## MATERNAL IMPRESSIONS.

In our July issue there appeared an editorial on "The Causes of Feeble-Mindedness," in which we rejected the idea that maternal impressions had anything to do with the condition, as there is no nerve tissue in the cord; and further stated that after conception had taken place, all the mother could do for the child was to feed it. She might "impress" it for good or ill as she gave it good or poor nuorishment; but this was only a matter of health and growth.

An esteemed subscriber has written and submitted three cases for an answer. We shall avail ourselves of this opportunity to explain the main laws of heredity, and also to show that "meternal impressions," as usually understood, do not occur.

The first case is that of a woman who had the pictures of owls in her room, and her child was born with a face that resembled an owl. Let us here refer to the statistics of John Hunter, the great investigator. He collected instances of several thousand children who had marks of some sort, and he found that in these cases their mothers had not been subjected to any special experiences. He then collected the results of about a similar number of mothers who had varying experiences of an unpleasant character, especially of sight; but there was no larger number of marked children than from an equal number of mothers who had had no unpleasant impressions. All that can be in the child must first be in sperm plasm of the mother's ovum, and the germ plasm of the father's spermatozoon. Everything else is only growth from food the mother supplies. A woman may see a snake and her child may have the marks somewhere of a snake, but it has been proven beyond a shadow of doubt that such an event is merely a coincidence. Dr. O. W. Holmes was entirely wrong on his biology in the story of Elsie Venner. A drunken mother may "impress" very unfavorably the health of the child in utero; but this is not what is meant by "maternal impression."

The second case submitted is that of a child having the red hair of its father, though no nerve tissue connects parent and child. The potentiality to reproduce features of the father is in the sperm plasm. It is in the same way that the potentiality to produce bone, brain, muscle, skin, color, etc., etc., is there. These parts of the child are not produced by "maternal impressions" arising from the mother looking at the father. No, they are the result of the very quality of the two parental elements that come together at the moment of fertilization. This runs all through the vegetable world, where plants resemble the parents, because of the fertilization of the seeds. Here there are no "maternal impressions." In plants also crosses can be obtained by fertilization of one variety with another. So, too, half-breeds in man can be obtained. A blind, white