

cent., among those said to be vaccinated but no mark found 23.57 per cent., with one mark 7.73 per cent., two marks, 7.70 per cent. three marks, 1.95 per cent. and 4 marks, 1.55 per cent. He gives the percentage of deaths of persons who had had smallpox and taken the disease a second time as 19 per cent. It is a singular fact that there are people who take smallpox more than once, medical men having to give up attending these patients on account of their susceptibility to the disease. Many assert that four marks should be given when an epidemic of the disease is threatened.

What is a good vesicle? More than once, more than three times, I have made a house to house visit in the wards mentioned, and then made a statement at the Board of Health that 90 per cent. of the French population in this city were unprotected, that they did not possess a good mark. An ordinary smooth, irregular cicatrix is a bad mark; a good one is one which is generally circular, but which shows that the vesicle is composed of a large number of depressions in the centre of this mark, perhaps 15 or 20.

What is vaccination? I have thought a good deal of the subject and make the statement that there are several thousand instances on record where the matter from smallpox has been taken and introduced into the cow and brought back to the individual, and you have the very best vaccine which has been taken from the human family.

When should a person be vaccinated?

Some say that a person should always be revaccinated at puberty, but no matter what the age it should be done when a smallpox epidemic is threatened. Is it a wise thing to rupture a vaccine vesicle during its progress? We know that there is a system of vaccination which is called arm-to-arm vaccination, where children are brought on a certain day to be vaccinated from the arms of those done on a previous stated occasion, and from whom at a later period new children are vaccinated. Now a great many hold, and I feel inclined to agree with them, that it is a mistake to rupture a vesicle, that a certain amount of this matter does not go through the individual when the vesicle is ruptured, it should be allowed to go through its progress untampered with until the very end.

The next thing is what is the best method to prevent pitting in smallpox? I do not propose to give my own views but something which has not been generally known. When I began the study of medicine I was an apprentice to Dr. James Crawford, Professor of Clinical Medicine, who advised the application of tincture of iodine. I have since, whenever I had a case of smallpox, used this with very satisfactory results. This was demonstrated in the *Medical Chronicle*,