the deadly viruses of the fearful pestilences? And, moreover, would further improved sanitation not diminish the mortality of all, nay, even check the evolution of some existing zymotic distempers, so as also to render them matters of history?

The last division for consideration here is—

3d. THE DESTRUCTION OF CONTAGIA.—This point is necessarily of a very abstract character. For although contagia make their presence felt widely and conclusively, and though their specificity seems varied and definite, yet, as already stated, almost none have been isolated. I am compelled, therefore, to confine my remarks on this point to the destruction of the infecting power of vaccine lymph, the only virus with which it is safe to experiment on the human subject. The results of these experiments can, therefore, only be applied inferentially to the other hypothetical febrile viruses. I shall first notice what does, and secondly what does not destroy the infecting power of vaccine lymph.

Dr. Henry, of Manchester, showed in 1831, that dry vaccine lymph, heated for two hours to 140° Fahrenheit, failed to produce vaccinia. I myself made the following experiments: Separate portions of vaccine lymph were exposed for twenty-four hours, under identical conditions, to various volatile media. They were then liquified by neutral glycerine, the reaction of the mixtures ascertained and sealed in tubes till children were vaccinated with them. The results showed that with the mixtures of lymph and glycerine which were neutral or alkaline, vaccination was successful, while with those that were acid it was unsuccessful.* These experiments were repeated with the acid bodies only, but the acidized lymph, instead of being sealed in tubes, was exposed to the air for about twelve days, in order to see whether the infecting power of the lymph was merely suspended. The results, however, was the same as when the lymph was at once sealed in tubes. The volatile bodies which destroyed the infecting power of the lymph were sulphurous, nitrous, glacial acetic, and hydrochloric acids, and the vapor of chloride of lime.

Two tubes of vaccine lymph were mixed with half a minim of liquor potassæ. Twenty-four hours after, the mixture, now dried into a film, was moistened with water, and a child vaccinated with it. The operation was *unsuccessful.* Two tubes of lymph were mixed with one minum of a mixture consisting of one part of liquor potassæ in twenty of water.

* Glasgow Medical Journal, loc. cit.