The suggestion has indeed been made that all normal midwifery, whether for rich or poor, should be conducted by midwives, supervised and assisted in abnormal cases by competent consultants, the role of the general practitioner being limited to that of anæsthetist, &c. The same end would be reached by making the general practitioner a competent consultant, hence the insistence laid by the General Medical Council upon the improved education of the medical student in the principles and practice of obstetrics and gynæcology.

The suggestions made by Dr. Janet Campbell herself [in her report as Senior Medical Officer for Maternity and Child Welfare, British Ministry of Health] for securing a reduction in the excessive maternal mortality, group themselves under three headings :—

(1.) An improvement in the quality of the professional attendance, as regards both medical students and midwives.
(2.) Action through the Public Health Department of the local authority with a view chiefly to securing adequate ante-natal and post-natal care of all pregnant women, whether in an institution or in their own homes.
(3.) Various social and educational measures in which the help of the community as a whole is called in.

SECTION 4.—INJURY TO THE INFANT INCIDENTAL TO CHILDBIRTH.

Until the last few years there has been singularly little professional interest manifested in the fate of the child during and soon after delivery: still-births have passed almost unnoticed, and deaths soon after birth have been generally recorded as due to prematurity or congenital debility, and regarded as not worth serious consideration. Leading authorities on midwifery and gynæcology have admitted this attitude—notably Sir Alexander Simpson, who said that nothing in his long professional and professorial career at Edinburgh University stung him in the retrospect with more sharp regret than the fact that in his preoccupation with the mother he had virtually forgotten the child. Yet for half his life Sir Alexander was the sole lecturer on children, as well as teacher of obstetrics to the medical students, and the yearly hordes of doctors graduating at Edinburgh naturally entered on practice sharing the views of their teacher. Such views are cleverly, though cuttingly, conveyed in a remark which occurs in the preface to the exhaustive and authoritative monograph on "Birth Injuries of the Child," by Dr. Hugo Ehrenfest, of St. Louis University, published recently in America. He says :—

There is much evidence rapidly accumulating which tends to show that many of the conditions, still rather loosely classified as congenital, as a matter of fact are but the later manifestations of traumatic lesions [injuries] sustained at birth, lesions which remain unrecognized in the new-born, possibly because their symptoms were insignificant, and more probably because the obstetrician failed to examine the new-born with the necessary care, or left, as is the custom, the observation of the behaviour of the infant during the first few days of life entirely to a more or less competent nurse.

Modern conceptions of the causation of birth injuries of the child place on the obstetrician not only the task of preventing them so far as this is possible, but also the responsibility for recognition of their presence at the earliest possible moment. He must cease to regard the new-born as the *unavoidable by-product of his essential function of separating the mother from the fœtus*, as facetiously but with a justification recently remarked by a leading pediatrician. . . .

Injuries of the Skull-bones.

Dr. Ehrenfest introduces this chapter, which deals solely with injuries incurred in the course of delivery, with the following extremely significant paragraph :—

The elasticity of the flat cranial bones, and their mobility against each other within the extent of the sutures, afford to them unusual protection against serious traumatic injury, even if a definite disproportion between pelvis and head necessitates an excessive degree of moulding. Therefore, *the more serious traumatic lesions, as a rule, are seen only after labours terminated by forcible means.* Cranial-bone injuries usually are divided into indentations, fissures, and actual fractures. In the individual case such exact differentiation may be impossible. Deeper indentations, probably more often than suspected, are associated with fissures or fractures, recognizable only during a subsequent operation or at autopsy. *Fissures really are only special types of fractures.* . . .

Intracranial Injuries.

Of all injuries to the head caused by the trauma of birth those affecting the contents of the skull, brain, and meninges are most important. This fact is duly appreciated in older medical literature. It always seemed obvious that all severer injuries of the cranial bones, such as deep indentations and guttered fractures, as a rule, will also damage intracranial structures. . . . In considering this topic historically it seems striking that it was not the obstetrician but the neurologist who first manifested interest in the clinical aspect of the problem.

Dr. Little, of London, in a paper published in 1862, asserted that cerebral spastic palsy in children is a result of an intracranial hæmorrhage in about three-fourths of all instances.

We shall consider further on, in detail, the views of other neurologists concerning the relation of brain trauma at birth to the later physical and mental development of the child. It suffices to say here that the neurologist manifested a keen interest in this problem early, and has maintained it ever since. In chronological order the pediatrician came next. The last to enter the field was the obstetrician. . . . Without fear of contradiction I make the assertion that in a large number of cases to-day definite symptoms of intracranial injuries during childbirth are overlooked. The obstetrician of to-day still fails to appreciate his responsibility in this matter.

The student of the extensive literature devoted to these lesions must keep in mind the important fact that exact and reliable knowledge concerning the intracranial hæmorrhages of the new-born infant has been gained only within the last ten years, and that many of the older contributions, still extensively and rather indiscriminately quoted by recent writers, often express nothing but mere surmise or theory. *It is a deplorable fact that modern text-books of obstetrics in this question of the cranial birth trauma express entirely erroneous views, and in elaborate statistics of neonatal mortality practically never mention or classify the one important and common cause—viz., intracranial traumatic lesions.* . . .

Regarding the use of pituitrin, Ehrenfest says :—

When a large dose is given the fœtal head is often quickly forced through a not fully effaced cervix. In studying the numerous detailed records of severer brain-injuries in literature one cannot fail to notice the frequency with which the administration of pituitrin is mentioned in these histories. . . . We find Sidbury, Neff, and Porter, among others, expressing their belief that pituitrin was undeniably responsible for many fatal hæmorrhages that they had seen in new-born infants.