

(d) From the lesions in experimental cases in animals the bacillus can be obtained in pure cultivation, living and virulent."

These facts do not rest upon the authority of a single individual, or upon a single series of experiments, but they are continually being confirmed by different investigators all the world over. The conclusion to be drawn from these statements of fact is that tuberculosis is a specific disease, due to the presence in the human organism of the bacillus tuberculosis.

The bacillus tuberculosis, then, being the essential and necessary factor in the production of a case of tuberculosis, our next enquiry would naturally be, how are the bacilli produced, how are they propagated, and how are they communicated to an individual who previously was proof against their invasion? Being a micro-organism, it can be produced only by preceding generations of bacilli. Bacillus produces bacillus as human produces human—just as human beings require certain conditions for their existence and the performance of their various functions, so do bacilli. We find that naturally these bacilli will only grow and increase where the conditions are favourable—heat, moisture, and a low vitality of the tissues upon which they are deposited. They will not grow outside the bodies of diseased human beings or of animals susceptible to their action. It is true that they may be cultivated artificially, and it is thus that experiments have been carried on; but naturally they require the conditions mentioned above for their growth and propagation. How, then, do they pass from the body of an infected animal to the body of another previously unaffected? In several ways, but the two main modes of infection are by food containing the bacilli, and by the inspiration of air contaminated by these germs. Of these two the infection by means of diseased food is the less frequent, and in adults, at least, the less important. It is a subject, however, which requires the closest and most careful consideration of the health authorities, and especially should all dairies be thoroughly inspected and the cattle tested by competent inspectors for the presence of this dread disease. This test may be readily made now by the inoculation of the cattle with tuberculin. In our opinion no one should be allowed to sell milk unless he holds a certificate from the proper authorities that his cows are free from tuberculosis. More important, because more