The mother passed through the disease in the most favourable manner, but as evidence of it, she retains several distinctive marks on her face.

I was exceedingly curious to ascertain the effects of the Small Pox on the child, which I firmly expected to be pockmarked at its birth from head to foot; and my curiosity was gratified on the 16th of December, when I was summoned to attend her in accouchement. After a perfectly natural labour, of ordinary duration, she was safely delivered of a fine boy, whose skin did not exhibit the slightest indications of its having suffered from the disease which had affected its mother a few months previously. There was not a single mark upon its body.

Now arises the question of susceptibility.

When the child was a month old, in consequence of the still existing prevalence of the Small Pox in the same neighbourhood, even although the infant was so young, I deemed it advisable, as an act of prudence, to vaccinate it. The operation was accordingly performed on the 22nd January. On examining the arm on the 26th, four days afterwards, there was not the slightest appearance of irritation on it. I repeated the operation on the same day, and up to the moment of writing, for I have seen the child this day, February 4th, the ninth from the date of the revaccination, the arm appears as if nothing had been done to it; the operation of vaccination having therefore totally failed.

Now there cannot exist the least doubt as to the genuineness of the vaccine matter employed on these occasions. I had vaccinated two children previously to, and one on the same day as, that on which I first vaccinated Mrs. B's child. In fact a portion of the same scab had been used in all the cases, and the operation had been uniformly successful on the three other children. Besides it is commonly believed, and not without reason, that the operation is likely to prove the more successful the earlier the age of the infant. There was every thing, therefore, in favour of the operation proving entirely successful in this particular case.

To what then are we to attribute the failures? It appears to me, and the idea had impressed my mind before I saw Dr. Trimmer's questions, that it could only be attributable to the protective influence afforded by the mother's blood, when circulating through the infant's system during its intra-uterine existence, and while the mother was suffering under the disease, operating upon the constitution of the child, and producing its effects, precisely as it is doing on the constitution of the mother. We cannot, of course, explain how this protective agency is exerted, although we can appreciate the positive existence of such a preventative or protective influence in its effects, and I feel bound to consider, that in this instance the protective influence of the attack of variolous disease on the mother, prevented the impregnation of the infant's system by the vaccine virus, exactly as it would have done in the mother herself.

I am fully aware that we cannot build up an hypothesis on a single fact, any more than a single swallow can make a summer, but there is so much, consonant with every day's experience, in the idea that the unborn infant should be influenced by its mother's diseases, and partake to the fullest extent in all their effects on her system, that we cannot but admit it as a fact.