

straight beef cattle would be reared on the arable farm. Now, the beef grower with his sole return of \$35.63 for his cow during the year and the food fed to the calf would be no match for the intelligent dairyman. Dairy men would ultimately possess the arable farms of this country. Could a worse calamity come upon the dairy interest? What would they do with their products? In the sight of reason and self interest, from the standpoint of prudence, and in the face of unanswered, and I think unanswerable demonstration, would it not be better for the dairyman manfully to concede that there is a place for the dual-purpose cow upon our farms? And then would it not be wise for them to adopt the motto as they meet the owners of those cattle, "Let there be no strife between thee and me and between my herdmen and thy herdmen, for we are brethren."

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#### **HOW FOOD ADULTERATORS ARE TO BE TREATED IN FRANCE.**

A measure which has been passed by the French Senate, and will probably be agreed to by the Chamber, proposed to inflict a heavy fine or imprisonment upon persons found guilty of the less heinous forms of fraud or adulteration in relation to agricultural products and other merchandise, and both penalties upon the more serious offenders, including persons who use any adulterant injurious to health. All repetitions of an offence, too, are to be punished by both fine and imprisonment. The fines extend up to a maximum of 10,000 francs, and the terms of imprisonment up to two years for the worst offenders.

#### **INEFFECTUAL PASTEURISATION OF MILK.**

A bulletin from the Wisconsin Agricultural Experiment Station describing trials in the pasteurisation of milk for butter-making, states that an examination of thirteen samples of raw milk showed an average of 32,000,000 bacteria in one cubic centimetre (about one-thousand of a quart) while the testing of sixteen samples of pasteurised milk showed an average of 1,800,000 bacteria in the same volume of milk. As this reduction is one of 94 per cent, the result is regarded as satis-

factory. For the mere keeping of milk, it may be; and it is stated that the pasteurised skim milk kept twelve to twenty-four hours longer than that which was not treated. But as a security against disease germs, it is hardly worth while to carry out a process which leaves 1,800,000 living germs in one thousandth part of a quart, or 900,000,000 in a pint.

#### **MILK FEVER TREATMENT.**

After withdrawing all the milk, the udder is washed with a desinfectant, and then 4 drachmes of iodide of potassium dissolved in a pint of water are injected into the udder, about a fourth part into each test. This process is repeated in twelve hours (if necessary) using only half the quantity (2 drachms) of iodide of potassium. The apparatus required is a syringe having a small tube attached that will readily pass up the teat.

"Not more than a hundred and forty years ago, the roads of England were pronounced to be the worst in Europe."

"By more active canvassing for orders by studying the requirement of costumers, the foreigner, we find, is competing with us on more than favourable conditions."

#### **FOOD SUPPLY IN TIME OF WAR.**

The adjourned debate on the Address was resumed in the House of Commons on Thursday by Mr. Seton-Karr, who moved an amendment advocating an inquiry into the question of the large and increasing dependence of the kingdom on foreign imports for the necessaries of life and the danger that might arise in consequence in the event of war. He suggested as measures of precaution that some preferential favour should be shown to colonial produce, that steps should be taken to increase our production of wheat at home, and that the establishment of national granaries should be tried tentatively. Mr. Ritchie, who resisted the amendment, did not believe that there would be any starvation in this country in the event of war as long as the Navy was strong enough to protect our trade route and to prevent