

DAIRY.

Buttermaking at the Toronto Industrial.

One of the most popular and most interesting features of the fair was the buttermaking. The new dairy building is provided with a room especially built for this work—a model dairy indeed, with its clean white walls, cement floor, good drainage, a plentiful supply of hot and cold water, together with all the utensils necessary for the making of fine butter and cheese. This dairy room, so fresh and clean and sweet, brightly decorated with flowering plants, was one of the attractions of the fair. Not only were the buttermakers from the farm homes greatly benefited by the instruction they received, but it proved an object lesson to city people as well, many having to confess that they had never seen butter made before.

In former years the competitors in the buttermaking contests were given the ripened cream ready for churning. This year, however, a change was made, and the competitors were given sweet cream and were allowed to use their own judgment as regards the ripening, thus "skill in ripening cream" was another point of consideration in the practical work.

Onlookers, as a rule, think that the churning and working of the butter is simply a race, and the one who finishes first must be the winner of the first prize; but this is a wrong idea, as "time" is only one of the many things that are taken into consideration. "Quantity and quality of butter," "exhaustiveness of churning," "neatness and cleanliness," and many other points, are all summed up when making the awards. And not only is the practical work taken into account, but the finished butter is also scored for flavor, grain, color, salt and package.

In the professional class, four ladies and four gentlemen competed, with the following results:

First prize (\$40)—Miss M. Green, of Loyal: practical, 90.6; butter, 95.8.

Second prize (\$30)—Miss E. Hewson, of Mayfield: practical, 88.6; butter, 95.6.

Third prize (\$20)—Mr. O. Hooper, of Guelph: practical, 90.0; butter, 93.8.

Fourth prize (\$10)—Miss H. McAllister, of Beachville: practical, 86.2; butter, 95.0.

In the amateur class five entered, and the prizes were won by:

Miss J. Stewart, Hampstead: practical, 98.25; butter, 95.50.

Miss G. McGill, Eramosa: practical, 96.25; butter, 94.50.

Mr. M. Stonehouse, Port Perry: practical, 97.00; butter, 93.62.

Mr. R. S. Hambleton, Jarvis: practical, 91.00; butter, 93.75.

The competition in each class was keen, and the character of the work in most cases was excellent. Each morning and afternoon short addresses were given by well-known agricultural and dairy experts. Those taking part were Mr. A. F. McLaren, M. P., Prof. Robertson, Dr. Mills, Prof. Ruddick, Prof. Dean, Prof. Hart, and Mr. James Stonehouse.

These pithy, pointed talks were eagerly listened to by those present, and it is to be hoped that the management of the fair will see fit to arrange for more instruction of this kind next year. In fact, so anxious were the people for more knowledge that a lecturer could get a crowd at any moment of the day.

When we consider that \$25,000,000 represents our exports of butter and cheese, dairying is a branch of work not to be despised, and should receive greater attention than it does at present, in order that we may improve not only in quantity, but also in quality. The better care of milk and cream is the great question that is met in the dairy business to-day, and if these buttermaking competitions do no more than create in those looking on a desire to do better and keep things cleaner, they will be well worth all the money expended, and will be a boon to the makers in the cheese and butter factories throughout the country, for if a farmer learns how best to care for milk and cream for home use, he will then know how to care for it for factory use. The dairyman's motto is "cleanliness," and visitors to the fair must certainly have been impressed when they saw the well-kept dairy with its intelligent dairymaids and dairymen clad in spotless white, doing their work in a scientific and systematic manner.

A new feature this year was the making of cheese. This work was carried on simply as an object lesson, and it is to be regretted that the new dairy building is not larger, so that the work might be done where all could see. Being done in the background, so to speak, much of the benefit that might have been received was lost. This department of work was taken charge of by Mr. R. W. Stratton, of the O. A. C. dairy department, and Mr. J. Babb, of Gifford.

The Babcock test, the acidimetre, and other dairy apparatus, were used and explained for the benefit of those interested in up-to-date dairying. How to make and use "culture" in buttermaking was also shown, and any questions asked regarding any phase of dairy work were fully answered by those

in charge, thus making this department a veritable dairy school.

Miss Bella Millar, of Guelph, an instructor in dairying, and a graduate of the O. A. C. dairy school, was judge of the competition for the first week, and Prof. Dean, of the O. A. C., the second. Both judges took a keen interest in all parts of the work.

The whole dairy building was under the superintendence of Mr. Jas. Stonehouse, a man well known in dairy circles, and one who deserves great credit for the thorough and systematic manner in which the work under his management was carried on.

The Beachville Creamery and By-product.

The Beachville Creamery, Oxford County, Ont., is well known throughout Canada by its brand of butter. It is owned by Jas. Ireland, one of our oldest manufacturers of cheese and butter, who gained honor as a maker of large cheese for Sir Thomas Lipton and other English firms. In 1891 Mr. Ireland built a cheese factory in Beachville, and after running it as such till 1896, put in a butter plant, and made about 30 tons of butter the first year. Since then the creamery has steadily increased, till now 6,000,000 pounds of milk is handled and 250,000 pounds of butter made annually. In connection with the making of butter, the skim milk is all utilized in the form of dried casein, and used by furniture dealers and paper hangers in the form of glue. Over one hundred and fifty tons a year is sold for this purpose. In this way the farmers realize more per hundred for their product, and it has proved to be a very profitable industry. The creamery is situated on a dry, sandy hill, with the best of drainage and splendid water. The building is of



MR. ROBT. IRELAND.

Recently appointed on the staff of the Kingston Dairy School.

frame, 60x80, with an addition of 30x60, painted outside and in. Three large-size Alpha separators, with a capacity of 11,000 pounds an hour, separate all the milk. It takes seven 7,500-pound vats to hold the milk of one day. The cream-ripening room is 30x16 feet, and has two 5,000-pound cream vats. The room is painted white, and has plenty of light. The buttermaking room is 30x50, fitted with two 600-gallon churns and two large butter-workers, and is considered the most up-to-date butter room in the country. The cold-storage rooms, of which there are two, hold 30 tons of butter each, and are kept at a temperature of 38 F. In connection with the factory is a large icehouse, 40x80 feet, built of stone, holding 500 tons of ice, which is kept by the use of straw (no sawdust). The casein is a by-product when finished, looks very much like light coffee sugar, and is manufactured at the rate of from eight to ten barrels a day.

The success the creamery has attained is due to the enterprising maker, Mr. Robert Ireland, who is widely known among dairymen throughout Canada. He was a student of Guelph Agricultural College, and was recently appointed instructor in buttermaking at the Kingston Dairy School. He has been a very successful competitor at Canadian exhibitions, also the Pan-American and World's Fair, Chicago. At the recent Toronto Industrial, two firsts and second prizes were awarded to his exhibit.

Trap the Dairy Drain.

To the Editor "Farmer's Advocate":

Sir,—In reading the instructions given as to how to build a small dairy, page 686 of September 15th issue, I thought that it would have been well to have added a warning about the drain. It should be trapped to prevent the bad smell from going up into the dairy, as a bad odor from a drain has been known to practically ruin butter placed in a building of that kind. Wishing you every success, I am as ever,

Oxford Co., Ont.

D. LAWRENCE.

GARDEN AND ORCHARD.

The Fruit Exhibit at Toronto.

There is probably no better advertisement of the capabilities and resources of the Province of Ontario than the Industrial Fair. Especially is this true of the exhibit in the fruit building. And yet it is not a fair or full representation of the capabilities of our Province in fruit-growing, owing to the early date at which the Fair is held, the fall and winter varieties of fruit not having attained full growth or color; and the southern parts, the Niagara Peninsula and the localities bordering on Lakes Ontario and Erie, have a decided advantage here in the fact of their season being usually about two weeks earlier than the middle and northern counties.

The exhibit of fruit this year, however, was a surprise to most people. Owing to the wet, cool weather all through the season, no one expected to see such a fine display. On entering the building, the exhibit of the Experimental Fruit Stations is the first to claim attention, where nine stations are represented. A. W. Peart, of the Burlington station, shows 115 varieties of fruit of fine quality, including many fine pears and plums. M. Pettit, Winona, of the Wentworth station, had a fine collection of grapes, but not so large as usual, owing to the fact of many varieties not being matured. The Simcoe station had about 100 varieties of fruit, including 12 varieties of hardy cherries, put up in solution in glass jars, as well as several varieties of small fruits. The Huron station had about 20 varieties of apples and some 30 varieties of plums, all of fine appearance. The strawberry raspberry shown in this collection was something of a novelty, being a cross between those two fruits. It is a handsome looking fruit, but in quality an utter failure. The Georgian Bay station had one of the finest exhibits, consisting almost entirely of plums, 130 varieties, and all of fine quality. Never was the capabilities of the Georgian Bay District as a plum-growing section shown to better advantage. Mr. Mitchell, who conducts the station, is a careful and thorough cultivator, and is evidently in love with his work. The East Central station, located at Whitby, showed well the ability of that section to produce fine apples and pears, about 40 varieties of each being represented. The Bay of Quinte station exhibit was the largest of all, 140 varieties, mostly apples, with a number of fine pears. The St. Lawrence station, located at Maitland, in the St. Lawrence Valley, was represented by about 32 varieties of apples and several varieties of plums. The chief commercial apples in that section is the Snow and Scarlet Pippin, the latter a seedling of the Snow. The Snow apple (or Fameuse, which is its proper name) having originated on the island of Montreal, the nearer to its original home it is grown the more productive it is, and the better the quality. Mr. Jones, who conducts the station, has an orchard of Fameuse and Scarlet Pippins, which is one of the most productive in the Province. The Southwestern station, located at Leamington, in Essex county, and conducted by Mr. Hillburn, had a tempting display of peaches, one of the most luscious fruits produced in the Province, the Fitzgerald, Elberta, Tyhurst and Crawford being leading varieties. There is evidence, from the experiments now being made with different varieties, that the peach belt in this Province will be considerably extended in the future, and that many localities further north will be able to grow some hardy varieties of this most desirable fruit, and of fairly good quality.

Coming to the fruit exhibited in competition for prizes, one is impressed with the variety and great excellence of the display. Looking at the great exhibit of plums, one of the first thoughts is: Do we not produce the best plums in the world as well as the best apples? And perhaps it may seem selfish, but one cannot help thinking of the great and increasing quantity of California plums that are sold in this country, the appearance of which is superior, but the quality and flavor decidedly inferior to our own. But it is said we should not object to that, they come in before ours. True, but yet the fact remains that they do come into competition with our own in other parts of the Dominion.

Coming to the collections: Here is large prizes offered for a collection of 40 varieties of apples, and the red ticket is placed on a collection from the Bay of Quinte and the blue on one from Hamilton, both of them splendid in appearance, but just here the question arises: Is it wise to offer a large prize for 40 varieties? How many of these have any commercial value? Is this sort of thing not more of an injury than a benefit? Would not 20 varieties more than cover all the commercial varieties? The same may be said of the pears. You ask a pear-grower for a list of his best commercial pears, including those suitable for export, and he will not reach the figure ten.

On the west side is a large exhibit by the Fonthill Nursery of 200 varieties of apples. This enterprising firm have a large experimental orchard, where varieties are tested before being propagated for sale, which is a very good idea. But here again the same question comes up, what do we want with such an everlasting number of varieties? How many of them are of any use? Are we not growing far too many now? Every experienced grower will tell you to confine your planting to a few of the best commercial varieties.

The bulk of the prizes in apples went to the Bay of Quinte district and to Hamilton, while in pears, peaches and grapes the Niagara Peninsula, Burlington and Hamilton districts got the lion's share.