Book Reviews


The January 1966 number of the British Medical Bulletin is devoted to a progress report of current research on 'The Foetus and the New-born'. It will be remembered that the May 1961 number of the Bulletin, on 'Foetal and Neonatal Physiology', promised considerable advances in the coming years, and those who contributed to that volume may well be proud of the advancements that have been obtained, particularly perhaps in this country, in the intervening few years.

One outstanding impression gained from reading these 19 reviews is the highly scientific character that has now entered into a field which, perhaps more than any other in medicine, was for so long the fruitful source of non-critical, if well intentioned, 'clinical research'. Another is of the closeness of the co-operative effort, already launched in 1961, so that it is scarcely possible, from one contribution to the next, to detect whether the work has come from the clinician or the worker in the laboratory. So it is, for instance, that 'Alveolar Surface Properties of New-born Lung' (McCance in his Foreword complains of 'pulmonary surfactants' as one of the new horrors of jargon) is the work of E. O. R. Reynolds and L. B. Strang in the Paediatric Department of University College Hospital, while Kenneth Cross from the Physiology Department of the London Hospital, in a characteristically delightful and authoritative contribution can instruct paediatricians and obstetricians on the 'Resuscitation of the Asphyxiated Infant' and, indeed, takes it upon himself to raise his professional eyebrows and wag his scientifically-minded finger at the uncritical claims made successively for intragastric oxygen, analeptics, hyperbaric oxygen, and hypothermia, and needs to remind them of the W.H.O. working party's recommendation 'that new methods of treatment should not be used on human infants until they have been adequately tested by appropriate animal experiments'.

The 19 contributions cover an immense area of basic and applied research: the physiology and pathology of placental functions; the wide range of papers on the physiological, biochemical, immunological, and neurological aspects of neonatal functioning; on pulmonary and cardiovascular adaptations of extrauterine life, and on the heart regulating mechanisms, and the mechanisms controlling metabolic activity.

Each one of these contributions should be read and absorbed by all paediatricians, as well as by those obstetricians who still undertake the care of the newborn. Though the reviewer picks out as a personal choice, for the newness of the ideas applied to a well-accepted concept, the contribution by A. N. Davison and J. Dobbing on 'Myelination as a Vulnerable Period in Brain Development', David Hull's contribution, because it brings him up to date so concisely on the structure and function of 'Brown Adipose Tissue', and, for its exciting though disturbing implications for the future, 'The Maintenance of the Isolated Foetus', by D. Pauline Alexander, H. G. Britton, and D. A. Nixon, no contribution is obscure, dull, or badly written, and each one gives an admirable summary of the present state of knowledge and of the problems still to be solved.

Michael Dawkins was to be the Scientific Editor of this number until his tragic death last summer, and the Bulletin pays a fitting tribute to the loss that has been suffered by the world of medical research. His own contribution, completed just before he died, stands as a monument to all that he would have contributed to paediatrics and physiology.

Professor Cross and his editorial group are to be congratulated on giving us an example of the best that can come out of British medicine and research.


In September 1964, the University of St. Andrews organized a symposium to cover all aspects of knowledge relating to the early conceptus. This brave undertaking brought together experts in many fields of science. 21 papers were given in 5 sessions devoted to the requirements for normal nidation, the influence of drugs on embryogenesis, the clinical and pathological aspects of abnormal trophoblast, the cytogenetics of foetal mal-development, and trophoblast as a homograft.

The individual papers suffered from this very wide...
range of subjects, and tended to be brief reviews of work published in full elsewhere. This superficiality and lack of originality is really inherent in a symposium of this type and does not reflect on the undoubted distinction of those who spoke.

The reader will be grateful to find so much diverse information compressed into one volume and the good bibliography of each paper will provide a guide to further reading.


This is a record of a symposium on foetal and neonatal medicine held in Bad Schachen, Western Germany, in May 1965. It was attended by 32 paediatricians and obstetricians (all except 2 coming from Western Germany) and they must have worked hard to deliver and discuss 31 communications in 2 days. Subjects were divided into: disturbances of adaptation of the newborn; therapy of asphyxia; prematurity; and neonatal infections.

The first of these was concerned with foetal and placental physiology, with contributions by E. Saling and F. Kubli, obstetricians whose observations on the blood gases and pH of foetal blood samples during labour made the discussion on foetal distress particularly valuable. G. von Mural reported that maternal-to-foetal bleeding was not uncommon in normal deliveries.

Other subjects discussed included most of those that regularly feature in symposia devoted to neonatal medicine—diabetic pregnancy, respiratory distress syndrome, the use of THAM in the newborn, postnatal hypoglycaemia—subjects that are currently occupying the attention of workers in many centres, and to which these authors were able, here and there, to contribute new, interesting, and occasionally important observations. Therefore, though this symposium seems to have covered quite similar ground to that of other symposia such as the Ciba ‘Somatic Stability of the Newly Born’, held in London in 1961, and the Nutricia ‘Adaptation of the Newborn Infant to Extra-uterine Life’, held in Groningen in 1964, any worker in this discipline with at least a smattering of German will find it well worth his while to scan this account.

The book is admirably produced with many diagrams and adequate references, amongst which the reader ignorant of the German literature will certainly discover some useful papers.


In a sagacious forward Sir Wilfrid Sheldon writes: ‘I found the reading of this book most stimulating, perhaps because it set me thinking and asking myself innumerable questions . . . ’ Compiled not for physical medicine specialists but for paediatricians, surgeons, and general practitioners, it will set them thinking too, and answer some of the important questions that are increasingly being asked about the care of children.

The editor first describes the scope of physical medicine and the aims of treatment, and summarizes the crucial differences between paediatric and adult physical medicine. A fine chapter on growth, by Tanner, is followed by one on ‘Physical Fitness’ which shows not only that more problems of physical development than of organic disease are referred to the physical medicine department, but that the old idea of regimental ‘physical jerks’ is now being superseded. A chapter on posture includes a good description of skeletal growth, muscle tone and balance, and neuromuscular control. After these broad discussions come the more detailed practical sections: orthopaedic disorders including poliomyelitis; cerebral palsy, with a reasoned and wide approach to the problems of the whole child; electrodiagnosis, hypotonia, and ‘the floppy infant’; rheumatic diseases (without acute rheumatism); a useful and well-illustrated chapter on chest disorders; and finally one on convalescence.

It is a welcome sign of the times that a book on ‘physical medicine’ deals with so much more than the narrow physical aspects. Quotations from the chapter on cerebral palsy, as an example, are almost an epitome of modern paediatrics. ‘Cerebral palsy cannot be dealt with as a matter of physical medicine alone . . . in treatment and management the child must be considered as a whole and as part of the family, and not merely as something for which a certain amount of bending and stretching can be prescribed.’ ‘As adolescence approaches, stabilization of the personality becomes of greater importance than stabilization of the trunk and limbs, for it is on the child’s personality that his ultimate adaptation to society will depend.’ If there are still doctors who scribble on a form ‘For physio’, and leave it at that, they will do well to read what the team of enthusiastic experts who write in this book say so well; and they will discover how broad and how rewarding has become what was once a limited and rather dull form of therapy. Those who try to help the child in every possible way will be grateful to the editor and his colleagues for providing a book, focused not on techniques and minutiae (important though they are), but on principles of diagnosis and treatment, to which they will constantly be referring.


There is little specifically paediatric about the electrocardiography in this book. A considerable portion of this small volume is devoted to a brief account of the general aspects of electrocardiography including recorders and routine interpretation. To a reader quite