a free diet, and one looks in vain for guidance on dietary control in this disease.

Other sections that seem to be inadequate include the

section on vomiting in infancy in which neither pyloric stenosis nor hiatus hernia receive a mention, the subsection on hyperpyrexia, in which overclothing is not mentioned as a cause, and the treatment recommended is to place the child in an ice-water bath. Some of the opinions on surgical subjects are at least questionable: one wonders whether E.N.T. surgeons would agree with the advocacy of myringotomy in otitis media, whether paediatric surgeons would agree that there *never* is any place for hormone treatment in undescended testes, and that the diagnosis of intussusception 'may sometimes be made on clinical grounds but a barium enema is generally necessary for confirmation of the diagnosis'.

The home treatment section is fascinating both for what is mentioned and for what is omitted. Enemas are discussed in detail with a list a page and a half long of different types of enemas, and there are some frightening illustrations of hot-water bottles which can be adapted for use as an enema syringe. Mention is made of vaginal and perineal irrigation and of the solutions that may be used to wash out the throat, ears, nose, and eyes. The use of heat as a form of treatment is discussed with some care, and nothing is left out—even the use of potatoes in their jackets is mentioned. There is, however, no mention of the necessity of avoiding overclothing the baby with a febrile illness in order to avoid hyperpyrexia and convulsions, though we are warned not to leave the child in his sitz bath while we answer the telephone or the front door.

However, other sections are better balanced and well presented; for example, the sections on cystic fibrosis of the pancreas and on poisoning. The lists of drugs excreted in breast milk or transmitted through the placenta are useful, and the only quibble one can make with the otherwise excellent pharmaceutical aspects of the book is to regret that the author agrees with the use of Latin in prescriptions and that on occasions, even in the same chapter, some dosages are given as mg. per kg. and others as mg./m.² of body surface. Surely uniformity would have been better. There are numerous illustrations throughout the whole book, most of which are good and some excellent.

This book is one that we hope will improve in future editions: at present it is more useful as a reference book on the uses of various drugs than on the actual management of disease. If the dead wood were removed, and the standard of the whole book uniformly raised to the level of its best chapters, it would indeed be excellent.

Lehrbuch der Pädiatrie. 7th ed. By G. FANCONI and A. WALLGREN. Pp. xii + 1145; 713 figures + tables. SW. Fr. 98.) Basel and Stuttgart: Schwabe. 1963.

This is an excellent compendium of Continental paediatrics, contributed to by over 20 specialists covering all aspects of paediatric practice. In keeping with modern advances in practice and in research, the authors have brought in younger contributors, all specialists, and this has been achieved without great alteration to the main text. The standard of the chapters still maintains the high example set by their predecessors, the schematic

presentation of the material is excellent throughout, and the picture diagrams are of great benefit to the reader. The book is beautifully illustrated with the emphasis on clinical teaching.

Diseases of waning significance, i.e. vitamin D deficiency rickets, acrodynia, and other vitamin deficiencies have been reduced in length, but the size of the book has not altered; though it is perhaps a formidable size for undergraduates, it is nevertheless an extremely valuable teaching and reference book for paediatricians and practitioners alike. It should hold a high place in international paediatrics.

Information is readily obtained by virtue of a detailed index covering more than 80 pages.

A revised English edition is eagerly awaited.

Down's Syndrome. A Clinical and Cytogenetical Investigation. By KARL-HENRIK GUSTOVSON. (Pp. 196; 34 figures + 5 tables. SW.Kr. 28.) Stockholm: Almqvist and Wiksell. 1964.

The main and original part of this investigation deals with a cytogenetic and clinical study of 119 subjects with Down's syndrome or suspected Down's syndrome, referred to the Institute for Medical Genetics at Uppsala since 1959. Of these persons, 57 were referred because the diagnosis was in doubt, 18 for counselling because of young maternal age (30 years and less), 9 because of a positive family history, and 35, all born to women over 30, for other reasons.

In 18 of the 57 patients whose original diagnosis was in doubt, a diagnosis of Down's syndrome could not be confirmed clinically when they were reviewed and, of these, 16 had a normal chromosome make-up, one had a chromosome anomaly difficult to relate to Down's syndrome (Case 6), and one was a chromosome mosaic of normal and 21-trisomic cells. In the other 39, in whom a confident clinical diagnosis of Down's syndrome was made, the cytological findings confirmed the clinical assessment.

There were 5 patients with chromosome translocations, in one between a presumptive 21 and a member of group 13-15 (D/G), and in 4 between a presumptive 21 and another member of the 21-22 group (G/G translocation). Excluding familial cases there were 33 infants of younger mothers (30 years and younger at the birth of the affected children) four of whom carried translocations, and 60 children of older mothers only one of whom carried a translocation. None of the translocations was apparently inherited, though in one G/G translocation the father

could not be studied chromosomally. A study of the five families with two Down's syndromes in the sibship, and of one family with two in the kinship, showed that the index cases were trisomic for chromosome 21 (one was a mosaic), that the three secondary cases that were examined were also trisomic 21, and that the parents were chromosomally normal.

Of the 119 patients in this survey the author personally examined 111, and a part of the report is devoted to the analysis and discussion of the clinical aspects of Down's syndrome.

The clinical and cytological features of the cases studied are summarized and tabulated in the Appendix.

Abnormalities of the Sex Chromosome Complement in Man. (Spec. Rep. Ser. med. Res. Coun. (Lond.), No. 305.) By W. M. COURT BROWN, D. G. HARNDEN, PATRICIA A. JACOBS, N. MACLEAN, and D. J. MANTLE. (Pp. viii + 239; 3 plates. 27s. 6d.) London: H.M.S.O. 1964.

The main object of this report is to make available to those interested in human genetics and cytogenetics, particularly, data collected since 1959 in connexion with the Registry of Abnormal Human Karyotypes set up in the Medical Research Council's Effects of Radiation Research Unit in Edinburgh.

The first two parts are introductory and deal with techniques and with the methods of detection of human sex-chromosome anomalies, and summarize briefly the abnormalities of sex chromosomes that have been described in the literature and that are relevant to the third part of the report. This forms its bulk and gives in detail the cytological, clinical history, and other findings in 266 individuals with sex chromosome abnormalities and discrepancies, reported to the Registry and studied from 1959 to the end of 1962.

Most of the subjects are adults, but there are some children, either specially referred, for instance for investigation of failure to grow satisfactorily, or discovered because of neonatal signs (e.g. congenital lymphoedema and webbing of neck) and in the course of routine nuclear sexing of newborn babies. Of the 266 persons, 134 have a male phenotype (99 are XXY and 24 have sex chromosome mosaicism), 128 are of feminine appearance (38 are XO, 33 are XXX, 22 are sex chromosome mosaics, and 26, among whom 20 are thought to be examples of testicular feminization, have an XY complement), and there are also 5 true hermaphrodites. The information in each case is clearly set out and the authors are to be congratulated on making their carefully collected data available to those interested in this rapidly expanding field.