DAIRY AND CREAMERY.

CIRCULAR COW BARN.

It Will Get Sunshine In Nearly Every Window Anyhow.

Here is one man's idea of a model barn. It has room for cows and horses both, with lofts overhead for grain. The objections to basement stables are as nearly obviated here as they could be anywhere.

In this barn, or any barn, the animals should all head outward so as to get the air and light. The neat ventilator at the

ROUND BARN.

top shows that the animals get fresh air in winter. The greatest objection to a basement stable is that the moisture from the animals rises through the floor above and penetrates the hay and grain stored upon that floor and often molds them.

On the whole, however, this barn is built on an excellent pattern. One more convenient for the storing and distribution of food for live stock could not well be devised.

The Heifer.

We must breed this calf into a cow in order that she may give a flow of milk at 2 years of age and in order to get her into the habit of giving milk. The average man does not understand that a heifer must eat so as to furnish nutrition out of her food for her own sustenance first. Here are 600 or 700 pounds that she must keep up to a temperature of 98 degrees or 99 degrees, or she dies. You saw how difficult it was to keep comfortable in this room when our stove had little coal. Imagine heifers placed in such difficult conditions, where the owner does not build a fire to aid them in storing up energy. What does the cow do? She consumes more fuel in order to keep her temperature up to the proper point before she begins to use any to make milk. She has to have a maintenance ration.

Now she has conceived, and it is nature's law to reproduce. Nature sacrifices everything for that. So the young calf must raise another calf in the uterus. She must maintain a heat up to 100 degrees, or she dies. Some men treat these young heifers as though they were basswood Indians in front of a tobacco store, with just about as much consideration. The next thing is the little calf drops a calf. If it comes from a good family, the man is likely to raise that calf. Now, as a rule, it should not be raised. It was merely a necessity to get the heifer started to give milk. Milk the heifer three months. She is turned out on fair grass very likely early in May. In June she is asked to give another calf and is bred again. Then you ask her to give milk. You are disappointed if you don't get from one-half to one pound of butter. And then you want her to grow. There is a threefold demand made on this heifer. I appeal to you, gentlemen, we are asking that heifer to do too much, to perpetuate herself with all these demands upon her.

Suppose she is now 6 years old. She gives a large quantity of butter. You ask her to still retain sufficient vigor to transmit to her offspring all of her good qualities and a little more. If that cow has been engaged in her business of giving milk, she is nervous; she has comparatively little force which comes from muscle and energy. How are we going to get that force? Why, through the male. He has a life of comparative ease and is the proper bank from which to draw. His physical organization is not all milked away. You will agree with me that he should be in the highest possible physical condition in order to overcome this difficulty we have with the dam.—Professor Roberts.

Which Pays Best?

To prove which is the more profitable market, the creamery or a milk association, in Philadelphia two dairymen reported to Dr. A. T. Neale month by month, one sending his milk to Philadelphia, the other to a creamery which paid by test. The one sent 33,214 quarts of milk to Philadelphia, for which he received 3.1 cents per quart, or $1,027.23, the milk averaging 4.3 per cent of fat for the year. The other sent 33,214 quarts of 5 per cent milk to the creamery, receiving $1,076.84. Had the first sent his 4.3 milk to the creamery he would have lost $101.04, and had the second sent his 5 per cent milk to the city he would have lost $49.63. "That is," said Dr. Neale, "in the city trade no distinction in price is made between a product with 5 per cent and one with 4.3 per cent of butter, yet in 33,214 quarts of milk this difference on a creamery basis represents $150.67."—Philadelphia Ledger.

Oleo Goes Down Hill.

It seems that the manufacture of oleomargarine is falling off. This is due no doubt to the recent legislation and the disposition of producers of butter to watch the selling of oleo very closely. During April only 40,750 50 pound tubs were turned out at Chicago against 57,837 for April, 1894. During the past ten months of the fiscal year 589,961 tubs have been manufactured against 705,650 for the same time last year. Boston consumption shows a decline of 75 per cent since the enforcement of the state law, which the United States supreme court declared constitutional.

AUGUST CHEESE.

Useful Suggestions From Two Well Known Canadian Experts.

From Dairy Inspector Peter McFarlane:

Cheesemakers generally have had considerable trouble in making fine cheese. Many are anxious for a good yield and therefore try to obtain it at the expense of the quality. Now, this is rather poor policy. Quality should be the first consideration and quantity second. Makers must examine every can carefully, rejecting sour and bad flavored milk. Heat to 86 degrees, using the rennet test. Set when ripe enough so as to run off the whey in about three hours from the time the milk is set. Use rennet enough to cut in 40 to 45 minutes and cut fine—that is, provided you have any difficulty in getting a nice firm curd. Stir slowly at first.

Cook to 100 degrees, firm well in the whey, using a small hand hayrake, and draw the whey well down at the first show of acid. Keep up the stirring process until you have a good, firm curd, and draw the balance of whey when it shows from a quarter to half an inch of acid by the hot iron test. Stir until dry enough, so as to expel the surplus whey, and pack at the sides of the vat, leaving a large drain up the center. Turn over in half an hour. Do not allow the whey to gather in pools around the curd. Pile double the second turning and increase the layers every time until four or five high. Turn every 20 minutes after the first time. Keep over 94 degrees, 96 degrees being the best temperature.

If there is no gas, it will be ready to pass through the mill in, say, 2½ to 3 hours; if gassy, do not pass through the mill until the gas has nearly all gone. Allow it to cool down to 90 or 92 before milling. Stir well for 15 to 20 minutes and salt with 2¾ pounds of salt per 1,000 pounds of milk. Stir for 15 minutes after salting. Put to press as large cheeses as you can press and have boxes large enough to hold them, as the demand is now for tall cheese. Press gently at first, turning them, and pull up the bandage in about 45 or 50 minutes. Put on all the pressure before leaving them for the night and see that they are pressing even. Turn them again in the morning and keep up the pressure through the day, taking them out a short time before they are needed. Turn them every day in the curing room. If the weather is hot and dry, sprinkle the curing room with cold water twice or three times a day. Air the curing room night and morning, and you should expect good results.

From Professor Robertson:

"Cool August cheese" implies a rich flavor which may be preserved for the winter trade; a firm, solid body full of meatiness; a fine outside finish, with clean, bright rind, free from cracks, and bandages fresh looking. When the evenings are cool and the milk needs ripening, don't fail to leave it in the vat until it reaches the proper state of maturity before the rennet is added. Use enough rennet to coagulate mature milk to a state fit for cutting in 40 minutes, when set at 88 degrees F. Dilute the extract to the extent of one pailful of water for every vatful of milk and then mix it thoroughly by vigorous, rapid stirring.

When you are troubled with gassy curds, allow a development of acid, such as will be indicated by threads from the hot iron test a quarter of an inch long before the removal of the whey. It is a good plan to run most of the whey off at an earlier stage and to leave only enough whey on the curd to permit a free stirring of it. After the whey is drawn air the curd thoroughly and make provision for keeping it warm. When a curd sink is used, if you need to retain the heat put the curd back into the vat, but let the temperature be kept above 94 degrees. Frequent turning and aeration will facilitate the development of acid, providing the temperature be maintained. After the curd cutter has been used the curd should be stirred and aired for 15 or 20 minutes before the application of salt. From 2½ to 2¾ pounds of salt per 1,000 pounds of milk should be added to curds that are fairly well dried by the previous stirring. They should be put in the hoops within 20 minutes after the salt has been mixed in.

Pressure should be applied very gradually. The cheese should be bandaged neatly when they are turned in the hoops, within two hours after they are put in the presses. They should again be turned in the hoops some time in the following morning. Where practicable cheese should be pressed for at least 20 hours.

Dairy and Creamery.

In order to be first class a cow should be a large milker and should have also a heavy per cent of fat and solids in the milk.

A genius has found a good way to paint iron stable and creamery roofs quickly. He gets an ordinary spray pump and a quantity of pure boiled linseed oil. Then he puts the oil into the sprayer, turns the hose upon the roof and pumps away. He says he can spray a whole large barn roof thus in two hours. Some of the oil drops off, but not much. Roofs that have had iron paint upon them previously but have grown rusty can be treated in this way with great advantage about every other year.

It is the thin, poor cream that froths and foams when churned at low temperature. Rich cream is not apt to. This is one of Mr. H. B. Gurler's experimental discoveries.

It begins to look as if the colder cream can be churned the more butter it will bring.

August is perhaps the very worst month in the year for microbes, foul odors and noxious vapors of all kinds. It has been observed that the cholera always rages worst in August and the early part of September. During August, therefore, those who handle milk, cream, butter and cheese will need to be doubly and triply careful as to cleanliness.

FRUIT AND FLOWERS

VARIETIES OF THE STRAWBERRY.

Desirable Sorts as Decided by Tests Made at Several Experiment Stations.

A bulletin from the New York station bearing the title, "Varieties of Strawberries," consists of a tabulation of the replies received from 110 correspondents throughout the state in regard to the different varieties grown in their sections. The Wilson strawberry still appears to be the leading variety for general cultivation, followed by Crescent, Bubach, Haverland, Warfield and Parker Earle. Each important strawberry center has its own list of favorites, varying according to locality. In Oswego county, for example, Parker Earle and Bubach are preferred to Wilson and Crescent. The most popular early variety is Michel, with Crescent ranking second. Parker Earle and Gandy are recommended as late berries. The Crescent is considered the most productive variety, with Wilson and Warfield ranking second and third. As shippers Wilson, Parker Earle and Warfield received the greatest number of votes. In regard to the best berry for home use 31 varieties are mentioned by 101 correspondents, Bubach, Crescent, Jessie and Wilson receiving the most votes for this honor. In all 53 varieties are recommended, but the most prominent are Wilson, Crescent, Bubach, Haverland, Parker Earle, Warfield, Michel, Gandy and Jessie.

From the Utah comes a bulletin giving notes on 14 varieties of strawberries, and Parker Earle, Sharpless and Thompson No. 7 are recommended.

On the grounds of the Colorado station 38 varieties were tested.

Michel Early is recommended as a desirable extra early berry, while the most attractive berry in appearance and flavor was Edward Favorite. For market varieties are recommended Warfield, Parker Earle, Edward Favorite, Boynton and Woolverton.

The following are the best of the varieties that have been thoroughly tested at the Ohio station: Bubach, Crescent, Enhance, Greenville, Haverland, Lorett, Muskingham, Parker Earle and Warfield.

About Greenhouse Roofs.

Rural New Yorker contributes the following points about greenhouse roofs: A pitch of 26 degrees, six inches to the foot, is about as flat as can be safely used. Thirty degrees, seven inches to the foot, is much better, as there is then enough adhesion of the inside drip to the glass to carry it down to the plate. Grooved sash bars are growing in favor and should be used, where obtainable, as they cost but a trifle more than the plain bars and carry off considerable leakage and condensed moisture that might otherwise drip. They do not gather moisture from the glass between the bars.

Short-span-to-the-south greenhouses are still in an experimental state. The general consensus of opinion seems to be that they admit more sunlight at midwinter than the usual style and less at the beginning and end of the season, when the angle of the sun is passing that of the northern slope. They are cooler and more comfortable in summer. The one serious objection, which greatly limits their range of usefulness, is that, if tall growing plants are placed in the front or south bench, where the head room is greatest, they shade the remaining portions of the house badly, as the north bench must of necessity be placed low. Very good results are claimed when low plants requiring much sunlight are grown.

The Lotus Lily.

Nelumbium speciosum, the lotus lily and its varieties, are of comparatively recent introduction into the United States, but its culture as a hardy plant is becoming general, its naturalization and success being phenomenal. Twelve or fourteen years ago E. D. Sturtevant first planted Nelumbium speciosum in a mill pond at Bordentown, N. J. It soon established itself and proved its hardiness in that location. Since that time it has grown as freely and bloomed more profusely than the Ameri-

LOTUS LILIES.

can species, Nelumbium luteum. Their introduction into Central park, New York, Lincoln and other parks and gardens in Chicago, Philadelphia, St. Louis and Boston marks an era in American floriculture. July and August are the flowering months for the nelumbium.

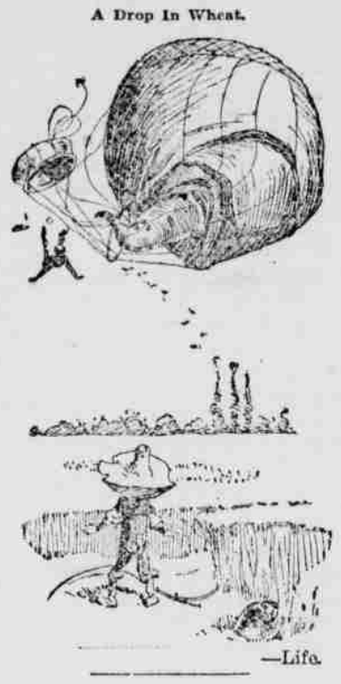
Fine specimens are to be seen in gardens of no larger dimensions than two or three city lots and where a small tank 10 by 3 feet, or a vat 6 feet in diameter, or a hogshead sunk into the ground to the natural level, or even made from the half of a kerosene barrel, may be utilized with success. In all cases where artificial resources are used a good rich soil and plenty of it is necessary to cultivate nelumbium. The chief point in planting is apparently not to plant until the weather is favorable for quick growth.

Entirely Too Convenient.

Sam—Foh de Lawd's sake, Pete, wha' foh you cuttin down dem nice trees?

Pete—Can't you see, niggah, dat dey's jis' invitin a lynchin party.—Truth.

A Drop In Wheat.



—Life.

Within the Law.

Uncle Mose—Good mornin, deacon. Wha' for youse gwine and tied dem boxin gloves on de ole mule's hind feet?

Deacon—Dis ere mule is a hard hitter, and it's agin de law to use bare nuckels, so I'ze put de gloves on him.—Texas Siftings.

Their Custom.

Visitor—Do your neighbors take a Sunday paper?

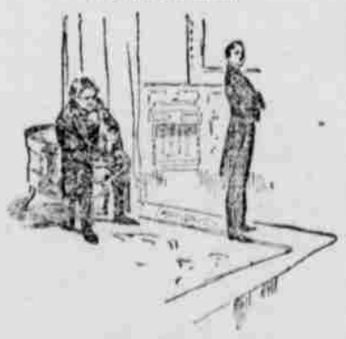
Fair Suburban Householder—When they get up before we do.—St. James Budget.

At a Church Wedding.

She—The groom seems quite cool.

He—The bride is from Boston.—Life.

A Quick Response.



Old Cashly (giving his son a check)—Now, be careful, my boy. Remember, a fool and his money are soon parted.

Spendall Cashly—Yes, sir, and thank you for having obliged me so promptly.—Scribner's Magazine.