

The Dairy.

Grasses for Butter Farms.

Before entering upon the question of butter manufacture and factory management, it will be proper to say a word concerning the food of stock. The excellence of "fancy butter" does not depend altogether upon its manufacture, for in the first place good milk must be secured.

"Fancy butter," that will sell for a dollar per pound, cannot be made from bad material, from milk produced on weedy pastures, nor upon the rank, sour herbage of swamps, nor upon land newly seeded with red clover. The experienced butter dairymen, therefore, pay much attention to the feed of their cows, and prefer old pastures.

On the old pastures of the butter district there are several varieties of grasses that spring up spontaneously, and are much esteemed as affording sweet and nutritious feed, from which the best qualities of milk and butter are produced. These grasses form a dense solid turf, leaving no intervening spaces. They embrace the June or blue grass (*Poa pratensis*), the fowl meadow grass (*Poa serotina*), meadow fescue (*Festuca pratensis*), red top (*Agrostis vulgaris*), the wire grass (*Poa compressa*), the sweet-scented vernal and vanilla grass, together with timothy (*Phleum pratense*), orchard grass (*Dactylis glomerata*), clover and other forage plants.

The June grass (*Poa pratensis*) is regarded as very valuable. It throws out a dense mass of leaves, is highly relished by cattle, and produces milk from which a superior quality of butter is made. It is found growing throughout the butter districts of the country. The wire grass (*Poa compressa*) is deemed one of the most nutritive of the grasses, is very hardy, eagerly sought after by cattle, and is one of the best grasses for fattening. Cows feeding upon it yield milk of the richest quality, from which the nicest butter is made. It flourishes well upon gravelly knolls and in shaded places, and its stem is green after the seed has ripened. It is found growing in all parts of the country.

The meadow fescue is common in old grass lands where the soil is thick and grasses of different varieties are mingled together. It starts up early in the spring, is relished by stock, and furnishes good early feed. The milk farmers hold it in high estimation as a reliable grass, tenacious of life, and not running out like timothy (*Phleum pratense*) or clover. The white clover (*Trifolium repens*) springs up spontaneously in old pastures, and is highly esteemed as giving flavour and quality to butter.

The sweet-scented vernal grass grows best upon the moist soil of old meadows. It starts very early, and gives off an agreeable odour.

We have been particular in naming the grasses which are most esteemed for pro-

ducing a high-priced butter, because a record of long and well-conducted experiments has proved their utility. It is possible that climate and soil might so modify the character of these grasses as to render them less worthy of esteem in other countries than among the butter dairymen of New York; still, as the experience of farmers noted for their success in a particular direction is more or less suggestive and valuable, we give the record as it is.—N. A. WILLARD.

Raising Winter Calves.

It is by some farmers thought to be difficult and unprofitable to raise winter calves. The prices of cattle are so unfavourable that many are discouraged about raising calves, and would prefer to shift their stock into sheep. There is no good reason to doubt that by the time the present calf has arrived at maturity, good cattle of all kinds will bear remunerative prices.

We advise farmers to raise the calves and go on with a mixed stock without regard to the fluctuations in value which are caused by unforeseen circumstances, and which no one can anticipate with any certainty.

There is no difficulty in raising winter calves. We have raised a great many calves in winter time, and prefer that season because there is then more leisure to take care of them than in spring or summer. In raising calves in winter, as well as at any other time, we prefer to separate them from the cow as soon as they are born. They learn to drink more readily, and the cow submits to the loss of the calf more quietly, than after feeding and suckling it. The young calf should be well rubbed and wiped dry with straw, and given a good soft bed of straw in a warm stable, with no cracks or apertures to admit the cold air.

If the weather be cold, it should be fed with warm milk as soon as it will take it. The feeding should be frequent for a few days. This is more important than in warm weather, as the young calf becomes chilled very soon after it is hungry. After a week or ten days skim milk may be substituted for new milk if desirable. Boiled potatoes may be mashed fine and mixed with the milk, also crusts of bread after being soaked in hot water. Both are very healthful and nutritious. Hay tea, or gruel made of corn meal, oat meal, or oil meal, may be used in place of milk, being added to it gradually until the fifth week, when the milk is often discontinued.

After many experiments, we are of the opinion that no other food can take the place of milk. It is the natural food of the calf, and contains all the elements which are essential to growth and health. Oil meal should be used with care. It is desirable to teach the calf at an early age to eat sweet early cut hay, oat meal and roots. It is absolutely necessary to the health and growth of the calf that it should be supplied at all times with a clean, dry bed and dry footing. —*Vermont Record*.

Scotch Dairy Show.

The *Irish Farmers' Gazette* says:—The great show of cheese, butter, and roots, which takes place annually at Kilmarnock under the auspices of the Ayrshire Agricultural Association, was held in the Corn Exchange and several temporary erections in the immediate vicinity of the large hall. The magnitude of the show may be estimated from the fact that there were about 240 tons of cheese in the premises, roughly valued at 20,000 pounds. These figures are much larger than they have been on any previous occasion.

The *Mark Lane Express* has the following remarks on this show:—The comparison of fine English and Scotch cheese was one of the most interesting occurrences at the recent show of the Ayrshire Agricultural Association. It has been said by English judges that a few cheese-makers in Somersetshire—10 or 15, or 20 in number—still surpass the best makers of Cheddar cheese in Scotland. Last year the men of Galloway, with great spirit, offered to bring the matter to a practical test by a competition, but the Somerset men declined to meet them. Failing to obtain a competition on a large scale, a few of the Galloway men applied to an eminent cheese factor who gets the produce of some of the best dairies in Somersetshire, and he selected two "thoroughly fine" specimens for exhibition at Kilmarnock. A Scotch cheese was selected for comparison with the best English one. The Scotch cheese was one of the two which had been placed first for Lady Stuart Menteth's prize. The judges took half an hour to come to a decision, and they were not satisfied till they cut both cheeses through the middle. The quality of the two was wonderfully near. The Somerset cheese appeared to have the advantage of being a month older than the other, and it excelled a little in "style." Though no more than the usual width, it weighed 110 lbs. The Galloway cheese might be about three-fourths of that weight. It was equally fine in colour, "texture," and quality, and rather excelled the other in flavour. In the end, the unanimous decision was in favour of the Scotch cheese.

The American Dairying Interest.

The number of milch cows in the United States, according to the census of 1850, was 6,385,094; the number in 1860 was 8,728,862; the number in 1870 was 11,008,925. The number of milch cows in the State of New York in 1870 was 1,980,000, over \$50,000 more than was in 1860, when it was 1,123,643.

The pounds of butter made in the United States in 1850, were 313,345,306; in 1860, they were 460,509,854; in 1870, they were 470,336,468. Of this number, in 1870, 103,097,280 pounds were made in the State of New York, which is over 23,000,000 more than were made in 1860, when we produced 79,766,094.