

pronounced as spurious. Vaccination may be retarded somewhat in its course, but I think it can never be accelerated beyond a day or so without destroying its protective character.

When the reading of this paper was concluded, Dr. Moreau Morris, of New York, said that the first point seemed to be how to get vaccine virus. So far as his experience extended he was satisfied that humanized lymph was equally protective with bovine. Concerning the collection of virus, its use, and its introduction, he referred to the mode of collecting virus used by physicians, and said that he believed the vaccine should be kept at an even temperature, and not preserved beyond a certain length of time.

General E. L. Viele, civil engineer, presented a paper on "Principles and Practice in Drainage and Sewerage, in connection with Water Supplies." The speaker said that it sometimes seemed to him that it required more skill and true courage to conduct a sanitary campaign than to marshal an army. Of all the problems presented by the subject, none were more important than those connected with drainage and sewerage. Water was unceasing in its activity, ever destroying and renewing. It should be studied everywhere, in the forest and in the fields; but, more than all, it should be studied in the city. The portion which was retained in the soil was the cause of much of the disease which afflicts mankind. The after-effect of malarial diseases was then alluded to, showing that though the patient might recover, it would be almost impossible for him fully to regain his former health.

A report of the condition of some parts of Salem, Mass., was then quoted, showing that near portions of flat land, where waste water was allowed to collect, many fatal cases of typhoid fever occur every year. Every dwelling should have drains around it, connecting with some general outlet. The chief source of the great fever epidemics was an undrained soil. Experience had shown that in the country, in insalubrious districts, the laying of drains had always been followed by a decrease in the death rate. In the country the wells were generally little better than reservoirs for waste water. The use of hydraulic cement would obviate all this, and the overflow of the cesspools should be made to filter through charcoal.

Stephen Smith, M. D., of New York read a paper on "The Reciprocal Relations of the Public Health Service and the Highest Educational Qualifications of the Medical Profession."