

CONTRIBUTED ARTICLES.

PRE-NATAL CULTURE.

BY MISS CHAPELL.

THE constructive power of pre-natal culture and influence is too little known and understood. It is an old saying, "The hand that rocks the cradle rules the world," but I would like to press the fact: *The one who is the cradle moulds those who are to rule the world.*

The right moulding of coming generations is of vital importance. There can be no higher dignity in the realm of human life, physically speaking, and it has marked effects upon the spiritual side also. Many of the problems which humanity is heir to can be counterbalanced to some extent, in future generations, if the knowledge of this potential power is given to mothers with the knowledge how to use it, and the assistance necessary from the husband and others who are intimately associated in her daily life.

This wonderful, artistic work is woman's supreme privilege. "Nature works insistently in her unseen laboratory, the mother's womb." Luther Burbank says in his book, 'The Training of the Human Plant,' "My own studies have led me to be assured, that heredity is only the sum of all past environments; in other words, environment is the architect of heredity, and I am assured of another fact, acquired characteristics are transmitted. This fact, that characteristics which have been acquired during the life of the individual, are transmitted, has been taught in the Bible. It tells us "Adam begot children in his own likeness," that is the characteristics which he had acquired since the fall into sin and disobedience, were passed on to his children. The likeness passed on is that of the time when the child is begotten, so far as the father is concerned; with the mother, in addition to this, is added the whole period—she is the whole cradle of the new life.

The difference between the children of the same parents, same ancestors, and environment, has puzzled many people, but the above scientific fact makes it very clear. The character of a potential life is believed by most people to be fixed when once its embryonic life has commenced. It is from this initial stage that the influence, called pre-natal culture, commences. I like the word culture, it represents every advantage being brought to bear, to develop, to the utmost capacity, the inherent beauty and perfection. Nay, pre-natal culture means more than this. It is the cultivation of virtues and beauty of character in the mother, quite foreign to her nature, and often painful and difficult, to exercise, but the very greatness of the effort stamps the finished characteristics in the very tissues of the brain of the human building under construction; and will be lived out in the post-natal life, as naturally as the flowers give forth their perfume.

A. E. Newton, in the preface of his book on "Pre-natal culture," says: A mother may, during the period of gestation, exercise some influence by her own voluntary mental and physical action, either, unwittingly or purposely, in determining the traits and tendencies of her offspring.

This is now a common belief among intelligent people, but probably few have any understanding of the process by which such results are effected, or conception of the extent which it may be controlled, by intelligent purpose and wise direction, for the benefit of our children and improvement of the race.

The greatest emotions and the greatest efforts in any direction are those which seem to stamp the characteristics on the child, particularly if the mother's mind persistently dwells upon the cause of the emotions. If a mother is at a dead level, and nothing stands out to stir her emotions to pleasure or the reverse, or no special effort is made by her in any direction, her children are likely to be markedly true to ancestral traits of character.

This is the impression gained from my study of the subject.

Dr. Brittan, who has given much study to the occult problems of human life, gives the following very reasonable hypothesis as to the law or process of embryonic moulding.

"The singular effects produced on the unborn child by the sudden mental emotions of the mother are remarkable examples of a kind of electro-typing on the sensitive surfaces of living forms.

It is doubtless true that the mind's action in such cases may increase or diminish the molecular deposits in several portions of the system. The precise place which each separate particle assumes in the new organic structure may be determined by the influence of thought and feeling. If, for example, there exists in the mother any unusual tendency of the vital forces to the brain at the critical period, there will be a similar cerebral development and activity in the offspring."

A. E. Newton says: "The electro-typing consists in causing, by means of electrical agency, the deposit of fine particles of metal, as gold, silver or copper, dissolved in a powerful acid, upon the surface of any article. Gilding, silver-plating and copper-facing are now executed to a large extent by this curious process.

The coating of metal thus deposited becomes exceedingly compact and durable, and may be made of any desirable thickness, proportionate to the time occupied in the process. It is reasonable to suppose that by a somewhat similar process, effected by the vital forces of the mother, and to some extent controlled by her mental operations and emotions, are deposited the molecules of matter which go to form the human embryo in all its various parts."

Darwin supposed that all the cells of the body continually give off great numbers of gemmules, which are conveyed by the blood and deposited in the germ cell of the organism. These cells are thus endowed with the power of producing a cell of the same kind, each gemmule producing the cell from which it is derived.

Science has demonstrated that when we think, we use up cells in our brain—and thus attract more nourishment to make cells to take place of those used. The more intense and rapid is the thinking, the greater is the number of cells thus produced, with the correspondingly greater number of gemmules causing the basal mental capacity to be greater in the child, in that part of the brain, corresponding to the part specially exercised in the mother.

In other words. If the mother specially exercises a particular part of the brain, from which certain qualities and capacities arise, during the pre-natal period, there may be a similar process to the electro-typing. Dr. Brittan suggests, but the deposits may be the gemmules which Darwin suggests, which carried by the blood and giving increased material for the greater growth of that part of the brain than the mother possessed, or any ancestors known to them.

I have reason to believe, steady, persistent endeavour will produce results as illustrated by a very interesting case, related by Dr. Chapple (medical), late M.P. of the New Zealand Parliament. A country store-keeper met with an accident and was an invalid for a long time. They got a manager for the store, whom they found dishonest and whom they had to dismiss. The next was very incapable, and the store-keeper worried so much, it retarded his recovery. His wife, who was pregnant, and an uneducated woman, quietly began to practise sums and spent time in the business, until she got an insight into it, and gradually took over the management, and carried it on successfully, because of her steady plodding. The motive was to relieve her husband of anxiety, and the book-keeping was always a labour, and effort more or less.

One of the earliest amusements of the child that was born soon after this experience, was to have a pencil and paper and work at figures. He carried all before him in his country school on those lines, and later took some high degrees in the world of figures, to the amazement of the neighbours who knew how ordinary were the parents of this prodigy. Years afterwards the mother was recounting to the doctor the strenuous time she had when her husband had the accident, and she was "carrying" that boy, and how she wrestled with figures, until she could keep the necessary accounts. "Ah!" the doctor said—"There is the explanation of the cleverness of your boy in figures."

[It is suggested that if any members know of other cases of pre-natal culture they should write about them to the Editor.—EDITOR, *N. J. of I.*]

CALCUTTA NURSES' CLUB—OFFICIAL OPENING.

(From *The Statesman*, November 17.)

TRIBUTES BY THE COUNTESS OF LYTTON.

The Countess of Lytton's Hostel and Club at 4, Auckland Square, inaugurated for the benefit of Calcutta nurses, was formally opened yesterday afternoon by His Excellency the Governor. The opening ceremony took place on the lawn fronting the hostel and was attended by a large and representative gathering.