

Dairy.

Keeping Butter in Summer.

In making a few notes upon that subject we shall try to keep in mind, not the improved refrigerators of the town and the city, but the conveniences of the country, and give our observations on the causes of poor butter, so far as produced by storage.

A majority of summer butter is poor because every condition of good butter making is violated from the time the prospective cow is dropped till the last act of packing and storing the butter; and such butter, with the best storage in the world, would be inferior. But assuming that the butter is good, the question of summer storage upon our prairies is the one before us. A writer in the Country Gentleman makes a strong point on the salting of the butter and the vessel used in packing. The lady says:—

Wood or stone makes the best vessels for packing butter, but opinions differ as to which exceeds the other. White oak firkins soaked for two days in sour milk, then washed out and soaked one day in strong brine, and then rubbed thoroughly with salt, are the best, according to my mind. If E. R. will pack the butter in such vessels after he has worked out every drop of buttermilk, and salted by the following receipt, I can assure him that he can keep his butter from June to June as sweet as when first made:—

To every pound of butter add two heaping table-spoonfuls of the finest dairy salt, the same amount of granulated white sugar, and a quarter of a tea-spoonful of saltpetre, pulverized very finely. These ingredients can be mixed together, in this proportion, in large, wide-mouthed bottles, and kept for use. After the churn has done its work, add the mixture, and turn the crank in reversed order for four or five minutes. The butter is thus salted without touching the fingers to it, and the housewife needs only to lift it out with a butter paddle and pack it tightly in a firkin, or else form it into tastefully stamped cakes all ready for the table. The sugar is quite as essential for the preservation of butter as the curing of hams; and every one knows that sugar-cured hams are the finest in the market. The saltpetre can be omitted if the butter is not desired for winter use.

C. C. Bull, of Rock Falls, Wis., at the last meeting of the Illinois State Dairyman's Association, discussed the question,

Can Summer butter be so handled and packed that it will retain its freshness and sweetness for winter use?

Whether butter can be thus preserved so as to be good, sweet, old butter, without rancidity or bad flavor, is a question which we believe can be answered in the affirmative, and we propose to discuss it under the heads, viz.:—As to the place of storage, the package, and the contents.

1. As to the place of storage:—

The first requirement is that it must be a cool place. A cellar or other apartment the temperature of which rises above 60 degrees Fahrenheit, we do not believe will keep butter well under any conditions. Most cellars show a temperature of 65 to 70 degrees. A deep cellar protected from the hot rays of the sun, and remaining uniformly below the temperature of 60 degrees, sweet and properly ventilated, is without doubt one of the very best places of storage for butter.

2. The package:—

Butter, to remain sweet, no matter what the temperature, must be preserved from contact with air. In mid-winter, even, butter exposed to the air will become bad; in Summer this will occur in much less time. The perfect butter package, therefore, will be air and water tight. The butter must be immersed (surrounded) by very strong, pure brine—or possibly, as some recommend, by strong brine with a little saltpetre and refined sugar added. It matters little what the shape, size or material of the package is provided this object is attained. As it was intimated at the beginning of this paper, butter can only remain sweet, and must be expected to lose a certain aroma and freshness of new butter. No long kept butter can be expected to remain in the class of fancy butter. A fancy or expensive package, therefore, is hardly in place in handling butter of this grade unless it is really better than a cheaper one, and is so accepted by the trade. Now we know of no style of pack-

age so acceptable to the trade in butter, all things considered, for accomplishing the end desired, than the old style oak firkin. Properly prepared by soaking in hot brine, afterwards in cold, and handled in the approved methods, we consider it quite as reliable as any other, and decidedly cheaper than any other we know of. We express this opinion with our present knowledge of the trials made in this direction.

3. As to the contents:—

The first thing to be said under this head is that butter to keep must be good butter—butter well handled from the milking to the packing—and nothing but butter. It is well understood that rancidity comes from that in the butter which is not butter—from the buteric acid which develops chemically, and the development of which is greatly hastened by bad handling; by the presence of caseine, buttermilk, water or other foreign substance not butter.

The shallow, poorly drained and ventilated cellar is the common place of storage on the prairie; and if this certainty is not enough there is added a taint of cabbage and onions. Driven to desperation, some resort to hanging the butter in a well, a few have good springs. The important item to the farmer for butter purposes is a deep cellar, not less than twelve feet, sides of stone and bottom well concreted. Windows should be arranged to give good ventilation, open at night and closed during the day. Such a cellar will vary but little in temperature. Next to the cool, dry cellar in a spring house, and some prefer this to the cellar, a spring house can be cheaply constructed near the well, and with a wind-pump would be easily operated. Where there is considerable descent from the wall the spring house may be walled with stone and covered with dirt, making it bank house, with tile pipes for ventilation. All things considered, the deep, dry cellar, well ventilated, is the best for butter.

Cattle for the Dairy in England.

A correspondent of the London Agricultural Gazette writes to that journal in response to a call for advice and information on the above subject:—

In reply to the inquiries of J. C. W., I have no doubt he will be able to improve his dairy greatly by the use of a pure Shorthorn bull of good shape upon well-selected cows. These cows may be selected in any of the principal cattle markets in the north of England where Shorthorn dairy cattle are generally kept. As they are brought for sale either newly calved or springing for calving, it is not difficult to judge of their milking capabilities. The extension of the milk trade has caused a greater supply of newly-calved cows, &c., to be provided for every month in the year, and on many farms where dairy cattle are bred they are commonly sold when in their prime, just before producing their second or third calf. There are many strains of Shorthorns which are specially noted for milking qualities; I cannot undertake to say which is best. I have used several bulls of the old Garne blood, which answered my purpose very well, and the stock of which have proved satisfactory milkers. Some most useful information with regard to dairy farming has appeared in past volumes of the Journal of the Royal Agricultural Society. Mr. Morton's paper on Dairy Husbandry, and the report of Mr. Jenkins on Dairy Farming in France, which contains some very interesting remarks upon butter making, are both well worth studying. The yield of two gallons each per day of the ten cows of J. C. W., all the year round, is not an unsatisfactory return, if the cows are not changed, as comparatively few cows give more than 730 gallons per annum. The value of the bull calves for rearing, and of the dairy cow herself when barren or no longer desirable for milking, are important considerations in favor of a Shorthorn dairy herd. I saw in the market yesterday a number of pure-bred Jersey steers, two years old, for which the breeder was asking £10 each, and failed to get an offer for them. They had been fairly well reared, and if they had been Shorthorns, with the same rearing, they would have been worth nearly double the price. The owner avowed his intention of rearing no more Jersey steers. Four out of the five Jersey cows which I have purchased in the last ten years have cast calf or proved barren while still young, and when sold fat realized less than two-thirds their value if they had been in calf.

A Home Market for Cheese.

To stimulate and secure an increased home market, it is important that the factories should commence in their own neighborhoods to make and introduce just such cheese as will meet the wants and the prejudices of their respective vicinities. We believe we only state what is well known to be the fact, that in most cheese factory neighborhoods, not one family in ten have cheese upon their tables a dozen times in a year; and not unfrequently what they do have, consists of a refuse lot too poor to send to the city market. One obstacle in the way of a general introduction of American cheese in our families, consists in the large sizes which are usually turned out by our factories. We have, heretofore, and on several occasions, urged the making of smaller sizes, say from 10 to 12 or 14 lbs., instead of from 60 to 90 lbs. This want we have heard expressed again and again in various sections of the country. We are not ignorant of the objections which are made to the manufacture of small cheeses, but we think they might be overcome so that they would be more than balanced by the benefit to the community. If our cheese makers would turn their attention to this subject, and diversify their products in the manner indicated, both for the foreign and home markets, there is hardly a doubt that the products of the dairy may be increased to double the present amount, with a steadier market, and at increased profits.—[American Dairyman.]

The Canadian authorities have declined to remove the prohibition imposed upon the importation of American cattle into Canada, and have extended the time until Sept. 6, if not sooner removed by special orders. This leaves Canadian buyers of Shorthorns at the late Chicago sale in a "bad fix."—*Prairie Farmer*.

The *Whitehall Review*, in quoting the wager made by Sir Roger Throckmorton, "that between sunrise and sunset a coat could be made for him out of wool from the back of a sheep," and which he won, adds: "An Austrian clothier has done all this in eleven hours, so that he really has outstripped the Berkshire baronet, who allowed himself from 4 a.m. to 9 p.m."

A slop made of corn and oats, ground in about equal parts, with a little oil meal added, makes the best food for the sow while sucking, to increase the flow of milk; and this, with clover pasture and plenty of soaked corn during the summer, will promote a rapid and healthy growth of the pigs.

Intending exhibitors to the number of 651, including 24,000 feet of space, have applied for the coming exhibition of the Royal Agricultural Society, Kilburn, England. The machinery in motion will be a mile in length, and the exhibit of seeds, roots, manures and feeding stuffs fully half a mile, if extended.

Professor Riley says that since his connection with the Department of Agriculture at Washington there have been sent to him four kinds of patent bandages for trapping the codling-worm, but after examination he cannot find in any of them any advantages over the simple paper bandages recommended and used years ago.

One of the chief causes of pleuro-pneumonia in cattle is believed to be a sudden change of temperature to which the animals are exposed. But on the other hand, if confined to warm barns, attention to ventilation must be given, as a putrescent atmosphere is very injurious, and one of the sources of disease.

It is said the leaves of mullein scattered among the corn in the crib will effectually preserve it from the ravages of rats, and that corn soaked in a solution of sulphate of iron (copperas) previous to planting will not be troubled with moles.

One of the agricultural resources of Texas is bones. A San Antonio firm has shipped since July 8 3,333 tons to the Northwest, where they are manufactured, and thence go East to be used for fertilizing purposes. The price paid to the San Antonio shippers was \$7.50 per ton.