

In regard to the section case Brother Root made a grand invention in it, out in my mind, there always has been an oversight, or call it what we may, and I will here try and show you what it is. For some reason it was thought best to make the sections as the price list says, two inches wide, but they are mostly 1 1/2. Now when we come to think of it, I find that there is only an eighth of an inch at the outside sections, or only half of a regular bee space, thus the bees are obliged to shorten those outside sills just an eighth shorter than all others, and, too, they must travel through the boxes to get at the outside, and of necessity must leave holes through all these combs. Now the improvement I made on this is. I got out strips three eighths wide by one-eighth thick; these I tack to the glass stays up and down, so that the edges of boxes will rest against them. The rest under the boxes are set to correspond, and the bees have a space just the same as all others in the crate.

To improve still one thing more I leave off the small strip usually placed across the under side of the box as rests, instead I nail the rest just where they remain, without any temporary spacing, and the bees will have just so much less gumming to do. Another improvement is to have the wedge for tightening the sections, in one end of the case, and instead of a square edge on the lower wedge, I bevel them down to an edge so that in adjusting the sections, it can be done much more rapidly, and not rack the sections out of shape. The cases are wide enough so that if the sections are just one and seven-eighths wide they will just fill them with the one-eighth stays at the sides. The show of bees and fixtures of State Fair were a wonder to many, but another season we doubt not will show large entries, and great improvements.—E. P. Churchill, at meeting Maine Beekeepers Association.

WHAT KIND OF CATTLE SHALL WE BREED?

The average farmer who has not made a specialty of rearing some one of the many improved breeds of cattle, is at a loss to know which kind would be most suitable for him to tie to.

Any man who is rearing and selling for breeding purposes any one of the various breeds of cattle now in vogue, can answer, without hesitation, the question that heads this article. The answer, of course, would be the kind that he is personally interested in. This is just what bewilders and confuses so many.

The Hereford men say the white faces are what you want. See how they sell at double the price of Short horns, and their beef the best in the world; and they are crazy for them in Texas and Colorado. But the Short-horn men retort by saying, the present boom in bald-faces will be of short duration; the sage-brush and cactus pastures of the west, for which they seem so well adapted, will soon be supplied; then their stock will be worthless, unless graded with Short-horn or some other breed, and the reason they sell high now is on account of the boom, and being but few of them compared with the Durhams; and thus their talk runs on. It is Hereford, Short-horns, Holsteins, Jersey or Polled Angus, as the case may be, each one dilating upon the superiority of the kind he is breeding, until we are dazed, lost, hopeless, and want the editor or some other person that knows everything to tell us what kind of cattle to raise.

But, joking aside, is it not a fact that cattle are bred more and more for a special purpose, and that all the breeds are good and useful in their place, and room for all of them in the different localities and situations of our broad and varied country? And should not the new beginner first make up his mind what he wants to keep cattle for? Then he will be prepared in a measure to choose the kind best suited for his purpose and location.

If he is a ranchman on the plains, I think he would not go far wrong if he introduced the Herefords, and, perhaps, the Polled Galloways, for the more exposed and extremely cold localities. But in Illinois and adjoining states, where feed is plenty and cheap, and where farmers expect to shelter and take care of their cattle, the Short-horns are hard to beat, and Polled Angus is certainly coming to the front and will soon be a worthy competitor in this line. Thus far the different breeds have been considered in relation to their beef producing qualities alone, though the Short-horns have become so widely disseminated that many of their strains are good milkers.

Where milk and beef combined is desired, the Holsteins and the milking strains of the Short horns will give good satisfaction, and the native cow is a valuable animal for this purpose and the principal source of supply among the milk shippers of this part of the state (Kankakee county). They prefer good-sized cows, as they frequently sell them for beef, when dry, and supply their places with fresh ones, to come in again. For milk alone, I know of no rival to the Holstein, and for butter it is perhaps an open question between them and the Jerseys. But for the greatest amount of butter from a given amount of milk, the little Jersey has no equal, but she is too small to be a favorite with the farmer. For a professional or business man in town she is unequaled and a great favorite.

I have never bred any of the improved varieties of cattle, and think I have no prejudice in the matter, and no interest in one kind more than another to warp my judgment, and would like to know if my conclusions are well founded, touching the profitableness of the different breeds here enumerated for the purpose named.—Cor. Ex.

CALVES.

Unless the weather is stormy, we turn our breeding bulls out for exercise half of every day, often with the cows in the pasture, when none of them are in heat. After breeding our cows we keep them in a stable, where they can not be with other cows, for ten or fifteen hours. We have a few stalls especially designed for cows that are due to calve during cold weather, and, of course, these are made as warm as we can get them. We turn the cows out with their calves three times each day, until the calves are six to eight weeks old, then only twice a day. We rarely allow calves to run with dam in pasture, though we put the calves out to graze as soon as they have learned to eat. Feed young calves well on shelled corn, oats and meal. Have separate pastures for bull and heifer calves and do not allow them to pasture together after the bulls are two or three months old. Our dry cows we winter principally on hay, feeding very little grain except to young stock and those that have calves at their side, or those designed for the show ring. We breed our heifers when about twenty months old.—Cor. Rural House.

The Dairy.

BUTTER MAKING.

That the farmers' wives of Canada are capable of making good butter is abundantly proved by the samples shown in almost any county or Provincial Agricultural Exhibition, but that a great number of farmers' wives make an inferior article is also abundantly shown by a visit at almost any of our retail groceries in almost any village, town, or city in either provinces.

There is no reason why Canada's name should not be among the very first in the butter markets of the world, but that it stands very low is shown by the reports of those who have visited foreign markets where Canadian butter has been shipped. There are several reasons why Canadians fail in foreign markets to take a first place, the chief of which is probably the lack of creameries. In Illinois these establishments are very common. We find that in foreign markets the butter from this State is not surpassed by the butter from any country.

I would say the establishment of creameries properly conducted would be the most successful method of creating a reputation for Canadian butter in foreign markets, but until this is done the following hints may be of use to those desirous of producing a first-class article:

1st. The teats and udders should be thoroughly washed and wiped, and the hands perfectly clean before beginning to milk.

2nd. The milking should be done quickly.

3rd. Never allow the milk to stand in the stable to cool.

4th. The milk room should be very clean and sweet, having a temperature of about 62 degrees.

5th. Skim within 24 hours, but do not use a perforated skimmer.

6th. Churn every day if possible, and under no circumstances let the cream go more than two days.

7th. Scald the churn and dish thoroughly, and put in the cream at 58 degrees; the motion will soon bring it up to 60.

8th. When the butter comes, pour in two or three quarts of iced soft water, and after gathering it well with the dash, remove it to a table or bowl, and thoroughly work it with a flat wooden paddle, using an abundance of cold soft water to wash out the buttermilk and harden the butter, but do not work the butter too much as it spoils the grain.

9th. If the butter is wanted for immediate use, half an ounce of salt to the pound is sufficient, but if for packing use from three-quarters to one ounce to the pound.

10. After salting cover with a cotton cloth soaked in brine and set away in a temperature of 60 degrees for twelve hours, then work the butter the second time just enough to get the remainder of the buttermilk out.

These points of the writer picked up from various sources, and which he has put into practice with benefit. Such as they are, they are given to the readers with the hope that they may do some service in assisting in raising the quality of our Canadian butter.

I am respectfully,
A DAIRYMAN.

WHITE SPECKS IN BUTTER.

I have read with much interest all that has been said on the above topic, not only in your paper, but five other different papers that find their way to our home

week after week, year after year, and am no more convinced of the cause than when I first commenced butter making. Not being an expert at the business, it was a source of much vexation when I had my first introduction to these pesky little "white specks." What could the matter be? I asked myself that question many times, not daring to ask out loud, for fear through my ignorance I had not taken proper care of the milk or cream, or both. It was then I began to take particular notice in setting the milk and of skimming the cream before the milk became thick, and of the temperature at the time of churning. After a time I discovered by looking across a pan of milk that light-colored specks were visible in the cream before the milk became sour. As they troubled me only during cold weather I became almost sure that it was the warm, dry air which caused them, as our milk room was warmed from the setting-room stove and the fire never was out from fall until spring. But I became convinced this last summer that my conclusions were in error, as I was annoyed very much by their putting in their appearance right in July, with the milk set in deep cans, immersed in cold water that never reached more than 60°, cream taken from milk still sweet and fresh, with specks to be seen in the cream at time of skimming. I am never troubled with them in butter only when they first show in the cream; then make ready to find them in the butter, for they are sure to be on hand at the next churning.—FATTIE, in Exchange.

THE American Dairyman says there is one point that should be deeply impressed upon the dairyman's mind, and that is, if he wants to make a first-class article of butter he must churn often. Never let the cream get over three days old, no matter how cold it may be kept. If cold, it will get old, flat and frinky. If sour, the whey will eat up the best butter globules. Churn as often as you can.

MILK allowed to remain at a temperature of 100 degrees, in a water bath for two hours, will keep sweet and pure for at least six months. It is important to seal it up before placing it in the water bath. The method known as Becker's which consists of keeping the bath at 60 degrees, is unsatisfactory, as milk thus treated is preserved for only forty-eight hours.

For a small dairyroom, a very convenient set of shelves may be made as follows: A 5 inch square post is set upright in a convenient part of the room, and is fitted with pins at the bottom and top which work in holes in pieces of wood fixed to the floor and the ceiling, so that the post will turn round quite freely. Grooves are cut in the sides of this post to receive 2 inch strips, which project 15 inches on each side. These make room for 4 pans of milk on each set, and as they need not be more than 8 inches apart in the clear, several of them can be fitted on one post; five of them only reaching to a height of 4 feet 6 inches, leaving the bottom one 18 inches from the floor. Thus 20 eight quart pans can be set on one of these frames, and as the frame revolves it is very convenient in use, when a small table is kept within reach of it. The cream jar may stand under the bottom shelf.

Nothing gives such beautiful colors as the Star Dyes.

"How did you come to get married?" asked a man of a very homely friend.