

doubtedly lessens the infectiousness of such milk but cannot make it safe. Dr. Theobald Smith showed, in 1893, that the tubercle bacillus could be found in the milk of tuberculous cows, when the udder was free from disease, so far as the naked eye could tell. In a series of experiments with the mixed milk of five cows which reacted to tuberculin, but were in good physical condition, I found it infectious for 15.8 per cent. of the guinea pigs inoculated. No attempt was made to concentrate the bacilli; on the contrary, the whole quantity of the milk was well shaken in order to imitate natural conditions. No lesion of the udders could be found during life or after death of the cows.

Rabinowitsch and Kempner found that ten out of fifteen cows, which reacted to tuberculin but showed no evidence of udder disease, gave milk containing tubercle bacilli. They conclude that "milk may contain tubercle bacilli; first, in beginning tuberculosis, without discoverable disease of the udder; and, second, in latent tuberculosis that can be detected only by the tuberculin reaction;" also, "milk from cows that react to tuberculin must be suspected of being infectious in every case."

**CONCLUSION.** At the present time the weight of the available evidence is in favour of the view that the chief source of infection in children, as well as in adults, is the human tubercle bacillus, and that the portal of entry is the respiratory tract. It has, however, been proven conclusively that the bovine tubercle bacillus is responsible for a certain proportion of the deaths from tuberculosis in children, and there is strong evidence at hand to show that the number of children infected from bovine sources is quite large. Whether the number be large or small, it is none the less our duty to guard against the use of milk from tuberculous cattle for food.

It is without question most important to build sanatoria for the treatment and cure of early cases of tuberculosis; to form societies which spread information concerning the disease and its prevention to the sick and well alike; to build hospitals for hopeless and dying cases, in order to remove them from their homes at the period of greatest danger to those around them; to pass laws against promiscuous spitting; to regulate ventilation and over-crowding of tenements and factories; to encourage good living amongst the masses in every way possible. All of these things are useful and necessary, but we will still fail in doing our whole duty, if we neglect to guard against food products from tuberculous animals and to make every effort for the eradication of tuberculosis from cattle.