IMPROVEMENT OF DAIRY COW

How Much Credit Must Be Given for Better Feeding and Care and How Much for Breeding?

In increasing the production of a dairy herd how much credit must be given for better feeding and care and how much for better breeding and se-lection?

This question has been argued back

lection?
This question has been argued back and forth and experiment stations in this and all other countries have made

Young Jerseys at Pasture

tests showing that from nine to fifty per cent fibercases have been made by better feeding and care.

The answer, of course, depends a great deal on previous feeding and care, but it is not an important ques-

care, but it is not an important ques-tion. The important thing is that we know positively that by better feeding and care better breeding and selection the production can be increased very largely and very profitably. It doesn't matter what form of effort gets the credit, the result is what we want.

DEVICE TO SEPARATE CREAM

Machine Will Often Pay for Itself in One Year, Much Depending on Number of Cows Kept.

The cream separator is a mechanical device for separating the cream from the milk, almost instantaneously by centrifugal force. Its advantages over the old methods of separation

CHURNING HINTS FOR WINTER

Butter Making Troubles May Be Over-come by Keeping Crosm at the Proper Temperature.

Troubles arising from winter butter-making may largely be overcome by keeping the cream to be churned at a temperature of 52 degrees Fahren-heit until two days before churning, when it should be placed where the temperature is about 75 degrees Fahr-cobatt

MILK ONLY WITH DRY HANDS Practice of Wetting Hands is Filthy Habit and Liable to Cause Cow's Teats to Chap.



Children for Farm Work.

The Keat (England) education committee has again desided to release children twelves years of age and upwards from school attendance for employment in agriculture during the summer months. Children of not less than twelve years of age are also to be released this year for employment in abme duttes! It thereby their mothers can be employed in agriculture.

One of the Coco.
'So Kitty said I had a thick head of

bair."
"Oh, she didn't mention the hair."

Barred Out.

Husband—Have you called upon those new people yet?

Wife—No, we can't associate with them. I was saved from doing it in the nick of time.

Husband—What happened?

Wife—Why, by the merest accident I heard that they you an open car all winter.—Judge.

Exceptions.
Women have no idea of applied science in ordinary life."
"How about chemical blondes?"

When a man makes a fool of himWhen be woman, it's a sign that it
doesn't require much of an effort.

\*What was it your client failed to
put a good face on the matter?"

"He changed countenance"



Efficiency built the Panama Canal, after inefficiency failed. The efficiency of the Panama Canal doubled the effectiveness of the U. S. Navy without adding a ship to it. It took over 8,000 miles out of the trip from New York to San Francisco and changed the highway between London and Australia from Suez to Panama.

Efficiency insures against lost motion—it produces the utmost service out of equipment and yields the finest product, at

## <u>Certain-teed</u>

## Roofing

### is an efficiency product

Is an efficiency product

Every advantage that men, money and machinery can offer is used to increase the production, maintain the quality and lower the cost. Each of the General's enormous mills is advantageously located to serve the ends of efficient manufacture and quick distribution. Each is equipped with the most up-to-date machinery. Ramaterials are purchased in enormous quantities and far shead of the needs of manufacturing, thus guarding against increased cost due to idle machinery. This also insures favorable buying, and the pick of the market.

Event chemistry at each will are amplicated as along a black of the state of the

Expert chemists at each mill are employed to select and blend the asphalts, and every roll of CERTAIN-TEED is made under their watchful care.

CERTAIN-TEED resists the drying-out process so destructive to ordinary roofing, because the felt is thoroughly saturated with a blend of soft asphalts, prepared under the formula of the General's board of expert chemists. It is then coated with a blend of harder asphalts, which keeps the inner saturation soft. This makes a roofing more pliable, and more impervious to the elements than the harder, drier kind.

CERTAIN-TEED is made in rolls; also in slate-surfaced shinoles.

There is a type of CERTAIN-TEED for every kind of building, with flat or pitched roofs, from the largest sky-scraper to the smallest residence or out-building.

CERTAIN-TEED is guaranteed for 5, 10 or 15 years, according to ply (1, 2 or 3). Experience proves that t lasts longer.



BEECHER, PECK & LEWIS, DETROIT

CONTROL OF ORCHARD PESTS

Certain Fungous and Bacterial Dis-eases Which Are Best Fought During the Winter Season.

eases Which Are Best Fought
During the Whiter Season.

In the management of the orchard, especially the apple and pear orchard, there is a period after the fruit is gathered, and perhaps after other crops have been safely harvested, that is most convenient for doing some of the careful work in the control of certain diseases and pests. There are certain funguis and bacterial diseases, particularly pear blight and apple canker, which are best worked upon at this time. These diseases are principally controlled by the cradication methods rather than by spraying the children of the careful strains and the strain of the tree, including the holeson clusters, young twiss, and the bark of larger branches, and oven on the body, collar, and root system of the tree. Under certain conditions the bacteria spread into the wood to a considerable extent. The disease attacks the pear, apple, quince, and other related fruits.

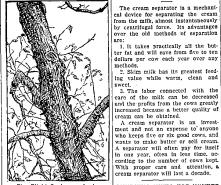
Pear blight eradication is quite a careful piece of work. It requires closes attention on the part of the related the pear apple, quince, and other related fruits.

Pear blight eradication is quite a careful piece of work. It requires closes attention on the part of the remember that thoroughness is essential for success. It is not necessary to determine in all cases whether the blight is alive or dead on the lower mergin, although somewhat helpful as a guide in determining how low to go. In actual practice it is better to cut out all the dead limbs and all the blight, anylow, regardless of whether it is a dead case or not.

The blight eradication should always preceds the pruning. Other pruning for shaping up the trees may be postponed until some convenient time later, but of course, before the buds push in the spring.

course, before the suds puss in the spring.

Apple cankers form dead spots on the twigs and branches of apple trees, and occasionally extend down on to the bodies. There are several differ-ent types of apple cankers in various



Fire Blight Canker on Apple. parts of the United States. Occasionally two or more kinds may occur on the same tree. They are caused by fungt growing comparatively slowly in the bark and skilling it. They often the same tree. They are provided the same tree in the writes from the provided they are the same tree in the writes. They often the same tree in the same provided they are the same tree in the same t parts of the United States. Occasi

SPRAYING TO CONTROL SCALE

Mixtures Must Be Prepared Properly and Used at Right Strength—Oll is Easily Applied.

temperature is about 75 degrees Pahr-inheit.

The cream should be kept at 58 to 60 degrees Pahrenheit during churning time and when the butter collects into small nut sizes the buttermik abould be drained off and water at a temperature of 60 degrees Pahrenheit should be poured over it, repeating the rinsing process two or three times. With the last rinsing, give twenty therming revolutions and draw off the water. To work the butter, place the particles on a flat board and strew the salt over it uniformly and work just enough to distribute the salt evenly throughout the butter. In order to completely control the San Jose scale pest the spray mixtures must be prepared properly and used at the proper strength and applied so thoroughly that every particle of the infeated tree is covered with the solu-tion. Since the solutions kill only by contact, each individual scale must be

tion. Since the solutions kill only by contact, each individual scale must be bit if the pest is to be controlled. A few scales which may encape by faulty spraying will reinfest the trees the following summer.

The oil spray are usually more easier.

The oil spray rease usually more easier. Whether the line-subpur or the oil spray is used, they should be applied from all directions, so that there is no chance of any portion of any of the limbs and twigs eacaping the treatment. A beginner usually attempts to thoroughly over the inner limbs, and if he is not careful he will leave the tips of many of the twigs, where thousands of scales will escape treatment. A nozite throwing a fine spray is to be preferred over the coarse nozzie used for controlling the coding moth during the spring and summer. Milkers should be allowed to milk only with dry hands. The practice of wetting the hands with milk is a fithy habit and is lable to cause the cows' teats to chap in the winter time. Milking should be done quickly and thoroughly, with no violent Jerking of the teats.

After each cow is milked the milk should be removed immediately to the milk should be removed immediately to the milk house. Avoid Wooden Stalis.

Stalis of wood have many flat surfaces and cracks which are difficult to keep clean, and in case of an outbreak of disease are not easy to disinfect thoroughly. Stalis and swing stanchioms ande of metal pipe are more sanitary.



Take Tablespoonful of Salts if Back Hurts or Bladder Bothers—Meat Forms Uric Acid.

We are a nation of meat eaters and our blood is filled with uric acid, says a well-known authority, who warns us to be constantly on guard against kid-ney trouble.

a well-known authority, who warse us to be constantly on guard against kidney trouble.

The kidneys do their kimes to free the blood of this irritating acid, but become weak from the blood of the irritating acid, but become weak from the beauthority the same of the blood of the king the beauthority and the blood of the blood to poison the catalend in the blood to the wind in the catalend in the cata

and active.—Adv.

A Prediction. Knicker-Who will be the presiden al candidates? Bocker—"Very" and "I."

Use Murine after Exposure ta Cold, Cutting Winds and Dust. It Restores, Refreshes and Promqtes Eye Health. Good for all Eyes that Need Care. Murine Eye Remedy Co., Chicago, Sends Eye Book on raquest.

Close B. Palmer has been leader of a church choir at Maple Grove, Tenn., for the past 58 years.

To keep clean and healthy take Dr. Pierce's Pleasant Pellets. They regulate liver, bowels and stomach.—Adv.

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territory is taken. Address me like this—t. h.
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Kerth Clark Street and Chicago America. Chicago, in.
"You seem to be in a melancholy mood this morning."

mod this morning."
"Yes, I've been thinking about thethousands of poor fellows being killedin Europe."
"Still, that isn't your fault."
"I know it, but you see, I don't own
any war stocks and there is nothing
to prevent my yielding to acute depression."

Many Children are Secty.

Mother Gray's Breet Dowders for Children
Break up Colds in 12 hours, relitive Ferrishness, Breadsobe, Stomach Troubles, Teething
Disorders, more and regulate the bowdes, and
Destroy Worms. They are so pleasant to take
children likerhen. Used by moders for Sprans,
All druggists, 150, almple FEEE. Address,
Nother Uny C., Le Roy, 3, 7, 1

The Humorous Hat.
"Has she any sense of humor?"
"I don't think so.' She can look at
ter hat without laughing."

Make the Liver Do its Duty

Nine times in ten whe right the stomach and bo CARTER'S LITTLE JVER PILLS (gentlybutfern)

and Distress After Eating.
SMALL PILL, SMALL DOSE, SMALL PRICE.

Brent 5 ood

Ladies, Beauty Is an Asset

# Women Once Invalids

Now in Good Health Through Use of Lydia E. Pinkham's Vegetable Compound. Say it is Household Necessity. Doctor Called it a Miracle.

All women ought to know the wonderful effects of taking Lydia E. Pinkham's Vegetable Compound even on those who seem hopelessly ill. Here are three actual cases:



Harrisburg, Penn.—"When I was single I suffered a great deal from female weakness because
my work compelled me to stand all day. I took
lydia Funkamen weakness because
my work compelled me to stand all day. I took
lydia Funkamen weakness
married I took the Compound ngain for a female
trouble and after three months I passed what the
dector called a growth. He said it was a miracle
that it came away as one generally goes under
the knife to have them removed. I never want to
be without your Compound in the house."—Mrs.
Frank Knort, 1649 Fulton St., Herrisburg, Penn.

Hardly Able to Move.

Albert Lea, Minn.—"For about a year I had sharp pains across my back and hips and was hardly able to move around the house. My head would ache and I was dizzy and had no appetite. After taking Lydis E. Pinkham's Vegetable Compound and Liver Fills, I am feeling stronger than for years. I have a little boy eight months old and am doing my work all alone. I would not be without your remedies in the house as there are none like them."—Mrs. F. E. Yosr, 611 Water St., Albert Lea, Minn.

Three Doctors Gave Her Up.

Pittsburg, Penn.—Your medicine has helped me wonderfully. When I was a girl 18 years old I was always sickly and delicate and suffered from irregularities. Three doctors gave me up and said I would go into consumption. I took I ydia E. Pinkham's Vegetable Compound and with the third bottle began to feel better. I soon became regular and I got strong and shortly after I was married and I got strong and shortly after I was married and I got strong and shortly after I was married able to work hard every day.—Mrs. CLEMENTUM. DURENTUM, 34 Gardner St., Troy Hill, Pittsburg, Penn. J. M. Worden and Mrs. 1 and 1 a



All women are invited to write to the Lydia E. Pinkham Medi-cine Co., Lynn, Mass., for special advice,—it will be confidential

## Prompt Relief

from the all-too-common ills of the digestive organs—weak stomach, torpid liver and inac-tive bowels—is found in the always safe, sure, quick-acting

## **BEECHAM'S** PILLS

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