

protection afforded by the operation. That vaccine, being indigenous to the heifer, does not degenerate: the painting of the arm shown is from a child vaccinated from lymph taken from the 240th heifer, from the original spontaneous cases which occurred at Longue Pointe, near Montreal, in Nov., 1877, during which year an epidemic of animal pox prevailed among cows and horses. He traced the progress of animal vaccination, and mentioned the various new stocks of animal lymph that have been introduced to the profession since the time of Jenner, 1798, which were, Woodville in 1800, Passey of France in 1836, Galbeata's retro-vaccination in Italy, 1810, followed later by Prof. Negri; the introduction of animal vaccination into France by Janvix, discovery of the Beaugency stock in 1868 by Prof. Depaul, the Longue Pointe stock by himself in 1877, and the progress of animal vaccination under Dr. Warlomont in Brussels, and last of all its introduction into England by Act of Parliament in 1881. That he had vaccinated three children of a family with lymph from a case of horse pox, and two of the same family with the cow pox, as an experiment, upon the same day: the result was in both cases the development of typical vaccinal vesicle, the horse pox producing rather more local disturbance, but running its course and terminating satisfactorily. That accidents follow vaccination and lack of prophylactic effect, are directly traceable to an imperfect vaccination with imperfectly developed or impure lymph. That a perfect vaccination consisted in the reproduction of a perfect vaccine vesicle with its attendant constitutional fever, and nothing else; that he feared, and believed in the possibility of conveying syphilis, skin affections, scrofulous taints, etc., with humanized lymph. He described a number of spurious vaccinations which might result from the operation, none of them protective, and suggested revaccination at an early date in all doubtful cases, which is not, like past vaccinal inoculation, illegal. He concluded by instancing the following advantages to be derived from the use of heifer lymph: 1st. It guarantees against the possibility of transmitting any other blood contamination. 2nd. The advantages of constant supplies of reliable lymph. 3rd. It gives the greatest possible guarantee of protection by emulating perfectly spontaneous vaccination, as observed by Jenner on the hands of milkers, and which has always been found to give absolute security against future contagion. 4th.

It enables the practitioner to be independent of his patients as to his stock of lymph. It had been objected to it that it was hard to take, this objection would be entirely removed with due care in its propagation and use, which he very fully explained, showing that both producer and user must use considerable judgment in the matter to secure success. He concluded a most interesting paper with the hope that the Association would press upon the attention of the Government the duty of establishing a National Vaccine Institution for the benefit of the whole country.

Dr. Slayter does not believe that syphilis can be communicated by vaccination. He has always used lymph supplied by the Royal Institution, and has never been dissatisfied with the results. He thinks with Dr. Bessey that there should be some means by which the public could be supplied with pure vaccine lymph.

Dr. Robillard said that in 1874, during an epidemic of small-pox, he vaccinated two children with lymph procured in Liverpool from the Royal Institution. In both of these, eruptions showed themselves, one of which he felt satisfied was a syphilitic nature, and which disappeared under mercurial treatment. He had never felt safe with that lymph since.

Dr. McDonald (Londonderry) procured his vaccine from Boston. He found that animal lymph was more insoluble than humanized lymph, and ignorance of this fact probably led to some of the failures when the former was used. He would also urge on the Government the importance of their taking charge of this matter.

Dr. Cowie said that formerly the lymph used in Halifax was perfectly satisfactory. In 1860 he had in one day vaccinated 120 persons; only six or seven failed, and in none were there any troublesome symptoms. During the past two or three years it had not been so satisfactory. There were now many more failures, and he had recently seen a man, vaccinated a month before, with large unhealed ulcers and enlarged glands.

Dr. Geo. Ross said that he would like to bear testimony from his own observation to the excellent results which had followed the introduction of animal vaccine in Montreal. Previous to this with the ordinary crust and lymph which were passed along from one to another, nor only were failures comparatively frequent, but unpleasant consequences were often met with. He had seen long-standing ulcers, axillary abscesses, erysipelas.