EVEN PERIODS FOR MILKING

Cows Thus Milked Gave More Milk in Evening Than in Morning-Effect of Phosphates.

An English experiment station has definitely determined that the total quantity of milk is not influenced by equal or unequal periods of milking, but that the fat percentage is materially altered by the length of time between morning and evening milkings. Cows milked at even periods gave more milk in the evening than in the morning. The evening's milk was slightly the poorer in quality.

In an experiment to determine the effected of feeding phosphates directly to cows, precipitated bone phosphate was fed at the rate of one ounce per



English Dexter Cow.

day. No appreciable effect was obtained either on the quantity or quality of the milk produced. Apparently this material had no effect on the stimulation of the nervous system; if anything, it had a depressing effect. The weight of cows receiving the precipitated bone ash showed a slight increase.

Experiments showed no advantage in milking three times a day was compared with twice a day.

Cows fed palm-nut cake did not increase in weight as did those fed cotton cake, but they showed a looser skin with a glossier look. The palmnut cake gave a higher percentage of fat in the milk.

TREATMENT FOR LEAKY TEAT

Forty-Penny Spike, Rounded Off to Point and Applied While Hot Will Prove Effective.

Many good cows are butchered be cause they milk so easily that the pressure in the udder during a big milk flow causes the teats to leak.

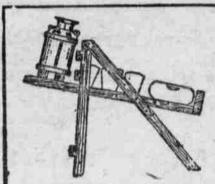
Leaking tents can usually be identifled by the concave depression at the milk opening. Hard milkers have a convex surface around the orifice. To stop a cow's tent from leaking, the best method I have found is to file a 40-penny spike, round off the point, heat the end hot enough to sear, and press it gently into the milk orifice, says a writer.

Hold in place till the cow informs to do too much at the first trial. The burn will nearly always cure readily as the result of the soothing influence of the milk, but if it is slow in healing, grease with salve. When the scar forms around the milk orifice, it contracts the opening and prevents the milk from leaking.

CLEANLINESS OF THE DAIRY

Vital Factor in Successful Production of Milk-Rack for Sunning Cans is illustrated.

Cleanliness is a very vital factor in the successful production of milk. The Mustration shows a simple sunning rack for milk cans and utensils. Any farmer can quickly construct this rack. All you need is a few 2-by-4s and 1-by-4s. The framework is of 2-by-4s and the braces are 1-by-4s. The cut shows



Rack for Sunning Cans.

an end view and the length will depend on the number of cans and utensils to be sunned. The rack should be adjustable to the direct rays of the sun. This is accomplished by the use of an iron bolt in securing the horizontal pieces at their intersection, with the upright 2-by-4s forming the pedestal. For clean milk cans, wash first in cold water, then steam (or scald, if steam is not available), then use the sun rack.

THOROUGH COOLING OF MILK

One of Most Important Steps in Its Care-Strain Immediately and Place in Cold Room.

Prompt and thorough cooling is one of the important steps in the care of milk.

Milk should never be left in the milking pail for several minutes in a warm place. It should be strained at once and put in the coolest place pos

SPRING WHEAT YIELDS HAY SUPPLY OF IMPORTANCE

Seventeen Different Stations Give Returns.

Results Obtained by State Agricultural Colleges, United States Department of Agriculture and by Co-Operation.

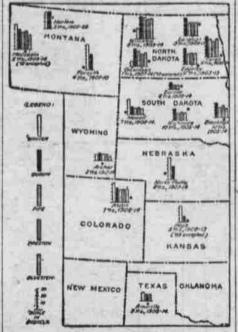
Every spring-wheat grower wants to know whether to grow common or durum wheat on his farm. A study of the diagram shown will help to answer the question.

The diagram shows wheat yields at 17 experiment stations in the great plains area. These results were obtained partly by the state agricultural experiment stations, partly by the United States department of agriculture, and partly by the two in co-operation.

For each station the figure shows a series of vertical columns, shaded in different ways. The number of columns in each case shows the number of different groups of wheat grown in these years. Each column stands-for the best varieties of its group and the height shows the yield in bushels per acre. The groups are hard red winter (white), durum (black), Fife (light slanting lines), Preston (heavy slanting lines), and bluestem (dotted lines).

The study of the Illustration tells some things very plainly. Here they

(1) Where winter wheat (the white column) can be grown safely it is a better yielder, and in many parts



Average Wheat Yields.

a much better yielder than any spring wheat. The figure shows roughly where winter wheat can be grown.

(2) Durum wheat (the black column) has outyielded all other groups of spring wheat at all of the stations named.

(3) Fife wheat (light slant-lined you that you have done enough. It | mon wheat in the northern and west- son that the hinges have only half the is better to repeat the operation than ern part of North Dakota. It is also weight to bear that the single gate well adapted to eastern North Dakota and South Dakota and to Minne-

The Preston group (heavy (4) slant-lined column), as shown here, contains three different varieties. The only important one is the Preston.

(5) Bluestem wheat (dotted column) is hardly equal to Fife except in eastern North Dakota. There and in Minnesota the bluestem wheats are well adapted and most largely

MOLES DEVOUR MANY GRUBS

Bill of Fare Also Includes Earthworms, Cutworms and Other Insects, but Not Potatoes.

Before you kill the mole let him have a big dinner of grubs, if you would follow the suggestion of J. E. Guthrie of Iowa state college, who has found that ground moles will eat more than their weight of grubs in one day if they can find them. The mole's bill of fare also includes earthworms, cutworms and various insects, but not potatoes which he is sometimes accused of eating. Of course, severe up the lawn, but unless he so conducts himself it is evidently better to leave him to his grub-consuming activities. Rolling lawns will often discourage the operations of moles.

MACHINES IN PUBLIC FAVOR

Marked Increase Noted in Certain Farm Implements-Corn Huskers and Shredders Gain.

Census figures between 1909 and 1914 show a marked increase in certain farm implements. Corn huskers and shredders and corn and bean harvesters show the greatest amount of increased popularity.

Other implements slowing a gain n public favor are grain drills, springtooth harrows and grain harvesters.

CLEANLINESS IS BIG FACTOR

Plenty of Fresh Air and Liberal Use of Disinfectants Ars of Greatest Impo tance.

the henhouse. It includes also plenty field and the manure scattered, not

Farm Animals Consume Enormous Amount During Winter-Advantage in Cutting Small Areas.

On most farms there are "grass patches" or small meadows where by careful work the manager may save considerable hay. After the general hay crop is taken care of usually there will be a demand for more Where one has considerable live stock it will be rather hard to store and save too much hay, for animals consume an enormous amount during the winter and it is an easy matter to underestimate what they will require.

It will pay generally to find the hay patches where there is a small area of fine grass and save it. It may be a little more expensive to save small patches than in the hayfield proper, but if the hay is needed, as it generally will be, no complaint need be made about the expense.

There is another advantage in cutting and curing the small areas of hay. The grass is utilized for feed and not left to produce seed to cause you trouble next year. If the grass be Johnson grass, crab grass or other thrifty growth that is more or less a pest there will be all the more reason for cutting and curing it for hay.

CELERY OF HIGHEST QUALITY

Spraying to Prevent Blight and Rust Is of Utmost Importance-Much Work Required.

One acre of celery properly cared for represents a lot of work, extending from the time of planting the seed in the greenhouses or hotbed, transplanting the plants, setting them in the open field, watering, cultivating, spraying, harvesting, bunching and marketing. But the returns from a bumper crop of, say 40,000 head from the acre, averaging 50 to 60 cents a dozen heads, pays well for the labor and care bestowed on this crop.

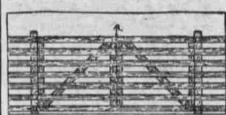
"Spraying to prevent blight and rust is of the utmost importance to insure a good yield of best quality celery." So says Samuel Beach, a Canadian truck grower. He uses bordeaux mixture whenever there is the slightest indication of blight or rust. As he cultivates the crop he watches for indications of leaf injury, and finds his one-horse power spraying outfit as necessary as his cultivator. The cost of spraying materials is considerably higher since the war began, but Mr. Beach finds that the spraying cannot be omitted, even were the cost of spraying materials several times as high as they are at present.

SERVICE FROM DOUBLE GATE

Farm Task, That for Some Reason of Other Is Neglected-Easy Plan Described Herewith.

The making of the double gate or the farm is a task that for some reason or other is usually neglected. The double gate gives much better service column) is the highest yielding com- than the large single gate for the readoes.

> An easy way to make the double gate is here described. It is presumed



Double Gate for Farm

that a 16-foot gate is to be built, and to do so we build the gate, (as shown), all in one piece. It is then set in place and the four hinges are made fast, the post well tamped, and the gate is then sawed in two in the center (as shown

This method will bring both gates on a line, and they will be sure to close evenly. It is a good plan to place the two center sidepieces about onehalf inch apart, and make two saw cuts, cutting out the extra half-inch which will prevent the rain from swelling the gate, which may prevent its closing evenly.

measures are necessary and he humps SOIL FERTILITY IN GARDENS

Without It Farmer Cannot Expect to Realize High Profits-Grow Some Leguminous Crop.

'eration in every A primary gardening pro to make and keep the soll as fer s possible. Without high fertility we cannot hope to realize high profits. Use lime occasionally so that the clovers will thrive, See that an ample supply of phosphorous is furnished all crops. Grow green manurial crops as much as possible, Take care of the stable manure produced on your own place and use it where it will do the most good. Buy stable manure when the price is right.

SAVING ALL MANURE VALUES

Whenever Possible Fertilizer Should Be Hauled to Field and Spread Soon as It Is Made.

Whenever possible, manure should be spread as soon as made. A wagon, or better, a manure spreader, should Cleanliness is the most important be placed where the manure can be factor in the successful raising of shoveled from the gutters directly inpoultry and it doesn't consist alto- to it to save handling twice. As soon gether in the removal of dirt from as filled, it should be hauled to the of fresh air and the liberal use of dis- piled in little heaps for later scatter-

COLD STORAGE IS EFFICIENT

Recommended by Expert of Kansae Agricultural College as Best Way of Keeping Eggs.

Cold storage is the best way to preserve eggs, in the opinion of F. E. Mussehl, instructor in poultry husbandry in the Kansas State Agricultural college.

"Many preparations are used for preserving eggs," says Mr. Mussehl, "but none are as efficient as cold storage. Some persons use sodium silicate, commonly known as water glass, while others use lard or one of the many commercial preparations to preserve eggs.

"These methods of storing eggs prevent decomposition by bacterial action, but do not stop enzyme action. The enzymes are always present in the egg and are active at ordinary temperatures. With good fresh eggs kept at the proper storage temperature -31 or 32 degrees Fahrenheit-enzyme action as well as bacterial action is prevented. Three months is a long time to keep eggs at room temperature yet this is what the poultry department has done."

In order to prove the superiority of infertile eggs over fertile ones in keeping quality, Mr. Mussehl kept a dozen eggs in his office for three months. When examined at the end of the period they showed no signs of decomposition other than a slight thinning of the white and yolk, and a faint odor. These changes were due to the action of enzymes within the egg.

ERADICATION OF RED MITES

All Night Pests Fill Their Bodies With Blood From Fowls and Then Hide in Daytime.

The red mite is the worst enemy the poultryman has to contend with, and the very hardest one to fight. This pest is very small and normally is grayish in color, but, more often, presents a deep red color, because of the blood with which it is

Unless very numerous, the mites are seldom found on the hens. The pests work on the hens at night, filling their bodies with blood, and hide beneath | meekly to bear it all. the perches, and in cracks and crevices near the roosting quarters during the day.

Whitewash is not very effective in fighting the red mite. A better spraying material is coal oil emulsion. This is made by dissolving half a bar of laundry soap in hot water and adding half a gallon of coal oil. This mixture can be diluted with five gallons of water. The emulsion is best applied with a spray-pump, for the reason cracks and crevices that could not be reached with a brush.

The job of spraying must be very thoroughly done. Some of the mites will likely escape the first spraying, and for this reason it is advisable to repeat the spraying in a few days, and again in a week, to destroy the mites that hatch from eggs.

WHY LEGHORNS ARE POPULAR

Food Cost Is Exceptionally Low and Floor Space Is Less-Test Made at Cornell University.

The cost of egg production with Leghorns is exceptionally low according to tests made at the Cornell univer-

On one large poultry farm the food cost in the case of Leghorns is exceptionally low and will average three cents a dozen less than where large



Flock of Leghorns.

breeds are used, and in addition to this the floor space required for Leghorns is less than that required for an equal number of larger fowls.

These birds also cost less to raise to maturity, and all of these characteristics will result in effecting very important saving in the cost of food,



KNOCKOUT FOR MR. BROWN

His Better Half's Story of Experience With Lottery Certainly Not Flattering to Him.

Mrs. Brown has a special horror of lotteries, and at all times and places she embraces every opportunity of holding forth with vehemence concerning this pet abomination. Her indignation will therefore be imagined when, one evening, her worthy spouse came home and proudly announced that he had joined a goose club. For something like an hour she poured the vials of wrath on her unfortunate husband's head, while he endeavored

At last the warmth of the attack proved quite too much for the long-enduring John, and he decided that the time had come for him to fire up in return.

"I suppose, my dear," sald he, endeavoring to be sarcastic, "you were never in a lottery, were you?"

But, alas for the speaker! Mrs. Brown turned upon him with withering scorn.

"Once, John, and only once," said that the pump will put the "uid in she. "They say, as you know, that marriage is a lottery. Well, I went in for that, and I myself won a goose ! London Tit-Bits.

> Pimples, boils, carbuncles, dry up and disappear with Doctor Pierce's Golden Medical Discovery. In tablets or liquid. -Adv.

Element of Uncertainty. "How do you think your state is go-

ing next election?" "We're going to have a walk-over," replied Senator Sorghum. "But I'm not quite sure which of us is going to get walked on."

Lots of men have cause to rejoice because they don't get what they want. It is always easy to be wise for

Disappointment. "What made the man kill the goose

who laid the golden egg?" "I can only guess at it. Maybe food was costing so much that he got re-sentful because the bird kept handing him old metal instead of regular eggs."

Wise Youngster.

Little Dick-What are you cutting out of that paper?

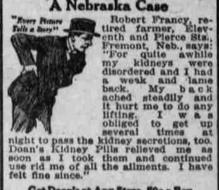
Little Johnny-Something I don't want mamma to see. "What is it?"

"It's an article that says wooden slippers are coming into fashion."

Strong Drinks Irritate Strong drinks like beer, whiskey,

tea and coffee, irritate the kidneys and habitual use tends to weaken them. Daily backache, with headache, nervousness, dizzy spells and a rheumatic condition should be taken as a warning of kidney trou-ble. Cut out, or at least moderate, the stimulant, and use Doan's Kid-ney Pills. They are fine for weak kidneys. Thousands recommend

A Nebraska Case



DOAN'S RIDNEY PILLS

FOSTER-MILBURN CO., BUFFALO, N. Y GALLSTON

Iron is Greatest of All Strength Builders, Says Doctor

A Secret of the Great Endurance and Power of Athletes

Icate, Nervous, Rundown People 200 Per Cent. Stronger In Two Weeks' Time in Many Cases.

from some stimulating medicine, sehas studied widely both in this country and Europe, when, as a macter From their weakened, nervous condition they know something is wrong for the lack of iron. bit they can't tell what, so they generally commence doctoring for stomach, liver or kidney trouble or symptoms of some other aliment caused by the lack of iron in the blood. This thing may go on for years, while the patient suffers untold agony. If you are not strong or well, you owe it to yourself to make the following test: See how long you can work or how far you can work or how far you can well, nothing is better than to give farm cannot be permitted, at least fence in as big a field as possible and let the birds roam over it at will. It means health, happiness and eggs.

Ordinary Nuxated Iron Will Make Del- | and entirely get rid of all symptoms of dyspepsia, liver and other troubles in from ten to fourteen days' time simply by taking iron in the proper form. And this after they had in some cases been doctoring for months NEW YORK, N. Y.-Most people without obtaining any benefit. But foolishly seem to think they are going don't take the old forms of reduced to get renewed health and strength iron, iron acetate or tincture of iron simply to save a few cents. You must cret nostrum or narcotic drug, said take iron in a form that can be east-Dr. Sauer, a well-known Specialist who ly absorbed and assimilated like nuxated iron if you want it to do you any good, otherwise it may prove worse of fact, real and true strength can only than useless. Many an athlete or come from the food you eat. But peo- prize-fighter has won the day simply ple often fail to get the strength out because he knew the secret of great of their food because they haven't strength and endurance and filled his enough iron in their blood to enable blood with iron before he went into ft to change food into living matter. the affray, while many another has gone down to inglorious defeat simply