

"Persevere and Succeed."

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## EDITORIAL

Every cheese factory in Canada should have a cool-curing room.

No one factor makes up the sum total of success. Because one has done well without a silo, or without corn, or without alfalfa, or without a good rotation, is no proof that he could not do better with any or each of these advantages.

One great trouble with agriculture in Eastern Canada is too much grass, oats and barley, and not nearly enough clover, corn, alfalfa, nor enough peas, roots and soiling crop; also, not enough rough land in permanent pasture, and not enough hills and rocky areas in woodland.

Over 170 persons have been in attendance this summer at the rural-science school, designed principally for teachers, at the Nova Scotia Agricultural College, Truro. It must have been a valuable course last summer, to draw nearly six times as many students this year as there were in the initial class of 1908.

If every farmer in this country were taking proper advantage of his opportunities, and doing as well as he might reasonably be expected to do, making full allowance for shortage of capital, ill-health, and all other handicaps with which we are variously afflicted, the production per acre of our fields could easily be doubled in ten years.

Forty-seven cheese factories in Oxford County made cheese in 1908 to the value of over a million and a quarter, the exact figures being 1,231, 340.82, or an average of over twenty-six thousand dollars per factory. In addition, a few factories made butter in winter to the value of \$48,869.35, all told. Butter made at home, milk and cream for retail trade and for home consumption, and the milk supply of a large condensary at Ingersoll, should swell the total volume of dairy products to a value considerably over a million and a half. With good weather from now out, prospects are for a fully-maintained or in-

### LONDON, ONTARIO, JULY 29, 1909

#### Cool-curing Rooms Needed.

If a manufacturing firm turning out twenty-five million dollars' worth of products a year could, by a capital investment of a million dollars, or even two million, save an annual loss of \$250,-000 in shrinkage, besides enlarging its demand through supplying a superior article, reducing claims for defective goods and improving the quality decidedly, with a good prospect of adding half a million a year to the value of its output thereby, how long would it take the board of directors to decide that the investment should be made, especially if the proposed step were necessary to meet foreign competition on equal terms ? That is about the position of the Canadian cheese industry in relation to the proposition of coolcuring rooms for cheese.

According to the Canada Yearbook, the Dominion exported to Great Britain, in 1908, 188,-823,188 pounds of cheese, valued at \$22,763,736. These figures take no account of a considerable home consumption, or small quantities shipped to other countries. This magnificent staple is manufactured in thousands of plants throughout the country, chiefly Ontario and Quebec, and, thanks to a persistent and well-generalled educational campaign, is being produced under such good average conditions in both stable and factory that its quality has enabled us to well-nigh monopolize the British market. This world-market, however, must be held, even as it has been won, by persistent, strenuous endeavor to progress and to excel. New Zealand, as well as other countries, are ever ready to step in and command a share of the trade, and the equable, ocean-tempered climate of the Antipodean Island gives it one decided advantage in a point in which, owing to our hot summers, we are comparatively weak, viz., the curing of the cheese from the time they leave the hoops till they reach the refrigerated cars or the buyers' warehouses. New Zealand cheese are all practically cool-cured, and never reach the consumer within two months after they are made. Moreover, they arrive in Britain in a cool season, and at a strategic period of the market. If Canada, therefore, is to maintain her position, she must look to her laurels, and, among other things, pay particular attention to

And the British cheese merchants, local buyers, instructors and experts all say the same.

The first effect of high temperatures is to make the texture of the cheese rough and mealy, and in extreme cases to cause them to show a greasiness that is undesirable, destroying the silkiness of texture always present in cheese at its best. Bad flavors are intensified at the higher temperatures, and many cheese go off flavor, while all become sharp much sooner. The injury begins as soon as the temperature rises above 60 degrees; at 74, grease shows on the surface-in other words, the fat begins to fry out.

Cool-curing minifies the development of defects in inferior cheese, and insures the curing of a good, well-made article into a fancy product.

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A few figures as to saving of shrinkage. During five years, commencing in 1902, the Dairy Commissioner's Branch of the Dominion Department of Agriculture maintained for illustration purposes four central cool-curing rooms, at Woodstock and Brockville, Ont., and St. Hyacinthe and Cowansville, Quebec, to which 104 factories sent cheese. To ascertain the saving in shrinkage by cool-curing, a test system was followed. Every week at least two cheese from each make were selected and weighed; one was cured in a room corresponding to ordinary factory conditions, the other placed in the cool-curing room. Averaging and comparing the weights at time of shipping out gave representative figures by which to estimate the shrinkage. It is on the strength of such conclusive data that Dairy Commissioner Ruddick estimated the saving in shrinkage by cool-curing at 1 to 11 per cent.

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Along this line, a few data from the Woodstock central cool-curing room will be of interest. The number of cheese cured there in the five years was 58,923, weighing 4,688,881 pounds. The saving in shrinkage was 70,792 pounds, with a value at that time, when cheese were lower than they are now, of \$7,064.00. Taking the case of a single factory, Spring Creek factory in four years sent 685,851 pounds of cheese, on which the saving in shrinkage was 9,957 pounds, valued at \$970, which went to the Government, by way

creased make this year.

W. F. Olds comes back at Mr. McNeill, Chief of the Dominion Fruit Division, with some heavy artillery of facts and evidence, contending, first, that winter apples grown in Norfolk Co., Ont., with reasonably satisfactory culture, will keep well enough for ordinary commercial purposes, and submitting a letter from one firm who preferred the pack of the Norfolk Fruit-growers' Association to apples from the famous Trenton district. Fall apples, he finds, are not being planted in Norfolk, and he quotes other opinions, in support of his own, that it would be inadvisable to plant them on a commercial scale, it being difficult to dispose of those they already have. He also indulges in some pleasantry at the modified delineation of the fall-apple belt. We think the general reader will conclude the Norfolk County growers have the best of the argument. They can and do grow good winter apples on a considerable scale, and market them profitably as such. The growing of fall apples in this region might be all right in the hands of specialists conveniently situated, who could handle them as a tender-fruit crop, but the general planting of fall apples commercially does not commend itself as a prudent policy, and we are inclined to agree with Mr. Olds, that the Fruit Division should bend its energies to getting the owners of present orchards to adopt modern methods.

the question of artificial cool-curing.

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So much for international competition. Let us bring the discussion down to a basis of direct individual interest. First of all, what is coolcuring ? A cool-curing room now signifies a curing room with an ice-chamber in connection, the walls of both compartments being insulated sufficiently to permit the temperature being controlled and maintained below 60 degrees Fah. The more important advantages of such a room are saving of from one to one and a half per cent. in shrinkage of the cheese, with consequently greater weights and values to the patron, improvement in quality, which, though still inadequately favored by the buyers, frequently nets an eighth to a quarter of a cent. a pound more for the cool-cured cheese; an avoidance of many cuts in price as a result of the development of bad flavors and objectionable qualities in the cheese, if cured at ordinary temperatures; lastly, a greater demand for cheese, as a result of the improvement in quality. Speaking at Prescott last winter, Dairy Commissioner Ruddick emphatically asseverated

from the same vat cured at higher temperatures."

of compensation for hauling the cheese. AIter four years' experience of cool-curing, the company remodelled the curing room at their factory, at a cost of \$575, or a capital expenditure of only about 60 per cent. of the four years' saving in shrinkage, not counting other advantages at all. In five years, East-and-West Oxford sent in 849,760 pounds of cheese, on which the saving in shrinkage was 12,757 pounds, valued at \$1,270. They then fitted up a curing room of their own, at a cost of six or seven hundred dollars. So it was with many other factories, and, as a net result of the Government demonstration, there were, last winter, according to Mr. Ruddick, 30 cool-curing rooms in the Central Ontario district including the Counties of Prince Edward, Hastings. and Peterboro, besides quite a number in Western Ontario and the Lake St. John District of Quebec. In the East they are quite as well pleased as in the West. One salesman thinks the patrons of his factory have made at least \$600 profit a year by cool-curing on an output of a hundred tons, the extra cost of the ice-chamber in the first place having been only this sum. Another thinks that, from an outlay " I state most positively, after comparing the of about \$400, their patrons have derived \$900 results of hundreds of tests, I have invariably advantage in three years. It was the privilege found the cheese cured at 60 degrees and under to of our editor to inspect a number of cool-curing be better in flavor and texture than other cheese rooms this month in Oxford County, and, without going into details just here, it is enough to