

termining the reputation of the cheese of any particular district. I am only repeating common talk in the trade when I say that the Central Ontario district, especially the Picton section, has come rapidly to the front again since it adopted the cool-curing system so generally.

EASTERN DISTRICTS NOW MAKING TARDY PROGRESS.

Now, let us see what has been doing meantime in the other districts. I find that there are only seven cool-curing room east of Kingston, all of which may be credited to the Brockville section, because there is not a single one, as far as I know, in the Eastern district.

I am afraid it is a case of history repeating itself, and that the dairymen of the Brockville section have, like their brethren of Belleville at an earlier period, already mentioned, been relying on past achievement, rather than on present effort, and, in consequence, they have been standing still, while other districts have been going ahead. I say this with all kindness, and without any intention of giving offence to my friends in this district. I ask them to bear in mind that I am quoting actual facts, not opinions, in support of this conclusion. I am not responsible for the facts.

Another matter has attracted my attention in preparing this review of the dairy situation in Eastern Ontario, which I think is worth mentioning. Members of the convention are aware that the Branch of the Dominion Department of Agriculture over which I have the honor to preside has for several years been encouraging the organization of cow-testing associations, for the purpose of studying the performance of individual cows. Many people think this movement is calculated to add more to the profits of dairying than any other scheme which has ever been proposed with that end in view. I need not go into details, because the subject has been ably presented by my assistant, Mr. Whitley. It will be sufficient to say that there are twenty of these associations in existence in Eastern Ontario. Of this number, 14 are in the Central Ontario district, which leaves only 6 east of Kingston, although the same effort at organization has been made in all parts of the country. These two movements—the cool-curing of cheese, and the improvement of the dairy herds—strike to the root of profitable dairy farming, the one by increasing the yield per cow, the other by improving the quality of cheese, and thus insuring a good demand at a higher level of prices. For these reasons, they deserve the careful attention of all dairymen.

Now we come to a point which should be emphasized. I have tried to show you that these three districts of Eastern Ontario have been progressing along certain lines in inverse ratio to their dependence on the dairy industry.

Does it not seem remarkable that the farmers who derive the largest proportion of their revenue from dairying appear to be the ones who are giving the least study to questions affecting their interests? I put it that way because it can be nothing but a lack of information which results in such backwardness as I have described. No intelligent man can have any doubt as to the value of the cool-curing of cheese, or of the keeping of records of his dairy herd, once he is in possession of all the facts bearing on these questions.

BENEFITS OF COOL-CURING CHEESE.

I ask your indulgence while I give you some facts in regard to the cool-curing of cheese. My own opportunities for getting information on the subject have been many, and I state most positively, after comparing the results of hundreds of tests, I have invariably found the cheese cured at 60 degrees and under to be better in flavor and texture than other cheese from the same vat cured at higher temperatures. But I do not ask you to take my unsupported word for it. I refer you to the pages of my annual reports for opinions of cheese merchants in Great Britain; ask any honest buyer in this country; ask Mr. Publow, the chief instructor; ask any of his instructors whose territory includes cheese factories with cool-curing rooms; ask the representatives of any of these factories, and be guided by what they say. I shall be glad to send anyone a list of all the cheese factories in Ontario which are equipped with cool-curing rooms. Here is what some of them say:

SIX HUNDRED DOLLARS' PROFIT FROM COOL-CURING IN TWO YEARS.

Mr. J. A. Holgate, patron and salesman of the Foxboro factory, in a letter recently received from him, makes the following statement: "I have tried to make a careful estimate of the results of cool-curing which we have had a cool-curing room, and I am convinced that in the last two years we have had at least \$600 a year profit from cool-curing on an output of 200,000 pounds of cheese. The satisfaction of having an extra \$600 a year is what the buyers want. Our cheese is sold at 80¢ more with the cool-curing than it would have cost without the

ice-chamber." That is to say, they were repaid for the outlay in one year.

Mr. G. A. Gillespie, of the Central Smith factory, writes: "It is quite safe to say that they (the patrons) have realized \$900 in three seasons from an outlay of about \$400."

Mr. J. R. Anderson, a patron of the Mountain View factory, says: "I can honestly say that we are pleased with the cool-curing of cheese here."

Mr. T. E. Whattam, Dairy Instructor in Prince Edward County, writes: "In talking with the factorymen who have cool-curing rooms, I find them well pleased with the results they have had, and am confident there are better things in store in the future, when the benefits of cool-curing are better known by the trade as a whole. I wish to say there is no comparison in the quality of the cheese cured in the ordinary way and those cured in the cool rooms. I believe cool-curing has helped the industry in this district more than any other advanced step in dairying in late years."

I could cite any number of similar statements. The gains mentioned are made up partly by saving of shrinkage, and partly by increased price, as compared with what would have been received for the same cheese had they been ordinarily cured.

COOL-CURING LESSENS CUTS IN PRICE.

I am well aware that cool-cured cheese do not receive the premium that they should over ordinary-cured, but I would like to point out that the value of cool-curing is not to be measured wholly by the relative price at which the cheese sell. There are many advantages, besides an advanced price for cheese, all of which put extra money into the pockets of the milk producers. In the first place, there is a saving of shrinkage, which is very considerable, amounting to about one per cent. In many cases there is a saving of cuts, because there are many cheese which pass without question when cool-cured that would have developed undesirable flavors and other objectionable qualities, if cured at ordinary temperatures. The patrons of factories with cool-curing rooms receive more money for their milk than they would do if the cheese were ordinary-cured.

IMPROVES QUALITY AND INCREASES DEMAND.

Then, I would remind the dairymen of Eastern Ontario that every pound of cheese they have sold during the past season brought a higher price, relatively, than it would have done if a certain number of the factories had not provided cool-curing rooms, and thus raised the general average quality of all the cheese, and increased the demand by encouraging consumption. I have not heard that any of the factories where the improvements have not been made have objected to receiving this premium on the price of their cheese.

The cool-curing movement has emphasized the importance of cool transit, and has attracted attention to that end of the business. The result is that all Canadian summer cheese are now landed in Great Britain in cooler condition, and milder in flavor than they formerly were, a circumstance which has materially helped to give tone to the market.

PATRONS SHOULD SHARE THE COST.

Now, it must be admitted that the Belleville and Picton districts differ from the Brockville section in this respect: that the factories there are mostly owned by the patrons themselves, while in the Brockville and Eastern district they are more largely proprietary. This is probably the reason why the Central Ontario factories, as well as those in Western Ontario, have been quicker to take hold of this question. But it is not a sufficient reason, for if it has paid the patrons of the co-operative factories, as shareholders in the companies, to incur the necessary expense, will it not pay the patrons of proprietary factories, who will derive all the benefit, to contribute in some manner to the cost of securing the improvements?

The owners of factories can hardly be expected to meet the whole expense out of the low rate for manufacturing which now prevails, in view of the fact that they will not receive any direct benefit from it.

Now, are the dairymen of the Brockville district going to repeat what they did some years ago, when they wrested the supremacy from the old Belleville district, or are these two Eastern sections to go on losing probably a quarter of a million a year through failure to take advantage of modern improvements, and at the same time endanger the future of a trade which is of so much importance to them?

NEW ZEALAND COMPETITION.

New Zealand is every year becoming more of a factor in the cheese trade, having doubled her output in two years. Now, note this point: The cheese from that country are all practically cool-cured, because the weather is never as hot there as it is here. This is a new kind of competition, and it presents some features which should cause Canadians interested in the cheese

industry to do some thinking. Bear in mind that New Zealand cheese arrive in Great Britain during the winter and spring months, or the period of non-production in Canada. If we continue to send cheese of indifferent quality, with heated flavors, etc., merchants in the Old Country will be disinclined to stock up with them for winter trade, but will wait and get a supply of the New Zealand cool-cured, and thus encourage the production of more and more cheese in that country. New Zealand is not a large country, but it is large enough to produce an enormous quantity of dairy produce if there is sufficient encouragement. The output of cheese in New Zealand this year will be, roughly speaking, 400,000 boxes—quite enough to have a material influence, as well as a sentimental effect, on market conditions. I do not think the alarm which is felt in some quarters over New Zealand competition will be justified if those engaged in the cheese industry in this country make the most of their opportunities. Our safeguard is to make a superior article so as to get a firm position in the market, but to do so, we must adopt every reasonable means to that end. We should surely avail ourselves of a plan which ensures immediate returns for the outlay, as well as security for the future.

PLANS AND SPECIFICATIONS FOR COOL-CURING ROOMS.

Incidentally, I would remind the members of the convention that I am prepared to send plans and specifications for cool-curing rooms, free of cost, to anyone who applies for them. We will give every assistance in our power towards the building of new factories, or in remodelling old ones.

A factoryman writes: "Through having an up-to-date cool-curing room in which to hold the cheese properly in hot weather, on a rising market, the past summer, we were able to save a couple of hundred dollars to the patrons on one lot."

POULTRY.

Chicken Raising.

Editor "The Farmer's Advocate":

My article on geese has been so favorably accepted by you that it gives me great pleasure in submitting this one on hen and chicken raising. My hens number about 80 at present, all Banded Rocks. They are of as good breeding as we can get in our locality. Every fall we buy four or five young cockerels, as good birds as we can secure. Sometimes we get them at our fall fairs, or, if not there, we buy from persons whose fowl have been successful as winners. Last fall, our own young fowl took second prize, but we have to exhibit against strong exhibitors.

We find, when we go to buy, that the best is always the cheapest in the end.

Our henhouse is not one of those modern and up-to-date houses, but we find it does very well. It is about 40 x 15 ft., and is taken off the whole south side of the barn. Its walls are double-boarded, with one ply of tar-felt between. There are four windows in the three outer walls, for letting in sunshine; too much sunshine cannot be had in any pen or stable. In center of long wall we have placed a door, good and large. Through this, all droppings, etc., are cleaned out. This door is left open on all sunny days, unless it is very cold. To keep hens from going out when it is open, there is a lath door hung on inside of house, and this is closed when the outer one is opened.

There is no floor in the house, just the earth, and, as our locality is well supplied with gravel pits, we find no trouble in keeping a good liberal supply on hand for the hens to eat or dust in. There is a covering of straw on top of house, height about 10 feet. No moisture or frost is ever seen on inside of the house.

For laying qualities, everybody thinks his own the best, and I think I have as good as can be found. Unlike other fowl of the same breed, and of which so many complaints are made, my hens are non-sitters. They never sit during the laying season—not until they start to moult. This compelled me to purchase an incubator last spring. If any do sit in early spring, I always have to use them for setting goose eggs or duck eggs under.

For early winter laying, I do not shove my hens, as I think I have as large a balance at the end of the year by not doing so. They are just pushed along quite easily, and when the middle of February comes they start to lay, and from that until about December 1st I get eggs—not by one and two a day, but by the dozens. When hens are pushed for early laying, and when it comes to setting your incubator, you find a greater percentage of infertile eggs than where they are not.

You cannot provide enough of change in food for them in early winter. Not everybody, I mean, is so situated as to get the necessary food called for to produce laying vitality. As for feed, I find oats and barley good, and for expense, it