

of 500 in summer and 600 in winter. It should be strained into the churn through a strainer made out of ordinary cheese cloth. The common barrel churn is perhaps one of the best for the farm dairy. Do not churn too fast when starting, and draw the plug 2 or 3 times to allow the gas which accumulates to escape. In about 30 to 45 minutes, the butter should show itself in the form of small grains. Add water, at a temperature of not more the 50°, at the rate of 1 gallon to 5, continue churning until the grains show the size of small wheat; then, draw off the butter milk. No occasion to turn the churn after this stage; 2 or 3 waters poured on from a good height will completely rid it of all the butter milk. Do not unnecessarily flood it with water, as it tends to injure the flavor.

SALTING AND PACKING

Lift the butter out of the churn and weigh carefully, place on the butter worker and add salt at the rate of one oz. to the pound, or, better still, just enough to suit your customers' tastes; work just enough to mix thoroughly, place away in a cool place for 24 hours,

of long hay each day. The "Rural New-Yorker" has often told its readers of a new horse food in which hay, corn and oats are all ground to a coarse powder. This feed is, we understand, giving the best of satisfaction and is certainly more economical than long hay and whole grain.—"Rural New-Yorker."

NEW SHAPED CHEESE

Square cheese is not unknown, but the fact that cheese is put up in 20 pound boxes is new perhaps to many. Geo. B. Whitmore & Co., 89-91 Warren street, large dealers in butter, cheese and eggs, received this week, a lot of the finest quality full cream cheese, put up in 20 pound packages. The package is an oblong box about 7 x 7 x 10 inches. This cheese is made in the state and bears the state brand. "We have met with an excellent demand for this cheese," said Mr. Whitmore, "from up-town grocers, and have got 11c per pound for it, $\frac{1}{2}$ more than for the highest quality in round cheese." One advantage that we claim for the cheese is

ble. Kansas station grew 100 tons of silage on ten acres, and it sustained 25 head of cattle 192 days—a result which it is thought could not be attained with ten acres of cured fodder.

Use the largest variety of corn that will mature before frost. Experiments at the Pennsylvania station show that as corn approaches maturity the amount of nutriment it contains and the digestibility both increase very rapidly. The total yield of the digestible food by the matured crop was two or three times that of the same crop in the silk, and 36 per cent greater than when the ears began to glaze. The Minnesota station found that 100 pounds of ensilage from the Northern and Southern, and sweet corn, all contained about the same feeding value.

Silage is distinctively a cattle feed, but the Kansas station finds it not good for feeding bulls. It may be fed in moderation to horses, pigs, poultry and sheep, but sour silage is dangerous to sheep.

There has been some complaint that silage gives milk an unpleasant flavor. This is probably due to sour and decayed silage. The Kansas station found

as seconds, while the uniform ones are termed firsts.

The sorted rennets are bought up by the houses that make the rennet extract. Some houses buy the seconds to make cheaper but inferior extract.

Rennet extract is a solution of the ferment in water, with salt added to preserve it.

Several hundred or thousand stomachs are put to soak in a large vat of water, or rather brine. The rennets being sorted are very uniform in strength, at least average uniform, where so many are used, and consequently the extract is of uniform strength where a certain number are soaked in a stated quantity of water.

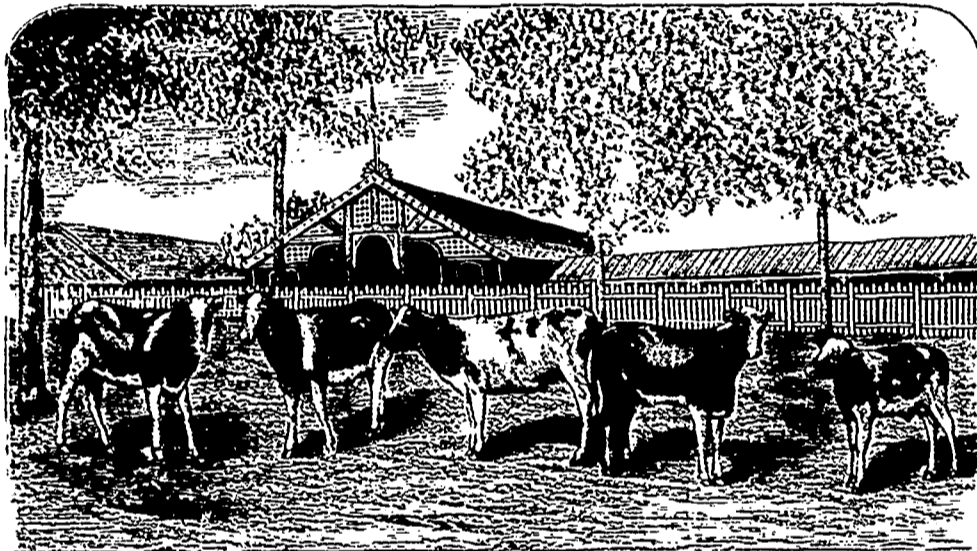
The extract is made a little stronger than it is sold, and is then diluted to a commercial strength.

Before soaking the rennets are cut open so that the water can easily get into them.

Rennets that are old or that have been kept in cold storage make deeper colored extract. I am told by a prominent manufacturer that the color of extract is not an indication of its strength.

Extract should be kept in a cool and perfectly dark place to prevent decomposition.

It should also be kept tightly corked. Do not let rennet freeze, as that will also spoil it.—John W. Decker in Hoards Dairyman.



FIRST PRIZE "BREEDER'S YOUNG HERD" OF PUREBRED GUERNEYS,

As shown at Montreal Exhibition, 1896. The property of the Hon. Sydney Fisher, Knowlton, Que. [NOTE—The Breeder's Young Herd is to consist of one bull under two years, two heifers of one year old and under two years, and two heifer calves under one year; the whole, except the bull, to be bred by the exhibitor.]

work the second time; then, pack away in tubs, which have been lined with parchment paper, cover with parchment paper the top, then make a thick paste with salt and water and spread it evenly over the surface to exclude the air. You should now have a tub of butter which will keep perfect for months, under proper conditions, and at the same time please the most fastidious.

TIMOTHY HAY EXPENSIVE FEED.

Mr Manchester tells us how he uses bran in the place of hay for feeding cows. Pound for pound the bran is cheaper than the hay, and if the latter were ground as fine as the bran, it would occupy but little more space. In fact, as we have often stated, timothy hay is the most expensive food one can give to a cow. At the writer's home good hay sells at \$22 a ton from the farm. The best of baled hay cannot compete with it. With a silo and a few acres of oat hay to feed as dry roughage, our farmers might sell nearly all their timothy and thus make it one of the best crops on the farm. Many people still think it a wise policy to stuff a horse with 20 pounds, or more,

that it cuts better than the ordinary cheese, being cut square instead of a V shape, thus preventing it from drying so quickly. From the urgent demand we have had for this cheese, I should say we will handle a considerable quantity of it from now on."—"N. Y. Butter Trade."

SILAGE EXPERIENCE.

According to the Agricultural Department at Washington, a compilation of experiments from various Experiment Stations shows the following results:

The Massachusetts station found mixed silage of corn and soja beans very fine. Vermont station made a superior silage of oats and vetch; also of oats and peas.

Silage produced more milk at the Ohio station, more butter at the Pennsylvania station, and more mutton at the Michigan station, than beets. Even when there is a loss of 20 per cent in the feeding value of silage, it is a cheaper feed than roots. The Wisconsin station preserves silage at a loss of only 8 per cent of its feeding value. The loss in curing fodder is never less than 20 per cent.

The Pennsylvania station found silage and cured fodder about equally digest-

that if the silage be fed just after milking, instead of before, this disagreeable flavor disappears.—"Hoard."

RENNET

Rennet is a ferment found in a calf's stomach. It has the power of curdling and digesting milk.

Who discovered the use of rennet in cheesemaking is not known, but we have a record three thousand years old that Jesse, the father of David, sent ten small cheeses to his sons in the Hebrew army, and we think it probable that he used this peculiar ferment of the calf's stomach to make the cheese referred to.

Rennet is also found in the sheep and pig, but the rennet extract of modern commerce is made from the stomach of calves killed when a week old.

The best rennets are called Bavarian, because they come largely from Bavaria. The supply, however, is not restricted to Bavaria. In Europe the farmer kills the calves at the right age, and just after feeding. The stomach is hung up in a smoke house to cure. There is a middle-man who goes from farm to farm, buying hides, tallow, etc., and rennets. He, in turn, sells these things to the wholesale houses, where the rennets are sorted. Any not of uniform size or that are mutilated are classed

The Horse.

Ranch horses consigned to the Netherlands — Notes — New-York Horse-Show — Frightful condition of roads in the Province of Quebec — Suggestions for good roads.

We cannot boast of having had a fine Autumn this year. What used to be our boast in the way of Canadian weather, has not been realized during September, October or November. I see that a suggestion, often made by various friends of mine, as well as by myself, has at last, been carried out, and that a consignment of 33 ranch horses was shipped on the 22 of last month, for military purposes, to the Netherlands Government who it pleased, with the experiment will take 200, annually. If they are like the lot of 50, sent down and sold at auction, in the G. P. R yards two years ago, from the Quorn Ranch, they are just the right sort for troopers.

"The twelfth annual Horse Show, New-York was first last and all the time a show for high steppers; as the A I heavy harness horse is now called, and, as most of these horses were docked trotters, it may be said that it was a trotting show. (I have known Americans before now, who were under the impression that a docked trotter was a hunter.)

"One fault on the part of the judges in the heavy harness classes still remains, the great speed at which some of the horses were sent round the ring. It is true that the converted trotters used in the majority of the traps need heavy-weights and a clipping pace to show action, but this does not make it right. Almost without exception the regular limit of speed in the cities of the world is six to seven miles.

"For the first time, the Horse Show gave liberal prizes for French Coach horses, and, also, for the first time did the New-York public gain as