

leaving the cow and before reaching the home of the consumer.

Park's recent bacteriological studies of tuberculosis in man show us that bovine tuberculosis plays an important part in the tuberculous affections of children. Pulmonary tuberculosis appears always to be of human origin, but the tuberculous cervical adenitis, the mesenteric tuberculous glands, and even generalized tuberculosis in children, when of alimentary origin, seem in most cases to be due to bovine infection.

That infantile summer diarrhoeas are in the vast proportion of cases due to milk-borne infection, can be doubted by no one who has looked into the question. The number of deaths occurring in children under one year of age in Canada and many other civilized countries is a standing disgrace. In the last census year (1901) there were born in Canada 149,448 children, and there were 21,328 deaths of infants under one year. One of every seven infants die in the first year of life. There is no cause of death so prolific among children in the first year of life as disease of the digestive organs. Milk forms the principal food during this year, about 400 quarts being consumed per head, and many observers have shown that the death rate from diarrhoeal diseases is greatest amongst artificially fed children. Newsholme, of Brighton, as the result of an investigation in an infant population of 1,259 in 10,308 houses in Brighton, England, concludes that, taking the whole of the first year of life, the number of deaths from epidemic diarrhoea among breast-fed babes is not much more than one-tenth the number among artificially fed infants. Not one death from diarrhoea occurred at the age period 6 to 9 months in breast-fed children. Other investigations made in England, France, Australia, and elsewhere have shown that during the summer months the number of deaths of artificially fed infants is three to eight times that of the breast-fed. On the other hand, we know that where milk is properly handled the infant mortality is comparatively low, and where radical improvement has been made in the milk supply and in the methods of handling it, there has been a sudden, even startling lowering of the death rate., This is well illustrated by the statistics given by the

New York Hospital for Children on Randall's Island. These children were fed on milk from a carefully selected herd pastured on the island. The deaths from 1895 to 1897 were 41.81 per cent. of the admissions. A pasteurizing plant was then installed, and with no other change in diet or hygiene, the rate promptly fell to 19.80 and for seven years the average was 21.75, or little more than half the rate at the time the organisms in the milk were not destroyed by pasteurization. In this one institution the changed death rate meant a yearly saving of 177 lives.

It is quite safe to say that milk plays just as important a part in the death rate throughout Canada, and that thousands of lives are yearly sacrificed because of impurities in milk. Our adult population should be aware of these facts that they may be on their guard against impure milk. But the infants are helpless, and it is the bounden duty of all to see that in every dairy, every milk shop, and wherever milk is handled, that such precautions are observed as will ensure safety to the consumer.

To secure good milk should not be a difficult matter—it need entail but slight additional expense. To continue to allow milk vendors to sell for human consumption the foul, infected mixture so often sold as milk, should be considered in the present state of our knowledge a breach of the Criminal Act, and differing but little from manslaughter.

By instructing farmers and dairymen in the proper selection, care and feeding of their herds they will be more than compensated for the slightly increased cost of production of a clean milk.

A large proportion of dairy cattle not only yield no profit, but are kept at an actual loss. An Illinois State Bulletin states that the most profitable dairy cows in Illinois give a net profit of \$57.22, the poorest have shown an actual loss of \$17.83. The average production of the Canadian dairy cow can readily be doubled, and the profit increased fourfold if every milk producer in the Dominion were to adopt careful business principles, keeping an accurate daily record of the amount of milk and butter fat, also the cost of food consumed, by each individual cow in his herd. When he discovers that a cow is not giving a good