

Spray early and late.

Ducks prefer soft food.

Whitewash the hen house.

Concrete tanks are superior.

Keep the dairy utensils clean.

"The early bird" easily keeps down the weeds.

Great Britain's wheat fields cover 2,000,000 acres.

Too much sun for young chicks is as bad as too little.

The manager must supply the brains for the cow machine. Don't wait for the weeds to appear

before you begin cultivating.

Have everything neat and sweet about your milk and butter business.

The owner of the small farm flock is the man most likely to neglect dip-

An alert carriage and a bright eye are necessary in a perfect carriage or saddle horse.

To teach chicks to drink, sprinkle a few grains of feed on the water for them to pick at.

The great majority of farmers do not know the value of the harrow, or if they do they do not use it.

Teach the lambs as early as possible to eat grain in a lamb creep to fit them for the early market.

If a horse sweats easily, take particular pains not to let him stand out in a draft, or drink too heartily.

It is expensive economy to do without a separator where cream is sold or butter made from five or more cows.

The best way to get rid of tuberculosis in dairy cattle is to follow the old precept about an ounce of preven-

The little pigs seem to be wonderfully keen in detecting the small holes in the fence through which they can escape.

Success in the dairy seems to be most all "s"; separator, silo, scalesthen the following letter, "t," test, ie a close second.

Have all cattle that come into the herd tuberculin tested and then have a well ventilated barn that is kept scrupulously clean.

If a sow that has lost the use of her legs is in good flesh, it would be best to slaughter her for meat, as chances of recovery are poor.

The poultry business requires study and constant attention, the same as any other business. First efforts are rarely ever successful.

One of the silo arguments that appeals to every stock owner is that there is no such thing as cornstalk disease to worry the sllage feeder.

The stomach of the little calf is very sensitive and easily ruined. Nothing will do it quicker than keeping the animal confined in a wet, dirty pen.

One of our readers recommends cream of tartar for chickenpox; one tablespoonful in soft feed for each twelve fowls, two or three times a week.

In growing a heifer for the dairy, muscular vitality is wanted rather largely from the skim milk portion of its diet.

should be washed off as soon as crop is not so very common but when that when Johanna gave 27 pounds of noticed. This is one of the little you do find such a man you find one milk a day she received 9 pounds of things that helps toward getting a who is a success. good hatch.

should be fed sparingly to keep hens disastrously on the reproductive or. Not a bad kind of a cow to have laying and to ward off diseases to gans. It is really not advisable to which the overfat bird is susceptible add it to the bill of fare for laying milk weighs eight pounds. Professor used for soil improvement it becomes in warm weather,

The calves to be vealed should be fed all they will eat greedily, so as very much. The feed may be whole and oil meal. But never give them packed. cold milk.

Don't do any pruning of the grape as "bleeding" will result and the vi- they are called "grass eggs." tality of the vines be sapped away, retarding proper growth, cutting down vines entirely.

Keep the best calves.

The silo spells success.

It is never too late to prune.

The Jersey is a popular breed.

It takes brains to raise dairy cows.

Beware of frauds in buying trees and bushes. Half way business doesn't pay in

breeding work. No animal suffers so much from

reglect as the sheep.

There should be a good scratching post in every pig pen.

Eternal vigilance is the price of everything good in the stock line.

See to it that the work horse is well curried during the heavy spring work

Comparatively few people realize the importance of drinking water for

Clean the calf pen often and bed it with a liberal supply of dry straw oftener.

The silo seems to be edging mighty near the cornerstone of successful dairying.

If you can't afford to buy a good bull get one with your neighbor, each paying half.

Fresh pasture is so relaxing that care must be taken that the cows do not lose flesh.

Many a farmer has drawn the greatest measure of prosperity from the dairy cow.

When spraying, if showers come and wash off the poison, spray those trees a second time.

Careful selection of the stallion is essential to the production of a uniform harvest of colts. A fumigation with burning sulphur

will get rid of both vermin and disease germs in the poultry house. The chickens like rape. A little

patch of it near the barnyard will

keep them busy and contented. Chickens will not die of gapes if they are fed proper food and plenty

Not only the flavor, but the keeping quality of butter is injured by keeping the cream until it gets very sour.

of it, and are kept free from lice.

Usually, a careful dressing of market fowls will draw a little premium from the buyers. It pays in the long

The quality of the egg can readily be established by a ration that will add sweetness and good flavor to the contents.

The sow should be in moderate flesh when bred, but when safely in pig she should have a strong ration to build her up.

Do not expect satisfaction from bordeaux mixture that has stood for deteriorates quickly.

Next to good feeding the thing that will make the horses look sleek and comfortable is elbow grease and a curry comb and brush.

Some people think that the dry cow needs no care, but those that make the best records have the best care during their period of rest.

See that the half-grown chicks have plenty of exercise, especially at feathering time, if you are trying to push them forward by heavy feeding.

Never speak harshly to a cow nor strike her. She is of a highly strung disposition and will easily become unmanageable through rough handling.

To feed too much soft food is unnatural. This is particularly true and harmful if overfed so such food lies around to sour and become unwhole-

if wet and cold, and the old hen is sisting of four parts of corn, two parts overly active, better confine her for a of bran, and one part of cottonseed than fat, and this is obtained very short time each morning or all of a rainy day.

The farmer who can tell just what Filth on eggs under the sitting hen it costs to produce and market a

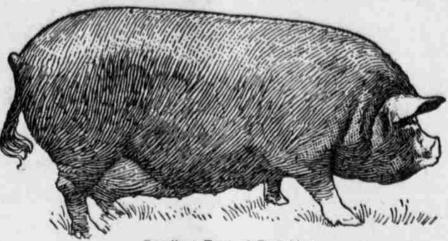
Cottonseed meal should not be fed This is the time of year when corn too liberally, as it then acts rather a gallon, 8 cents a quart, or \$285.76.

One dragging of the roads at the proper period immediately after they not to get hungry enough to bawl begin to crumble, following a shower, will do more good than a dozen dragmilk, part whole milk or skim milk gings after the dirt becomes hard and

When eggs are candled, and show a pale, greenish hue, and the yolk wobvines after the buds begin to swell, bles around in a weak, watery white, cooked they have an unpleasant flavor. When a hen is made sick eating too fruit production and often killing the freely of grass, she lays these kind of eggs.

PROPER MANAGEMENT OF SOWS ESSENTIAL CULTIVATION AND OF THE UTMOST IMPORTANCE MANAGEMENT OF GRAPE VIN

Animals in Good Physical Condition Will Care for Their Young and Raise Them in Excellent Manner-Best Food Just Before Farrowing Time Is Wheat Middlings and Bran.



Excellent Type of Berkshire,

(By L. G. JOHNSON.) Quite often I have heard the comonly a short time ago a neighbor of this purpose. mine had a fine brood sow to eat her

looked for. Sows by nature are not cannibals and if they are in good physical condition they will care for their young

and raise them in the proper way. On the other hand if she is nervous apt to eat her pigs, but when they have the run of good pasture and are properly fed and cared for they seldom eat their offspring.

If a sow is compelled to live in the barnyard, sleep in manure piles or straw stacks, and only fed a little dry corn she is apt to be feverish, con-Itipated and have but very little milk, out in shape that was hard to beat and in such cases she is likely to eat her pigs or lie on them and smother pigs, them before they are old enough to In *uck

I have a large basement under my barn where the frost is never seen pen in this basement. I don't care about the pen being over large, a pen sixteen feet square is large enough for four sows up to two weeks before farrowing, after which I place each sow in a separate pen with her pigs. I like this pen to be ten feet square with light bedding, cut straw is preferable.

The best food for a brood sow is wheat middlings, the coarser the better, or wheat bran and middlings may only feed enough to keep them in a

KANSAS COWS

be wet to a stiff mass with milk, house slops or water, where it is plaint of sows eating their pigs, and available skim milk is the best for

Besides this she will eat and should pigs immediately after farrowing. have plenty of clover or alfalfa hay; Now this is not natural for a sow to it is surprising the amount of clover do so, and when they do there is a hay that a sow will eat, especially to reason for it, if that reason is only those that have never fed the same to hogs; in addition to this I always feed my brood sows about four or five pounds of sugar beets to every hundredweight per day; I feed them whole for the purpose of giving the sow exercise in eating them, some and fretful at farrowing time she is advise the feeding of raw apples but I do not like to feed any great amount of them especially if they are sour.

One winter I kept six sows in the same pen and fed them the following rations per day: Twenty-seven pounds of sugar beets, ten pounds coarse middlings and all the clover hay they would eat, and they came and raised forty-seven nice healthy

In addition to the above ration I kep a box in the pen where the sows may have free access to it at all times filled with the following: Charcoal six and in case the weather is very cold parts, wood ashes two parts, and two I give my sows a good, warm, dry parts salt. It is needless to say that plenty of pure clear water should be given to the sows as most everyone realizes this fact.

I always handle my sows and humor their whims in order to keep them gentle as a gentle, well-satisfied sow will do better and have better success with her pigs than one that is nerv ous and fretful.

Brood sows should not be fed for the purpose of fattening them but be mixed half and half. This should thrifty, strong and healthy condition

BREEDING BULLS NEED EXERCISE

Carlotta Gave 15,773 Pounds of Milk in One Year - Fairly Good Average Yield Is 6,000 Pounds.

MAKE RECORDS

If a cow gives 6,000 pounds of milk a year most men are satisfied. This as much as twenty-four hours. It is a fairly good average yield. But here are some two-year-old Ayrshires tht surpass that figure by a long way. Their work was described by Prof. O. E. Reed, head of the dairy department, in the annual institute. Here are the records:

> Canary Belle, 10,118 pounds of milk and 437 pounds of butter, 3.7 per cent.

> Fearnot of Oakdale, 5,218 pounds of per cent test. Johanna of Juneau, 7,681 pounds of

> milk and 335 pounds of butter, 3.72 per cent test.

Rose of Oakdale, 5,956 pounds of milk and 308 pounds of butter, 4.42 per cent test. Any one of these cows would sup-

port a family of five persons. Such cows probably could be bought for \$175 or \$200, but not at the college. The cost of feeding the ration, and the income, may be gauged for all the group by referring to the history of Johanna of Junean, a model family cow; Johanna ate, every day, thirty pounds of silage, ten pounds of alfalfa STABLE MANURE Feed the small chickens often, and had, and nine pounds of grain, conmeal. This ration cost \$5 a month. It was fed as described only when the | Most Important and Abundant cow was giving the highest yield. One pound of the grain ration was allowed for every three pounds of milk, so the grain.

Johanna gave 893 gaHons of milk which sold in Manhattan for 32 cents around. And, by the way, a gallon of Reed told, too, of another fine cow, a ord test was finished ten days ago. She gave 15,773 pounds of milk and to 606 pounds of commercial butter. Her feed cost \$95.50. Most cows pass their usefulness period at 6 or 9 years. This old cow of 13 years returns a net. If her milk had been sold at 7 calves, and the cream used for butter. tilizers used in this country.

Close Confinement Will Ruin Dis position of Otherwise Kind Animal -- Makes the Best Stre.

(By G. M. TWITCHELL.) I saw a good bull the other day which was being spoiled by kindness. He had not been out of his little pen for more than a year, his feet were all out of shape and naturally he was crabbed and surly. Who wouldn't be under such treatment? It is simply inhuman, but it's common. A day or two later I saw another in a wellfenced enclosure, with an overhead wire firmly attached to strong posts, set 40 feet part at the ends of the milk and 292 pounds of butter, 4.08 pen, and a chain connecting the bull's nose to the wire. Here he traveled day after day, the fence too high for him to see other cattle, but with plenty of room for exercise. The good nature of the animal told of the success of humane treatment. It is not oply cruelty to keep a bull closely chained day after day and year after year, but more than that, it will ruin the disposition of an otherwise kind animal. The law of environment holds here, and the bull suffering for exercise cannot be as good a breeder as his neighbor made comfortable in

QUITE VALUABLE

every way. Try it.

Material for Soil Improvement - Much Unnecessary Waste.

Farm manure always has been and probably always will be the most important and most abundant material for soil improvement. It is a necessary product on every farm and on stock farms a product which accumulates in very large amounts. If not a worthless nuisance about the stables. Holstein, thirteen years old-Carlotta A conservative estimate places the Abbekerk 52826. Carlotta's year rec- annual production of farm manure in

the United States at two billion tons. The actual and known agricultural 515 pounds of butter fat, equivalent value of fresh farm manure containing both the liquid and solid excrements is \$2 a ton, if the value is measured in terms of plant food or by the actual increase in crop yields proprofit, leaving out details, of \$75.75 duced by the use of the manure on long cultivated soils. The unnecescents a quart it would have brought sary waste and loss of farm manure \$513.50. Deducting the feed bill the which occurs in the United States owner would still have \$418. Her each year is equal in value to ten milk was skimmed, though, for the times the value of all commercial ter-

MANAGEMENT OF GRAPE VINES

Found to Be Good Practice to do Pruning Just About Time of Picking, But in No Case Should Treatment Go Over Until Spring, as "Bleeding" Causes Weakness and Stunts.

The care of grapes is the same | telephone wire; these are passed whether for the home or the vineyard, through the box from end to end and wood is not procurable, but in Michigan and the other states the crop is trowel the upper surface is smoothed the root stock, being guided till they reach to longitudinal wires by being tied with tarred twine, writes Herman Haupt, Jr., in the Rural New Yorker. We use cedar posts eight feet long set butt end throughout coated with hot coal tar from the gas works. The end posts are braced so that the wires may be drawn taut. It is a mistake to bore holes in the posts and run wires | that six or eight or more posts may be through them at four feet from the ground, or in fact any distance, as it allows of the accumulation of moisture, and a wire at this height very naturally interferes with the cultivation of the vineyard and the picking of the crop. Any obstruction that prevents getting readily from one row of vines to the next is an error. The cross arms, if made of 1 by 4 inch board and secured with three nails. need not have the wire braced from hold the longitudinal wires we saw a

and the method of training depends made taut. The box is then laid out largely upon circumstances. In the its side, the open side up, and filled west, California, and the far east, It- with concrete: One part best Portaly, Spain, etc., no trellis is used, as land cement, three parts sand and water to make quite wet. With a supported by trellis. On our farm off. At the upper or smaller end of four canes are allowed to grow from the post are inserted in the wet concrete two one-quarter inch bolts, the head imbedded in the concrete, and the shank protruding an inch or more. The bolts are four inches apart and two inches from the top of the post. in the ground about 21/2 feet, with the One is two Inches and the other six inches from the top. To these bolts are screwed the cross-arms 24 inches long, when the post has set and hardened. The box or form is so made made at one time. This makes a post that will last for all time, and need no repairs. The end posts will, of course, need bracing in the same manner as the wooden ones. When the canes have reached the wires they are loosely tired to the wire and pruned back to the second bud of the new wood. We find it good practice to prune the vines just about the time of picking the fruit, or a little later, but in no case do we let it go till spring. the end of the arms to the post. To as the "bleeding" at that time weakens the vine and stunts both vine and fruit. Grapes do nicely on a sandy of gravelly soil and the ground should be kept clean and well worked. To give the vines a uniform influence from the sun and air, plant the vineyard in rows running north and south and on high, well-drained ground.



CONCRETE GRAPE POST. Mold for Making Posts; B, Front

View of Finished Post. ing the wooden post with one made

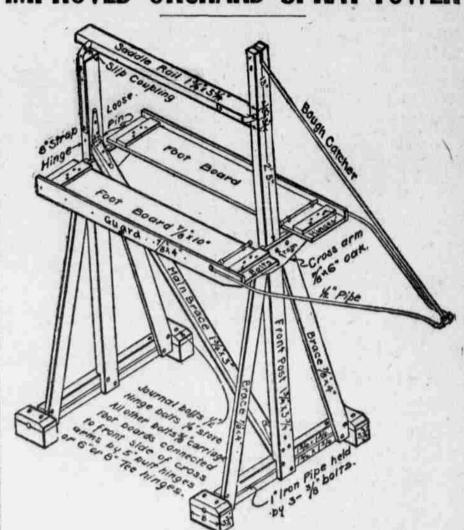
TO SET POSTS

Experience Teaches That It Will Last Much Longer With the Small End Placed in the Ground.

After many years' experience I have concluded by placing the small end of the post in the ground. A post will last much longer than with the large end down. The reason for this is obvious. When limbs are cut off it always leaves a cut that holds more or less water and where worms have worked the holes are always downward. These poles hold some moisture, but by placing the top end down this moisture runs out and leaves the post dry.

View of Finished Post; C, Side At first thought it looks as though the post with the large end up would shallow notch in the upper edge of not make a good appearance. Howthe cross-arms; this is sufficient, and ever, says an expert in the Farm and being daubed with tar keeps out mois- Home, I have generally found that the ture. At best wood will rot and we large end is the straight end, and fre have adopted the plan now of replac- quently there is a crook at the small end. If this be placed in the ground, of concrete. A rectangular box is the fence when completed looks much made tapering from six inches at the better. I also have found that small base to four inches at the top and posts for wire fence last longer than eight feet long, open along one side. large ones, for they do not hold mois-This box is made with only two sides ture as long. A post should never be tapering, the others are straight. In reset until it is well seasoned. The the ends of the box we bore four end posts should always be placed in holes, near the outer edge, for the ad- concrete; then there need be no bramission of four strands of galvanized cing or anchors used.

IMPROVED ORCHARD SPRAY TOWER



The special features of the im-|limbs. The bough catcher and the proved Cornell spray tower are: 1. It folds down flat. The bough catcher is lowered and then by removing the lose hinge pin at the upper end of the main brace the whole tower may be Built as shown in the cut, the tower let down backwards until it lies flat on the top of the spray rig. 2. It is easy to ride. The man using the but it may be mounted over the entower, standing astride of the saddle gine if desired. Full details of conrall, can grip this rail with his thighs struction are given by Prof. H. W. and so hold his position with ease. It has no rail to interfere with a free by the state college of agriculture at movement of the pole. 3. It parts the Ithaca, N. Y.

pipe braces raise and turn the limbs without breaking them. The operator can be on the saddle rail and the limbs will go over him. 4. it is strong. will last for many years. The tower is best mounted on top of the tank. Riley in a circular which will be sent