

THOUSANDS OF DOLLARS LOST EACH YEAR TO DAIRYMEN THROUGH IMPROPER COOLING



In Times of Cold Weather Prepare for Hot Weather—Harvesting Ice in a Northern State.

(Prepared by the United States Department of Agriculture.)

Each year dairymen lose thousands of dollars from returned sour milk, poor butter, and low-quality cheese. These losses are largely due to improper cooling of milk and cream on the farm, according to dairy specialists. For good results milk and cream should be cooled to 50 degrees or lower and held there; and as this usually can best be done by the use of ice, dairymen should take advantage of any near-by lake or stream to obtain a supply of ice for next year.

Ice Costs Little.
The ice harvesting season fortunately comes at a time when there is the least work on the farm for men and teams, and consequently the actual money cost is usually not very great.

The quantity of ice needed depends upon the location of the farm—whether in the North or in the South, the number of cows milked, and the method of handling the product. In the northern states it has been found that, with a moderately good ice house, one-half of a ton of ice per cow is sufficient to cool cream and hold it at a low temperature for delivery two or three times a week. One and one-half or two tons per cow should be provided where milk is to be cooled.

Capacity of Ice Houses.
A cubic foot of ice weighs about 57 pounds, so in storing ice it is customary to allow from 40 to 50 cubic feet per ton for the mass of ice. At least 12 inches must be left between the ice and the wall of the building for insulation, unless the ice house has permanently insulated walls and an unusually large space for insulation beneath and above the ice.

Where a lake, pond, or stream of clear water is not available, some preliminary work in preparing the ice field will be required before freezing weather sets in. It is therefore advisable to make all plans for the work as soon as possible. Water for the ice supply should be entirely free from contamination or pollution. Ponds and sluggish streams usually have grass and weeds growing in them, so that the ice harvested is likely to contain decayed vegetable matter, which is always objectionable. They should, therefore, be thoroughly cleared of such growths before the ice has formed.

In some sections it is necessary to impound the water for producing ice. This may be done either by excavating and diverting a stream into the excavation, or by constructing dams across low areas. In localities where very low temperatures prevail for several weeks at a time, and the supply of pure water is limited, blocks of ice may be frozen in metal cans or in special fiber containers.

In harvesting ice it is desirable to have a field of sufficient size to fill the ice house at a single cutting, as the thickness and quality of the ice will

be more nearly uniform, and the necessary preparation for cutting and harvesting need be made but once. In many instances, however, the size of the pond or stream is such that it is necessary to wait for a second crop in order to fill the ice house. The average farmer requires only a comparatively small quantity of ice, so that even a small harvesting surface will usually prove large enough, especially if ice is cut the second time. The square feet of surface required per ton when the ice is of different thicknesses is shown in the following table. Size of cake, 22 by 22 inches.

Square Feet of Ice Surface Required Per Ton of Ice.

Thickness of Ice Inches	Number of Cakes Required Per Ton	Cutting Space Required Per Ton
4	31.3	105.4
6	20.9	70.2
8	15.6	52.6
10	12.5	42.1
12	10.4	35.1
14	8.9	30.1
16	7.8	26.3
18	6.9	23.4
20	6.3	21.1
22	5.7	19.1

Few Tools Required.

When a small quantity of ice is to be harvested, but few tools are required. The following list contains those actually needed for harvesting ice on a small scale: Two ice saws, one hand marker, one pulley and rope, two pairs of ice tongs, two ice hooks, one pointed bar, and one straight edge. While these tools are all that are necessary, additional ones, such as the horse plow and marker, horse scraper and marker, and a calking bar are convenient and will help to expedite the work of ice harvesting.

U. S. BUTTER EXPORTS SMALL

This Country Furnishes Less Than 1 Per Cent of Product That Figures in Trade.

(Prepared by the United States Department of Agriculture.)

In spite of vast grazing lands in the United States this country furnishes less than 1 per cent of the butter that figures in world or international trade, according to statistics recently compiled by the United States department of agriculture. However, the same fact, expressed in terms of the total number of pounds of butter exported, does not look so insignificant, since the annual total for at least one year in each of the last six decades has approached 30,000,000 pounds. There has been marked fluctuation in this country's exports of butter, the amount frequently dropping to less than one-third of the total for the big years. The relation between domestic and foreign prices has been the determining factor in these changes. During the last few years our exports, small as they are relatively, have been going to 70 different countries, colonies, and dependencies.

THE KITCHEN CABINET

GOOD THINGS FOR THE FAMILY TABLE.

Faith is the rite power of Hope. If it want for Faith, there would be no living in this world. We couldn't even eat hash with enny safety, if it want for Faith. Faith is one of them warriors who dont kno when she is whipped. —Josh Billings.

The following may not be new, but are all at least worth trying once:

Raisin Drop Biscuit.—Sift together three cupfuls of flour, six level teaspoonfuls of baking powder and one teaspoonful of salt. Rub into the flour one-half cupful of sweet fat and add one and one-half cupfuls of milk lowly. The dough must be soft, so it will drop from the spoon; add one cupful of raisins, and drop on a buttered sheet. Bake twelve to fifteen minutes.

Grandmother's Cookies.—Cream one-half cupful of any good fat, add one cupful of sugar, one-half cupful of sour milk, one teaspoonful of soda and four cupfuls of flour. Sift the flour with a half-teaspoonful of salt, add the soda dissolved in the milk, and mix all the ingredients together. Roll out on a floured bread board, sprinkle with granulated sugar and bake twelve minutes in a hot oven.

Cocoa Nut Bars.—Cream half a cupful of butter substitute and two cupfuls of sugar together; add one-half cupful of milk slowly, then two well-beaten eggs. Add one-half teaspoonful of soda dissolved in one table-spoonful of water, then sift in one cupful of cocoa. Sift together with three cupfuls of flour, a half teaspoonful each of cream of tartar and salt. Mix, and roll one-fourth inch in thickness, and cut in strips four inches long and one inch wide. Brush the top with well-beaten egg, sprinkle with chopped nuts, and bake in a hot oven twelve minutes.

Beef Stew for Luncheon.—Peel and cook six onions, covering them with boiling water, and let them cook until nearly tender, then add a can of tomato soup, a can of peas, a teaspoonful of salt, two tablespoonfuls of chili sauce and one pound of sliced stewed beef. Parboil a pint of potatoes, drain, add to the onions and soup, and let cook ten minutes; add the sliced beef, peas, and let simmer until the potatoes are done. Then add the seasonings, and serve very hot.

FOOD SUGGESTIONS.

I'm just a little ditty and not the least bit witty; But, listen, I've a secret up my sleeve.

If you're forever sighing And all the world decrying, Your friends will all excuse themselves and leave.

Raisin Pie.—Mix two cupfuls of steamed, seeded and chopped raisins, the juice and rind and chopped pulp of one lemon, one cupful of cold water, one-third of a cupful of sugar and one beaten egg. Fill the crust, dust with flour, dot with bits of butter, cover with lattice crust and bake.

Chicken a la King.—Melt two table-spoonfuls of butter. In it cook one-fourth pound of fresh mushroom caps, peeled and broken in pieces, and half a green pepper, cut in shreds; stir and cook until some of the moisture is evaporated. In another saucpan melt two table-spoonfuls of butter; in it cook three table-spoonfuls of flour half a teaspoonful of salt and one-fourth teaspoonful of paprika; add one cupful of thin cream and one cupful of chicken broth and stir until boiling; beat in one egg yolk, beaten and mixed with a teaspoonful of lemon juice, and continue beating until the egg is cooked. Do not allow the mixture to boil; add the mushrooms and pepper and three cupfuls of chicken, breast preferably, cut in inch square pieces. This dish may be prepared from cold chicken but it is best hot, freshly cooked.

Breaded Tomatoes.—Take one can of tomatoes, one cupful of boiling water, one table-spoonful of salt, a teaspoonful of sugar and a dash of pepper with a pinch of soda. Bring to the boiling point and put through a sieve. Reheat and add crumbed bread until thick. A more attractive way of serving this same dish is to heat slices of bread until hot, butter generously and cover with seasoned tomatoes.

Corn Flake Griddle Cakes.—Sift together one cupful of pastry flour, one-half teaspoonful of soda, two teaspoonfuls of baking powder and half a teaspoonful of salt; add one cupful of corn flakes. Beat one egg very light, add a cupful of thick sour milk, half a cupful of sweet milk and two table-spoonfuls of shortening. Mix and bake on a hot well greased griddle.

Chowder of Parsnips.—Take one quart of well scraped parsnips sliced, one quart of quartered potatoes and four onions quartered. Cover with water, add salt and pepper and a four-inch cube of salt pork cut in bits; boil ten minutes, then simmer without stirring until well done.

Nellie Maxwell

WHEN SPRING SEWING OCCUPIES YOUR TIME



Among many other things that absorb the attention of home dress-makers, busy with spring sewing, there are negligees to be provided for hours of leisure. Now is the best time for making these luxurious and inspiring frivolities of the wardrobe. Gay new spring materials are here, and the business of sewing is in hand. January and February ought to see underthings for the family and negligees, housedresses, service clothes for the housewife, about disposed of. Certainly the pretty negligees should not be overlooked.

Negligees are usually in two garments, that is an underslip and a coat, or trousers and coat. These styles are about equally popular and the trousers are like those worn by Chinese women or patterned after those of India. Sometimes a long skirt is so draped as to suggest trousers and in any case these picturesque suits are fascinating. In the picture trousers of crepe-de-chine have double frills of narrow knife pleating about the ankles. The coat is much like a short kimono and it is edged with wide lace. A silk

cord and tassel is suspended from the coat at each side, falling from a small bow of ribbon. These tassels and cords have no particular reason for being where they are, except to look pretty; they do add to the grace of the coat by weighting it. There is no attempt to follow the style that inspires a negligee with fidelity to the original. The Chinese cord and tassel idea is used along with very pert little ribbon bows having an American flavor, and ribbon rosette with long ends at the front.

Such sensible things as the combination undergarment for a little girl, shown in the picture, must share attention with beautiful negligees in the spring sewing. The body and knickers are cut in one, the former gathered into an elastic band at the knee or on a straight band that buttons. Neck and short sleeves are finished with button-hole stitching over the edges of small scallops, and the same garment is made with lower neck and sleeveless for midsummer wear. The weight of the muslins used varies, too, according to the season for which the combinations are made.

Coats Stylish and Practical



It used to be that, to call a garment "practical" was about equivalent to calling it "commonplace," but that day has gone by. More and more the intangible element of style is demanded and commands a very tangible and substantial return in money. The two coats shown in the picture above will first catch the eye because of their smart style and then will bear study as thoroughly practical. The suppleness of the season's coatings makes it easy for designers to do unusual things, as in the coat shown at the left of the picture, where odd capelike extensions are set in at the sides and the body of the coat is joined to a deep yoke with many rows of machine stitching. Everything in the model is on a generous scale, even the handsome buttons are extra large. The very wide tuffler collar wraps about the throat in the coziest manner possible. In a less flexible material these ideas could not be carried out.

At the right of the picture there is a very smart bloused model, cut with kimono body and sleeves joined to a full skirt under a wide, crushed belt. The wide collar is gathered in at the neck and turns over. The cuffs, collar and bottom of the skirt are embellished with large disks, about the size of a silver dollar, which appear to be made of French knots in silk floss, set thickly together. The body blouses considerably and the entire design is novel and chic. Any of the soft coatings will serve for coats like those shown here, the velours, bolivias, silver-tones, and similar weaves that have distinguished this season's wraps make garments that are both practical and stylish.

Julia Bottomley

POULTRY

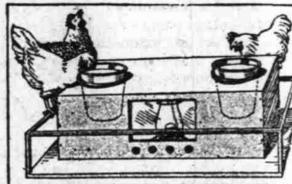
WATER SUPPLY WON'T FREEZE

Heat Deflected From Lantern Top Around Pails, Keeping Temperature Above Freezing.

To make a non-freezable drinking fountain for the hen house the following material will be needed: One soap or cracker box; a lantern; two galvanized iron pails, about two-quart capacity; and enough heavy asbestos paper to line box with a double thickness to keep in the heat generated by the lantern and for fire prevention.

The box must be large enough to hold the lantern and two pails. Two holes are cut in the top of box, one at each end, allowing the pails to sink into the box with only about 3 inches protruding; inside the box, between the pails, the lantern should be placed. The heat will be deflected by the lantern top and the box around the water pails, thus keeping the water a few degrees above freezing even in coldest weather.

The box is placed on a platform. This, in addition to being a support for perches on which the fowls stand while drinking, is also the bottom of



The Deflected Heat From the Lantern Keeps Fountain From Freezing.

the heat box upon which the lantern rests. When filling or cleaning the lantern, the box and pails are lifted from the platform, and when filling the pails, they are simply removed from the holes.—Popular Science Monthly.

ORIGIN OF MUSCOVY DUCKS

Breed Comes From South America and is Very Active—They Are Useful for Crossing.

The Muscovy breed of ducks originated in South America. It is very active. The drake weighs from 11 to 12 pounds; the female only six to seven pounds. The period of incubation is from 34 to 35 days. The standard admits two varieties—white and colored Muscovy. They are used for crossing to some extent, and, unlike most ducks, are rather quarrelsome with one another, and the drakes with other poultry. They are cared for just as other ducks. The ducklings are fed largely on ground food with plenty of green stuff, which may be put in the mash. Water should be before all ducks constantly in such a form that they cannot get into it with their feet. Sand or coarse gravel should be put in the feed once a day. All ducks must have a dry place to sleep.

STUDY OF MARKET DEMANDS

Mixed Flocks Will Not Produce Uniform Eggs or Meat, Most Desirable for Consumer.

Every poultry raiser should make a study of the market demands. A uniform color of eggs and flesh in poultry is desirable. A mixed flock will not produce uniform eggs or meat, and eggs from such a flock are not desirable for hatching.

ESSENTIALS FOR HEN HOUSE

Keep Flock Comfortable by Furnishing Good Ventilation, Fresh Air and Sunshine.

House the flock comfortably; keep houses dry and well ventilated, allowing plenty of fresh air and sunshine.

Remodel the old house—stop cracks and eliminate drafts.

Give hens a good straw litter to scratch in during the winter months.

POULTRY NOTES

Be sure chicks do not become crowded.

It is necessary to save some of the old hens for breeders.

Ducks and geese can usually be raised very economically on most farms.

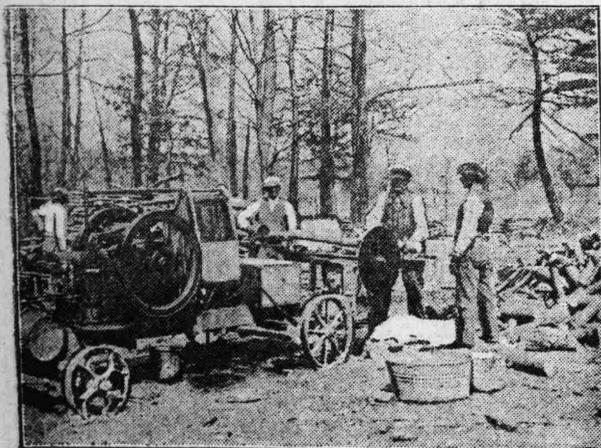
The wild breeds of turkeys are known as the North American, Mexican and the Honduras.

There are many farmers not now raising ducks and geese, but who could find raising them profitable.

Young hens will pay well for care and feed, but if they do not get good treatment they will not produce much profit.

Dampness is always more dangerous than cold, and that's why it is so important to have the hen house tight and dry.

MACHINERY SAVES LABOR IN CUTTING WOOD



Buzz Saw Operated by a Gasoline Engine.

(Prepared by the United States Department of Agriculture.)

Machinery is valuable in cutting firewood and is especially valuable now. Machinery speeds up wood cutting, and means more wood and therefore more coal saved.

A buzz saw or a drag saw will cut several times as much wood in a day as can be cut by hand and will do it much more easily. Wood-sawing machines are comparatively inexpensive, and when well cared for will last a long time. On farms which already have gasoline engines or other sources

of power, little extra outlay is necessary. Most of the outfits may be operated by a small number of men. Repairs and upkeep usually are moderate.

The cost of cutting a cord of wood with a buzz saw is approximately 20 cents. All small trees and cordwood can be cut readily with a buzz and circular saw, but logs above 10 to 12 inches in diameter can be cut best with a drag saw, although the latter will not cut so rapidly. The sawing outfit may be owned co-operatively or may be used for custom work.