

DR. D. J. EVANS raised the question as to the number of marks necessary for proper protection.

DR. GIRDWOOD related his experience in 1849 as an apprentice in vaccinating the poor. No attempt was made at cleansing the skin previous to vaccinating and the method was entirely arm to arm. He did not remember having much trouble with sore arms. The usual practice in those days was to make three marks.

DR. G. G. CAMPBELL thought that what many of the speakers had said regarding the infrequency of sore arms before the days of antiseptics was in accord with what Dr. McCrae had stated in his paper, that the danger of infection from skin cocci was almost nil. The danger of arm to arm vaccination came from the possibility of conveying disease such as erysipelas and syphilis, through the lymph. Where one was absolutely certain of the state of health of the subject from whose arm the lymph was taken it was possibly the best method.

With respect to the question raised by Dr. Perrigo of governmental supervision of establishments supplying vaccine, the speaker did not think the danger of a poor product being put on the market was as great here as might at first sight appear. Vaccine was mostly prepared by the manufacturing pharmacists who also supplied us with drugs, and while it was a comparatively easy matter to test the efficacy of vaccine it was by no means easy to do so of drugs, such as ergot and digitalis, and yet these products were generally reliable, the firm manufacturing them having a reputation to keep up.

DR. MORROW, speaking of the conditions under which it was not advisable to vaccinate, related the case of a man who was just recovering from a poisoned finger when it became necessary to vaccinate him. The operation had been done on the other arm and no trouble followed. Dr. Morrow also related the history of mental disturbance coming on in a boy just at the time a vaccination sore reached its height, and lasting for six or eight months at least. He expressed his preference for glycerinated lymph as giving a much larger percentage of takes.

DR. MAUDE ABBOTT stated that she had examined a sample of glycerinated lymph in October last, and obtained cultures of staphylococcus epidermidis albus and bacillus mesentericus.

DR. HOWARD CHURCH drew attention to the point that in giving a certificate of vaccination many physicians used the words "successful vaccination" when the operation had just been performed and one was unable to tell whether it would take or not.

DR. FOLEY called attention to the many different forms of eruption which occasionally followed vaccination, and mentioned that he had seen a case of syphilis following vaccination.