THE DAIRY.

BUTTER-MAKING FOR THE COMMON FARMER.

Dairying is firmly established as a leading and profitable branch of our American agriculture. But outside the number of the special dairymen there are thousands of farmers to whom their dairying is one of the most annoying and least profitable parts of their farm work. The average general farmer makes little money from the manufacture and sale of dairy products. Usually he makes his choice between butter-making and allowing the calves to suckle their dams. The latter is often chosen, but we more and more clearly see that this can not be the most profitable practice in the larger part of the country. The farmer must needs keep a few cows, to supply his own family with milk and butter, and to rear a few calves. The usual practice in the West is to have the cows calve in spring; oftentimes in the late spring. The great mass of the butter made on farms is made between the middle of May and the first of November. This is during the time of greatest pressure of farm work. During much of it, the weather is uncomfortably warm, flies are troublesome, the pastures may be cut short by drouth, the milk is cared for with greater difficulty; an unsatisfactory grade of butter is made, and sold at the lowest prices current during the year. It is no wonder that the farmer decides that he sees little profit or pleasure in dairying. Is there not a better way? We believe there is.

As a first step in the way of improvement, we suggest winter dairying. There are many "theoretical" arguments in favour of this, but more convincing than these is the testimony of many who have thoroughly tested the system. It seems to us decidedly better, in very many cases, to have the cows calve in the early fall—say September. The weather is cooler. For two months or more the pastures may be good. If well cared for and well fed in winter the cows will do better in milk giving than in heat of midsummer. In the spring, when turned on grass, they will do well through May and June, and then can be dried off for the hottest and least desirable part of the year for milk making. During autumn and winter there is less pressure of farm work; the milk and butter can be handled better, with easily-arranged facilities, than they can in midsummer; and, finally, there is almost invariably good prices for butter during all the winter. In many Western towns, in rich farming regions, where butter is sold at ten or fifteen cents in the summer, it is scarce in winter at thirty or thirty-five cents. There is some extra cost in keeping a milk-giving cow in winter over the cost in summer. But the cow must be kept in winter in any event, and the increase in cost is less than is often supposed, provided there be comfortable shelter provided.

As a second step in making dairying on the average farm more profitable, we suggest giving more attention to it; increasing the number of cows. "All the motions have to be gone through with," whether there be three or a dozen cows. Oftentimes it is really less inconvenience to handle the larger than it is the smaller quantity, as the amount of butter made will permit of the purchase of suitable apparatus. It is often easier to sell the larger than the smaller quantity at good prices. In many of the smaller towns of the West, and in all the larger ones, there are at least a few families or hotels to which butter can be sold at a fair price, if there be reasonable security of a steady supply of good quality

As we have frequently stated, it is quite possible to rear calves well on skimmed milk, with the addition of oil or cotton seed meal and grains, and that there are some advantages for thus rearing them in the winter. (The writer recently, May 1st, weighed three grade short horn heifer calves just past six months old, and reared on skimmed milk, which averaged 390 pounds. This does not seem a large weight; but he has reason to know that some calves near a year old would not weigh a hundred pounds more.) Increased attention to butter making need not mean less, but more, attention to cattle rearing.

Without attempting, at this time, anything like full instructions for the care of the milk, let us emphasize the fact that there need be no costly nor complicated arrangements. In a large majority of cases, deep setting will be much better than the old system of using shallow pans. Any one of half a dozen patent "creameries" will do good service. In default of any of these, a plain wooden tank, set conveniently near the well, in which to place ordinary tin cans, six inches in diameter and twenty inches deep, will give all the apparatus absolutely required for successful cream raising. Skimming at twelve or twent-four hours, the milk will be sweet and in good condition for feeding when warmed. Any one of a dozen patent churns will do good work—if care be taken to avoid all for which it is claimed that three to five minutes is all the time needed for churning. In default of any of these, a plain box or barrel churn will do admirably. There is difficulty in making good butter, but there is no "mystery" or secret about it. There is no reason why butter every way satisfactory may not be made in farmers' houses. Such butter is made in many such houses, and may be in many more.

Of course, there are many farmers who will find it practicable to furnish mill to a cheese or butter factory. Others can sell milk to advantage. We have written for the many who are so situated that they cannot conveniently practise either of these modes of disposing of their milk, and who wish to rear calves as well as to make butter.—*The Breeder's Gazette.*

BUTTER PACKING.

Mr. Wm. Cluxton of Peterboro' has written the following practical letter on the subject of packing butter for export. His suggestions are valuable and will no doubt be generally followed:—Sir,—Will you kindly permit me to caution farmers against using tinnets or tubs made from *maple wood*, for packing butter in. This wood injures the butter that comes in contact with it and renders it undesirable for shipping to Europe.

Tinnets of any kind of wood should be used as little as possible. *The best package is an ash firkin with a slip cover.* Butter is worth more in firkins than in tubs. I would recommend butter makers to use Liverpool fine dairy salt, and be careful not to over salt. They have plenty of salt air in England, and consequently do not relish salt butter.

DEVONS GOOD DAIRY COWS.

The *American Agriculturist* says: We have been looking over reports of what Devon cows have just been doing in the butter line among us, and find that nineteen of the cows have been producing from 15 to 20 lbs. 5 ozs. each of best quality of butter per week. Considering their medium size and economy of keep these are great yields, but in years gone by, there are records of still larger yields nearly equalling those of the most famous Jerseys of the present day. The Devons, however, not only excel in the dairy but in several other respects. They are very superior as working oxen, have a quicker step and greater endurance than any other breed, and are the most powerful of all for their size. When fattened they turn out a choice quality of beef. Thus we see that they are a most excellent, general purpose breed, good in the dairy, for work and for the shambles. The only other cattle that can be compared to them are the Red Polled Norfolk and Suffolk, which in fact are hornless Devons.

The Devons have been much neglected by the public for twenty years or so past, both in England and in America; but attention is now awakening to their great merits, and we have no doubt they will soon come into as high favour again as formerly; for aside from their polled congeners, no cattle are so profitably bred and raised on light pastures and hilly, rocky districts.

At a public sale of eighty-six lots of Devons the past year in England, they averaged $180 each. One cow of these sold for $625 and a bull for $875, while a calf brought 50 guineas ($350). These are about 25 per cent. higher prices than the average of any herd of either Guernsey, Jersey or Ayrshire cattle sold in England in the year 1882. We can learn from this the appreciation of Devons in their own native land.

MAKING BUTTER.

The cream, if churned sweet, should be stirred several times before churning to thoroughly incorporate and secure an even age, which the air can better do than by any other plan. Churn in revolving churns at a temperature not greater than 58 degrees. At the point of separation, cold brine should be introduced to produce granulation, and subsequent washings with weak brine to remove every trace of the buttermilk. The butter should be salted, but anything like working it into a solid mass should be avoided. When this butter has been allowed to "sweet" for a few hours it should be worked over enough to expel the surplus moisture and packed into packages away from the air.—*Exchange.*

The Danish system of making butter promises to become general; this consists in creaming the milk by centrifugal force, and churning about fifty gallons at a time, by special machinery worked by an ordinary engine. Not a drop of water is employed in the whole operation, and the hand never touches the butter. The latter brings at Paris, twenty per cent. higher price than the other prepared butters;-it has no porosity, no milk. Ice is not employed. The cream is heated to fifty-seven degrees, and the butter is made in forty-five minutes. Cleanliness is perfect.

B. F. P., of East Bethany, N. Y., communicates to the *Country Gentleman* his way of treating a kicking cow, as follows: "Take a snap ring, attach a half inch cord about a dozen feet in length, put the snap in the kicker's nose, draw the cord around her, letting it rest on her gambrel joints or below. Let a person stand at her shoulder and hold the cord just tight enough, so that it shall not slip down to the floor. Any one can then proceed to milk her without trouble. This course of treatment pursued for one week has never failed to cure the most obstinate kicker, and without any struggles or harshness."

The Pittsburgh *Stockman* says: "Did you ever stop to think that outside of the labour and care devoted to the preparation of the two kinds for market, it costs just as much to produce bad butter as good. It takes just as much, and often more 'cow,' just as much food, just as much milking, and just as much carrying to market, for an inferior as for a superior article. On the other side, it requires much more labour to sell it, and brings a much less return. This is the whole matter in a nutshell, and furnishes more argument for first-class dairy production than can be found in whole columns of dairy orations."