

The Midwife.

NATURE AND NURTURE.

The first lecture of the Advanced Course on Infant Care was given by C. W. Saleeby, Esq., M.D., at the Royal Society of Medicine, 1, Wimpole Street, on Monday, January 24th, Sir Thomas Barlow presiding.

The subject of the lecture was "Nature and Nurture."

The term Nature and Nurture were substitutes for Heredity and Environment, said the lecturer. It was a phrase of Sir Francis Galton, borrowed from Shakespeare; it was to be found in "The Tempest," where Prospero addresses Caliban (whose mother was a "foul hag" and therefore by the laws of heredity was less than human) as "a devil, a *born* devil, on whose nature nurture will never stick."

Birth was generally regarded as the beginning of living creatures, but it was wrongly so regarded; it was rather an episode. Birth was a tremendous transition of environment. The first stage was the maternal environment, the second was the world. Marcus Aurelius was amazed at the beginning of life by the confluence of two minute cells, one invisible, the other barely discernible, becoming one and forming the incredible human body. Thus began Shakespeare. Thus once, each of us. The whole of nature is embodied in microscopic cells. Whence is formed the rest of the body, so infinitely the larger part? Is it not from nurture, by what is taken in from outside, which, if not so taken, nature would come to nothing? It was preposterous to think that the real heritage was a single microscopic cell. The living creature was a product of the multiplication of both nature and nurture. To give an instance—in the heredity of eye-colour. The colour of children's eyes will follow that of the parents in a definite and constant fashion, and it would be said that nature is all-important. Sir Ernest Shackleton said that after six months in the Antarctic regions the eyes of his party had in every instance become blue or grey; this showed that eye-colour is a product of nature *and* nurture.

The ante-natal period had its needs and dangers. After the crisis of birth, still there were needs and dangers. The post-natal little creature, called the *infant*, which signified something that could not talk, still has its needs. After the first birthday till the age of four—which period he liked to call the Home Child—it still had its needs. Then there was the school child period, followed by adolescence, which signified the birth of the parent, and the capacity for reproducing. All these formed a cycle in the stages of nurture.

In all these stages there were morbid possibilities. There were morbid possibilities in the original cells. It was now known that certain

things may be absent from the nucleus of father or mother—some ferment, possibly. It was possible that the same kind was absent in both father and mother. There were instances known where generation after generation were inevitably deaf. Something was absent from the very cells from which heritage was derived, so that the ears could not function. There were conditions also which spoiled the quality of the cells; for example, alcoholism, the working in lead, by such toxins the genetic cells became spoiled. Is it nature or nurture produces the bad effect? Parental mal-nurture spoiling the nature of the child. The human cell was wonderfully nurtured and amazingly protected, the placental filter standing between it and infection. But if microbes reached the cell, was that heredity? Clearly it was ante-natal infection. What was known as congenital heart disease was caused by the microbe of rheumatism in ante-natal existence spoiling the valves. It was not hereditary infection, even if the mother's valves were similarly damaged.

The word congenital was a disgrace to medical science and ought to be abolished. To speak of congenital deafness or congenital syphilis was an insult to heredity. Infection before birth was as real as infection after birth. There was a class of persons—he could neither call them thinkers nor students—who maintained that the high mortality of infants in the slums was because their heredity was bad, that upon their nature good nurture will never stick; that the efforts of ours for their welfare in so far as they were successful, would only lead up to a race of weaklings.

These people had never published one word concerning the ante-natal period, or the effects of toxic infection, or any possibility of spoiling the genetic cells. The remedy was to stand between the Race and Racial poison. Effort will fail if the cause is truly genetic.

Dr. Saleeby said he felt much honoured by the presence of Sir Thomas Barlow at his lecture. Years ago a condition among children known as Barlow's disease was investigated by him, and was shown to be the effects of bad diet. Good nature and good nurture were both needed to make a fine human being. Nothing could make up for the inherent defect of genetic cells, but a defect such as deafness, due to infection, was not hereditary.

Dr. Saleeby threw on the screen some interesting slides, illustrating the effects of alcohol on the genetic cell, and family trees of hereditary deafness.

Before the lecture began Sir Thomas Barlow presented the certificates to the successful competitors in the examination on the former course of lectures on Infant Care. He urged the audience to give serious attention to the subject which Dr. Saleeby had chosen for his lecture.

[previous page](#)

[next page](#)