

**High.**

re has an inter-  
plies of wheat,  
roduce for 1909,  
prices was the  
for wheat—the  
ersea supplies of  
in the previous  
1908 and 1909  
average price of  
Colonial and  
t price of all—  
t 26s. 10d. was  
ts at 18s. 11d.

**Yields.**

who has a satis-  
ow or wet fields  
s not pay. On  
to be wiped out  
years. Many  
are putting in  
ite plan of the

that pays bet-  
Woods, of Gara-  
o a member of  
"My soil is a  
I have a good  
t. Three-inch  
was used for a  
drain along  
west part, but,  
were putting it  
gain. I would  
four-inch main,  
also make the  
ch drains more  
rous. On the  
age, we get the  
in at least a  
earlier. In a  
season we gain  
weeks or more,  
in some in-  
es it would  
been impossible  
et the crop in  
e it was too  
to have a crop.  
Besides making  
increases in  
we must con-  
the satisfac-  
and ease in  
ing the land.  
s that formerly  
not be culti-  
or sown at  
same time as  
est of the field,  
but putting the  
into mud, and  
g less than  
without de-  
impossible to  
for seeding."

**Y.****Produce 100**

g line of Cana-  
ry. Some years  
beef cattle for  
of dairying, be-  
e better, more  
is a great Ca-  
sh market. In  
creameries have  
r farms, home  
city and town  
ving enormous-  
es cream tariff  
empting prices  
condensed-milk  
powder estab-  
at of the milk  
d to a powder.  
"The Farm-  
herds of cows  
Many have al-  
hing and sam-  
less definitely  
a season for  
ly what value  
ilk or whey.  
y? And what  
winter? What  
r day for the  
p for the milk

at home, if made into butter? What is it costing you per cwt. to produce milk? What returns do you get per cwt. for the milk, or per cow, cash for the season? Even at, say, 80 cents per cwt. for milk, how do some factory patrons contrive to obtain more satisfactory net returns than others? Cost of production deducted, what is your net return for milk?

For the best letter, answering in detail the foregoing inquiries, according to the line of dairying pursued by the writer, and stating the breed or grade of cows used, we will award a prize of \$12; for the second best, \$8, and for the third, \$5. Not fancy essays, so much as a plain statement of facts and figures, to the extent of about 1,500 words, is what is required. It will just be a story of dairy experience, and will shed light on the question, What is the cost and the profit of producing milk?

Look up your records for this or a previous season, and put down the details in black and white. Mark all letters, "Dairy-cow Contest," and send letters in sealed envelopes, not rolled, but folded, so as to reach this office not later than October 15th, 1910.

**How Exhibition Butter was Made.**

Editor "The Farmer's Advocate":

Please accept my thanks for your kind letter of congratulations on my again winning the challenge trophy for butter at the Canadian National Exhibition.

In reply to your request for an article from me as to methods of manufacture and general conditions in this locality, I will endeavor to give you what information I can. This creamery is owned and operated by Messrs. Gunns, Ltd., of Toronto, who are well known for the excellent quality of goods supplied to their many customers. It is entirely a cream-gathering creamery, cream being collected in tanks twice a week from each patron during the summer months.

The quality of cream received, on the whole, is not by any means first-class, due partly to the distance it has to be hauled, and undoubtedly carelessness on the part of some patrons in not properly cooling their cream after separating, and also in sending cream too poor in butter-fat. The average test will not run over 22%, although some routes will go as high as 28%.

**SELECTED CREAM.**

A week before the butter was made for the exhibition, each patron on the route from which the cream was to be selected was asked by the cream-hauler to take every precaution to send only good cream, sweet in flavor and rich in butter-fat. Owing to the very hot and unfavorable weather, the cream received was not by any means sweet, but the flavor was not at all bad, thanks to the care taken by the patrons. Immediately on the arrival at factory, cream was pasteurized to a temperature of 185° F., and cooled at once to 58° F.; 10% of pure culture was added, and left to stand at 58° over night; churned at 56° in 25 minutes; washed twice in water at 55° F.; salted in the granular form. Butter was partly worked and left in churn for two hours after salting, to allow salt to dissolve; was then worked five minutes in the rollers and packed. Every precaution was taken to see that the packages were neat and clean and the butter properly packed and neatly finished.

R. M. PLAYER.

Bruce Co., Ont.

**Summer Soiling Indicated.**

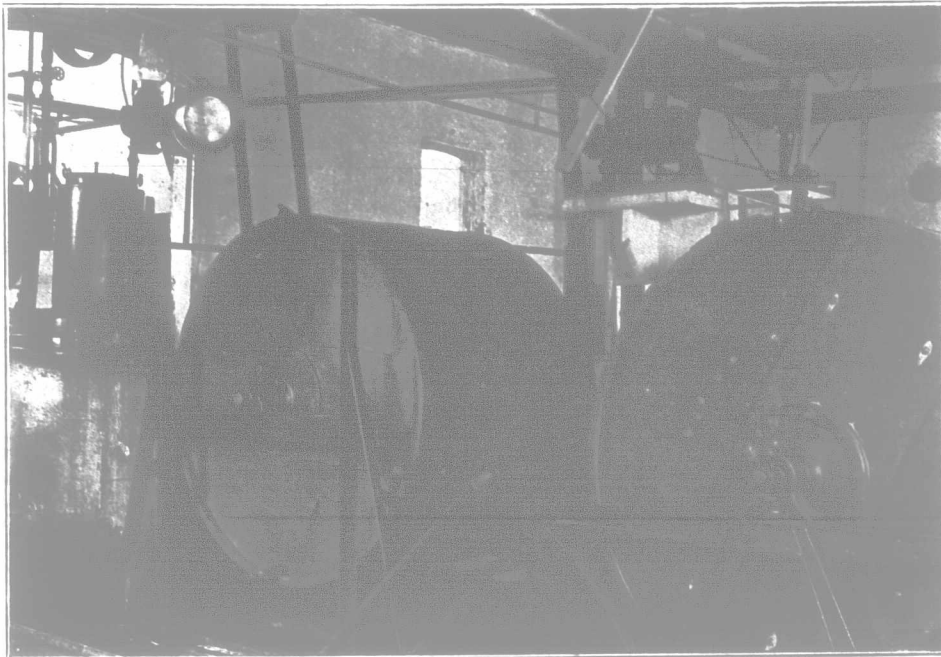
The unusual drouth prevalent this summer in many portions of the United States where dairy husbandry forms an important part of the farm economy, and affecting the milk production in many herds, and, consequently, the results of many official and semi-official tests, has brought sharply to the notice of Malcolm H. Gardner, Superintendent of Advanced Registry for the American Holstein-Friesian Association, the difference in production between those herds whose owners were prepared, and those whose owners were not prepared, for such a contingency.

Owing," he observes, "to the physical conformation of the North American Continent, there will always be more or less drouth in the summer season; and the increasing value of farm lands and interest on the investment accentuate the necessity of insuring against loss from their effects, as far as it may be possible to do so.

"With lands low in value, a light crop will pay interest upon the investment; but when they are of high value, the largest possible crop must be secured. Even under favorable conditions, pastures will not give nearly the feed value that the same lands will produce as meadow, though, of course, the matter of labor is eliminated; but when undue dependence is placed upon the pastures, and they fail, the results are little short of disastrous. It is generally admitted that, for health's sake, cattle need the freedom of the pasture; also, there is no feed that in May and June can quite take the place of fresh, green grass. In

my own experience, those breeders and dairymen are most successful who provide only sufficient pasturage for the early months of the average season, providing either silage or soiling crops to supplement the pastures when they begin to fail.

"Corn is mostly used for the soiling crop, and when well on towards maturity, contains a maximum of digestible nutrients. But, as a soiling crop, it is needed before it is mature, as a rule containing but little nutriment in proportion to its weight; and, while better than nothing, the breeder who feeds it in an immature condition deprives himself of what would become a valuable feed, and falls far short of supplying the needs of his cattle. I speak from experience, having tried soiling crops of all kinds before it was known that



Interior View of the Wilmot Creamery.  
Showing two combined churns and butter-workers.

corn silage could be fed as well in summer as in winter. Corn silage made from nearly-mature corn goes far towards solving the drouth problem, and wise breeders plan to have sufficient left over to last through an ordinary drouth.

"Even silage from mature corn is, however, not a properly-balanced food, and clover or alfalfa hay and a little bran should be fed with it. Alfalfa hay is better than clover to feed with corn silage, and with it it is possible to omit the bran. Alfalfa is a wonderful plant, and some one of the varieties will grow almost anywhere in the United States, while it is nearly drouth-proof. Every breeder who has not done so already should try it in a small way; if he can make one acre a success, he can then try a larger field. Corn is our other drouth-resisting crop; and if the moisture in the ground be conserved by about two inches of loose, fine-dirt mulch, it is surprising how little rain is required to make a good crop. In times of drouth, and when the corn has grown too tall for the two-horse cultivator, a fine-tooth single walking cultivator will go far towards irrigating the fields."

**From Beer to Butter.**

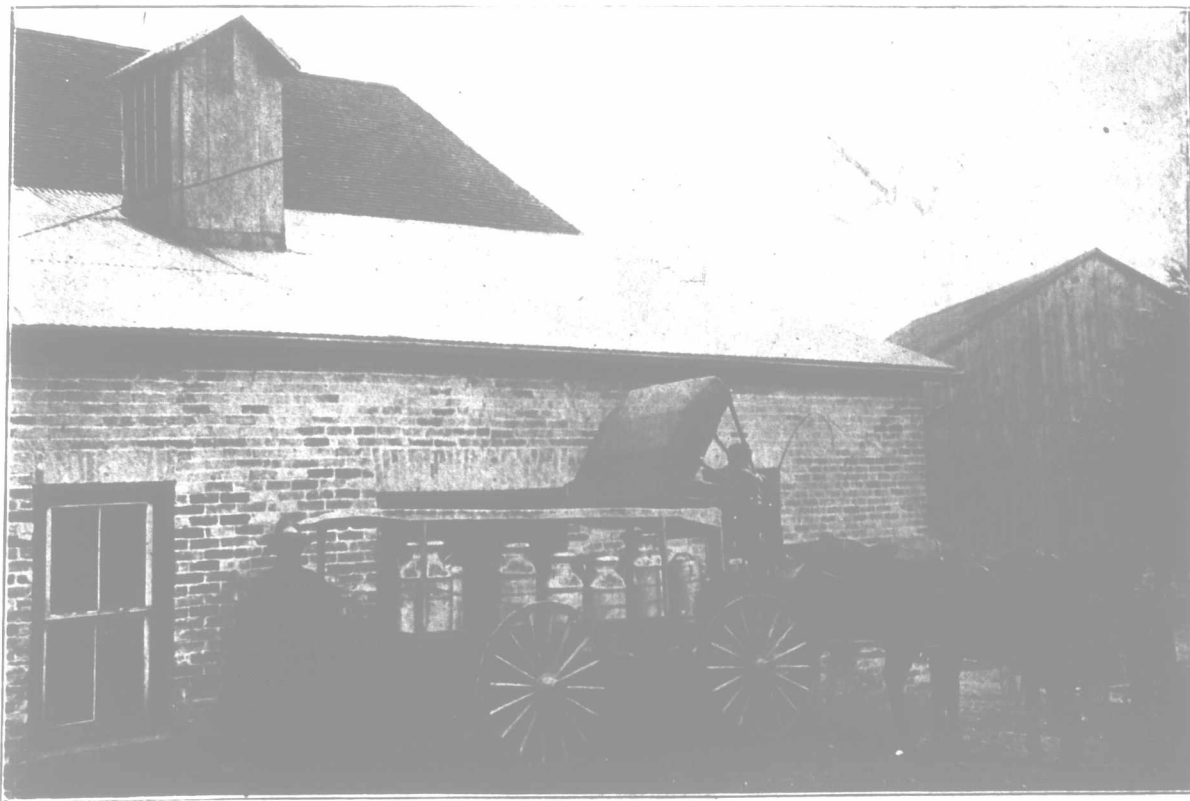
A brewery partially destroyed by fire, converted into a creamery 9 years ago, is the plant of the Wilmot Creamery Co., formerly known as Silver Spring Creamery Co., near Baden, Waterloo Co., Ont. It is an up-to-date creamery, too, and well managed by O. J. Schweitzer, a former cheese-maker. He was winner in 1905, when making at Brocksden factory, of the Challenge Cup at the Winter Dairy Exhibition held in connection with the Western Ontario Dairymen's convention. With two winters' experience making butter in the Tavistock factory, he came to Baden three years ago.

The Wilmot Creamery made last year 174,716 pounds of butter, and, when visited this year, the make was about 6,000 pounds per week, showing

a handsome increase over 1909. Our dairy editor was fortunate in arriving just in time to secure a snapshot of a cream-hauler delivering a load collected in individual cans, which are being tried this season, with excellent satisfaction thus far, on two or three routes. This system enables the creameryman to see in just what condition as to sweetness and flavor, each patron's cream is received. The cans, of which there are two sets, are washed at the creamery. The canvas cover on the wagon is to be noted. The driver, by the way, thinks it would be better if extending a foot or 18 inches beyond the wagon; the cover,

however, is an experiment. The patrons are being induced to send richer cream year by year, the average being now up to about 26 per cent. Some producers, who used to send cream testing around 21 per cent., are now up to 36 and 40 per cent. The maker prefers it not over 35 per cent., and not lower than 30 per cent. Low-testing cream is usually sour. The cream is gathered twice a week, and has been coming in during the summer at a temperature of 68 to 70 degrees. The cream is pasteurized now at 165 degrees, but, as it increases in richness and sweetness, may be pasteurized at a higher temperature. Our interior view shows conspicuously in the foreground the two churns, which are of different makes, the near one a Success, and the further one a Simplex. Both give good satisfaction.

The refrigerator chamber, 10 x 10 feet, inside dimensions, is cooled with a circulation system much like the cool-curing rooms in cheese factories, save that the floor being insulated, as well as the walls, the temperature can be kept down pretty steadily to about 42 degrees, instead of



Delivering Cream at the Wilmot Creamery.

Near Baden, Waterloo Co., Ont. Note the canvas-covered wagon and the individual cans.