The Midwife.

The Murslings.*

To the baby enthusiast Pierce Budin's book is full of suggestions and inspiration. It is a valuable and unique text-book for those who make the care of the infant a scientific study. Every conclusion is based on a multitude of careful observations; the author's large clinical experience gave him opportunities of putting to the test existing methods, initiating new lines of treatment, the value of which are to be estimated by the results, and of decrying the old fallacy of instinctive knowledge as a guide to what is increasingly recognised as a subject for a specialist.

Pierce Budin (born in 1846) was Head of the Obstetrical Department at the Charité and Maternité in Paris, where he reorganised the service; he initiated the struggle against infantile mortality in France, a problem even more acute there than it is here.

He was strikingly successful in his war against diarrhœa; his methods are justified by the very excellent results; and the origin of the many admirable modern institutions for dealing with nurslings is directly or indirectly due to him. In "The Nursling" we have the lectures delivered to his students; each point is illustrated by cases personally observed by him. Here are no dry bones of theory and speculation; there breathes throughout enthusiasm and the minute attention to detail, which make for success; and if we hesitate in accepting his conclusions we are forced to admit that our objections are not based on experiment. Take, for example, the question of giving hand-fed infants sterilised unmodified cow's milk; he warmly advocates this. Are, then, our elaborate prescriptions and calculations, our fussy and careful humanising of milk unneces-sary? It is upsetting to our axiom that a young infant cannot digest the casein of cow's milk; yet in the face of Budin's results, which show that the children steadily throve and increased in weight, and completely escaped the scourge of cholera infantum, which worked havoc among others whose feeding was not supervised, we can-not but say "Have we the best method?" In seventy-six of the largest towns of England and Wales there were 14,306 deaths from diarrhœa in three months! The first four chapters are devoted to the Premature Infant. The points insisted upon are:-

1. The necessity of preventing the weakling from becoming cold, as a fall of temperature may be fatal. Budin found that the mortality of infants brought to the Maternité with a rectal

* "The Nursling." The Feeding and Hygiene of Premature and Full-Term Infants: Pierce Budin, translated by Malony, Caxton Publishing Company, Strand, W.C., one vol., 21s. net. temperature of 32 degrees Cent. (89.6 Fahr.) or less was 98 per cent; other causes played a part in this, but the lowering of temperature was the chief factor. The plan of treatment he advocates is to place the infant, whose temperature has become lowered, into a warm bath, 35 degrees. Cent. (95 degrees Fahr.). The heat of the water is gradually increased till it reaches 38 degrees Cent. (100.4 Fahr.); the temperature of the weaking progressively rises, and when it reaches 37.5 degrees Cent. (99 degrees Fahr.), the infant should be transferred to an incubator. He noticed that if the water was of the same temperature all the time the temperature of the infant was not maintained to the same extent as when the heat was gradually increased.

2. The need of careful supervision in feeding. To the Nursling Department of the Maternité is attached a staff of wet nurses, who keep their own infants and feed besides two or three of the "prematures." Anyone who is interested in the question of wet-nurses would find this lecture particularly useful; our own casual and amateur methods of feeding premature infants show up in sharp contradistinction to this most excellent system. The daily use of the scales is warmly advocated, the quantity and quality of the food being progressively increased according to the weight of the infant. Budin says: "A weakling ought to take in general a quantity of milk equal or a little superior to one-fifth of its body weight; he insists that it is far better at first to give too little than too much; underfed infants are free from digestive troubles.

3. The importance of guarding the premature infants from infection. It is imperative to separate healthy weaklings from sick or suspected ones.

From data of premature children discharged from the Nursling Department the astonishing fact that the death rate of these is less than the death rate of infants born at full term came to light; it is then certain that a weakling in skilled hands is as capable of existing as a full-term child, when it is tended over the first few weeks of its existence.

The second and larger portion of the book deals with the Full Term Infant, from birth till two years of age. Attached to the Maternité is a Consultation for Nurslings. Babes born in the Hospital are brought periodically by their mothers for inspection once a week. They are systematically weighed, and examined. Breast feeding, wherever possible, is insisted upon; the proportion of women really unable to nurse their children is small, but there would have been many more had it not been for the zeal, the patience, and perseverance of Professor Budin.

In 1897-1904 the infantile mortality in Paris was 178 per 1,000; at Budin's Consultation it was



