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 maldevelopment, and trophoblast as a homograft.

The individual papers suffered from this very wide