

of even a susceptible animal are destroyed. He found that more than fifteen must be inoculated into a guinea pig for the disease to be set up in that animal. It follows, therefore, that they must be introduced in considerable numbers into the alimentary tract before they can, even under favorable circumstances, give rise to general infection.

The consideration of those instances in which the infection is said to have been conveyed to human beings through milk even more than in the case of direct infection through a wound involves the possibility of error. Many instances have been published, but time permits me to refer to only one or two in which the evidence is fairly convincing in its character. Nocard⁸ relates the following:—"Dr. Gosse, a well known medical man in Geneva, lost a daughter seventeen years old under the following circumstances: She had been in perfect health up to the year preceding her death, when symptoms of marasmus set in, which, in ten months terminated fatally. The autopsy revealed extensive tuberculous disease of the intestine and mesentery. Careful investigation revealed neither any family history or known personal exposure, but it appeared that every Sunday, Dr. Gosse and his family spent the day at a small estate on the hills where the young girl was in the habit of drinking freely of warm fresh milk. On testing the cows with tuberculin, four out of five on the estate were found to be tuberculous. They were killed, and in two of them tuberculous mastitis was discovered.

Brouardel¹⁹ relates that in a small boarding school in Paris under his care, five of the pupils in one term contracted tuberculosis, the only origin for which that he could discover was the milk of a cow afterwards found to be suffering from tuberculous mastitis, and of which these pupils had drunk freely. Marfan, Olivier and Denune relate similar cases.

As the result of the evidence afforded by experimental researches in animals, and the publication of instances similar to the above, milk was then regarded by the profession as a possible source of tubercular infection, especially in the case of infants and young children, and a committee appointed by the British Medical Association reported in 1895²⁰ that the mortality from tuberculosis in early childhood was not decreasing in the United Kingdom to the same extent as the death rate from this disease at other ages, and "the opinion that this great prevalence of the disease in childhood is due to infection through the alimentary canal by milk from tuberculous cows, appears to be well founded."

The attention of pathologists was now directed to the paths by which the bacilli effected an entrance into the body, but with the in-