



Tully Farm Model Stable.

From Ontario Milk Commission's Report.

### Cleanliness Scientific.

The accompanying cuts show exterior and interior views of the Tully Farm Model Stable, Syracuse, N.Y. This was one of the notable dairies visited by the Ontario Milk Commission. A brief description of their premises and methods may be of interest, as evidencing the importance and dignity with which modern thought has invested milk and its production, even though the standard attained may not be within the reach of the average dairyman. "Before entering the barn," the report proceeds, "everyone had to put on a clean white coat, lest some of the dust from the clothes contaminate the barns or the cows. The hose is turned on the ceiling, the floor and the cows, until only a few irrepressible flies are left to remind one of the unceasing menace of the germ kingdom. But the cows are not yet ready to be milked. A man goes along with a pail and a cloth and washes off the rear flanks and the udder. This operation is repeated by a second man, and a third devotes his attention to the udder only. By this time—which is after all only a matter of a few moments—it is regarded as reasonably certain that the cow will not give anything but milk, and men in sterilized white suits, seated on sterilized metal stools, proceed to milk with sterilized manicured hands into sterilized small-top pails. As each cow is milked, the milk is carried to a little room at the side, where it is weighed and the weight recorded, together with the number of the cow and the number of the milker. This record duly made, the milker goes back to another cow, but of course not without first washing his hands." It is not to be wondered at that on the score-card of the inspector this dairy is credited with 99 points. The milk in bottles, capped, sealed, and iced, is sold in New York for 12 cents net by the producers.

### Ontario's Milk Supply.

The people of the Province of Ontario pride themselves on being strictly up-to-date in all that pertains to agricultural theories and practices, but the report of the Ontario Milk Commission, which was presented to the Legislature February 21st, shows very plainly that vast improvement is possible in the handling of the milk supply of cities.

According to the latest figures there are 1,200,000 cows in the Province. The total amount invested in the dairy business in Ontario is said to be about \$50,000,000, and the annual return is estimated at \$15,000,000. Bacteriology, which means the study of germs, and which has made such remarkable development in the scientific world in recent years, has established the fact that milk sometimes conveys the germs of tuberculosis, diphtheria and scarlet fever, which is reason enough why all possible precautions in the care of milk should be taken. The menace of milk is largely measured by the time which elapses between cow and consumer, as the germs increase very rapidly, especially in high temperatures.

The figures given regarding infant mortality in Ontario cities, while not so startling as to cause a panic, are sufficiently grave to warrant the adoption of more rigorous measures than are at present in force. Out of every 1,000 children born alive in these cities, 160 die in the first year, or more than in the succeeding forty. The commission submits that "a considerable portion of this awful toll can be prevented. The cold fact that out of every thousand children born alive, sixteen more die in Ontario cities than in New York, four more die than in Chicago, and forty-four more die than in London, England, in spite of the slums and congestion reputed to these great cities,

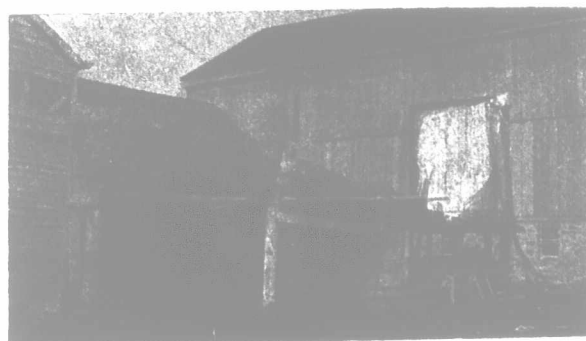
should touch the sympathies and arouse the consciences of Ontario cities and Ontario citizens."

In order to get first-hand information as to what is possible by strict oversight of a city's



Damp, Dark Stables Like This Develop Tuberculous Cattle.

From Ontario Milk Commission's Report.



More Typical Than Ideal.

From Ontario Milk Commission's Report.



Interior Tully Farm Model Stable.

From Ontario Milk Commission's Report.

milk supply, the commission visited the cities of Rochester, Syracuse, New York, Detroit and Chicago. In New York the infantile mortality has decreased remarkably with the development of depots for the supply of pure or pasteurized milk for infants. The health officer at Rochester inoculates guinea pigs with milk, and if they develop tuberculosis, he immediately goes to the place from which the milk was obtained and insists on having all the cattle tuberculin-tested, or else the milk is kept out of the city. The score-card system, by which each dairy is rated according to its cleanliness and general condition, was found in use in several cities. The recommendation of the commission in this regard is that the Government should give power to municipal Boards of Health to inspect at the source of supply and keep milk out if it is known to be contaminated. It is suggested that qualified veterinarians be chosen for inspectors. It is urged also that municipalities establish and maintain infants' milk supply depots, and that tuberculous cows be weeded out from dairy herds.

In the matter of adulteration of milk, there is need for legislation. Out of 2,541 samples of milk tested in Toronto, 1,614, or about 40 per cent., were below 3 per cent. butter-fat. The conclusion is drawn that there is widespread adulteration, as natural milk from the cow is very rarely below 3 per cent. The recommendation is that Government fix a food value standard for milk of 3 per cent. fat and 12 per cent. solids as the minimum.

Pasteurization is not regarded as a Provincial ideal, but may be used as a municipal expedient, under proper scientific regulations. Several other suggestions are made, such as that in cities of 50,000 and over, milk should not be sold in shops except in sealed bottles, that first prominence should be given to the importance of cleanliness and coldness at every stage in the handling of milk, that consumers as well as producers of milk need education in this line, that a determined effort be made to weed out tuberculous cows from Ontario herds, etc.

The commission evidently believe that more real good can be accomplished in the meantime by an educational campaign, and by publicity of the facts as they have found them, than by legislation of an extreme character.

The commission, which was appointed by the Government as the result of the resolution of W. K. McNaught (North Toronto), at the Legislative session of 1909, consisted of Dr. A. R. Pyne, Chairman, brother of the Minister of Education; Messrs. J. R. Dargavel, M.P.P.; F. G. Macdiarmid, M.P.P.; W. F. Nickle, M.P.P., and W. Bert Roadhouse, Secretary.

To show how thoroughly in earnest is the Province of Quebec in regard to improvement in sheep and swine breeding, the General Live-stock Breeders' Association, at their recent meeting in Montreal, voted \$4,000 for the purchase of the best animals they can find in Canada and Europe, for use on the farms of the Province. Steps were also discussed for the further improvement of French-Canadian horses and cattle. A report was read to the effect that the decrease in pure-bred swine registrations was due to their being sold on the market, instead of for breeding purposes, because of the relatively higher prices of the former. The secretary reported the membership of the Association at 400, to which it has grown from 60, when formed 16 years ago. By sending out a number of capable speakers to an extended series of meetings, the Live-stock Branch of the Dominion Department of Agriculture is materially aiding in the campaign of agricultural education.