

NOTES From MEADOWBROOK FARM



Spinach is easy to grow.
Keep the brooders clean.
Growing chicks require meat.
Poultry require much attention.
Corn is the best finishing food for hogs.

The freshest eggs always hatch the best.
Plan for a big lot of roots for the sheep this year.
Easier to hatch a fine lot of chicks than it is to raise them.

Keep a good brood sow as long as she will produce satisfactory litters.
Be sure that the heifer is well developed before allowing her to be bred.

It is better to give a cow six to eight weeks' rest between periods of lactation.

The disadvantage about June chicks is that they will not mature for laying in the fall.

Young chicks sometimes occupy nests that have been so long used that they are alive with vermin.

Neglect to keep one's obligations to furnish eggs has been the ruin of a great many poultry farmers.

Some poultrymen feed cut bone the year around, and records show an increase in their laying capacity.

A two-weeks' diet of cornmeal and skim milk will mean an extra profit on any culled out birds to be marketed.

The best calves should be selected from each year's crop. This is the only way to keep the herd in good shape.

Never misrepresent the age of an egg. You can't afford to sell your soul for the sake of selling a few eggs.

The sheep's meridian of life is six years. After that the downhill side comes at a pretty good jog. It pays to remember this.

If the young chicks have gapes, you may be sure that the soil is contaminated by gape worms, somewhere near the poultry yard.

According to Prof. K. C. Davis of the new Jersey agricultural experiment station, alfalfa is as easily grown as any hay crop.

Be sure there are no narrow doors for the ewes to crowd through. One jam may cause the loss of a lamb, or both ewe and lamb.

It is much easier to start with stock that is a proven success than it is to breed up. The latter is a costly as well as tiresome experiment.

According to those who have eggs for hatching there will be many new fanciers. These breeders are reporting large numbers of small sales.

A small investment will fix up almost any stable. With a few more windows and some ventilating flues the result will be thoroughly valuable.

The best weaner you can put on the calf is never to allow it to suck the cow after the first few days, the first milk (colostrum) being necessary for the calf.

It is commonly supposed that the feeding of hogs in summer is cheaper than in winter, because in winter much of the food is used to supply animal heat.

Many farmers who make poultry culture a side issue are apt to get it too much on the side. Make it a branch of the farm work, and give it good business attention.

Beginning now, a succession of patches planted to sweet corn, cane, cowpeas, etc., will come in handy for cow feed when pastures get short about three months hence.

Make sure that the calf does not get to the cow again, once it is separated from her and put on the skim-milk diet, as it will not only tend to spoil the calf, but will cause the cow to worry after her calf and reduce her milk flow.

Market or otherwise remove the males from the flock as soon as no more eggs for hatching are wanted. They have no influence on the number of eggs produced, and infertile eggs keep much the best, especially in warm weather.

Hogs like fresh water.
Lookout for currant worms.
Too much sun is bad for chicks.
Do not allow too many pigs to run together.
Let your horses take their time the first hour.

Soft shelled eggs indicate a lack of lime in the feed.
Poor fences soon breed and train up a herd of breachy stock.
More silos and less rotten corn shocks will increase profits.

Cut up dandelions and the tender young shoots of grass for the chicks.
Above all things give the calves clean, dry pens with plenty of sunshine.

In trimming raspberry and blackberry bushes, look out for the gall beetle.

Faults in a herd can be eliminated most quickly by careful breeding and selection.

A hot sweat-collar is apt to soften the shoulders of a horse, if you do not look out.

A concrete tank will not spring a leak and at the same time it will always be ready for use.

If possible keep the ewes with twin lambs separate from other sheep for a week or so at least.

Provided your cow is a good one, the more she is fed along right lines, the more she will give.

It has been found advantageous to wash the inside of the silo with a mixture of cement and water.

Put a bull ring in the nose of the chronic self-sucking cow and you have a humane, effective remedy.

Dairy work is just like any kind of work. If it is going to be done profitably it requires thought and care.

Silo users assert that they have found a way to cut down the cost of handling cows at least one-third.

Lack of charcoal, grit and green food together with animal rations in insufficient quantities means failure.

The dairyman, if he will use the means that are at hand, can build up his soil better than any other farmer.

There is no animal on the farm that turns a larger profit in proportion to the money invested than a sheep.

Old sheep sometimes make good money for experienced shepherds, but young shepherds should start with young sheep.

Some cows begin to "go back" when they reach the age of eight but many others are still profitable at twelve to fifteen.

It is no little labor to keep a stall where several calves run clean and dry, but there is no other way if you want to raise good calves.

Don't expect the team to do a hard day's work in the field and then trot a half dozen miles to town and back again after supper.

The profit in keeping cows comes from the extra amount of milk that they give above the ordinary yield on common pasture or coarse feed.

Hogs should have access to water at all times, and running water is to be preferred, unless it flows through farms where other hogs are kept.

It costs money to inclose the chicken yard, of course, but it costs less than the toll exacted by cats, dogs and rats helping themselves to the young chickens.

Growing chickens require much meat, in order to produce the vigor that will aid them to resist all kinds of disease and even the attacks of lice and mites.

Good care consists in doing everything from milking and caring for the cows to marketing the butter or cream as if your whole life success depended upon it.

Hog cholera can be readily prevented by keeping the source of contamination away from the herd by protecting the well animals from all carriers of the infection.

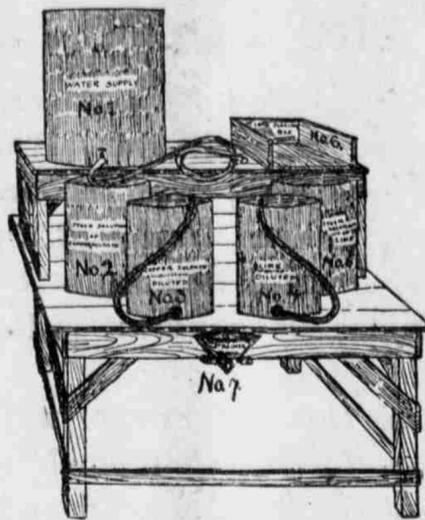
Nothing is more delicious than sweet corn, and if planted at intervals, perhaps by making two or three plantings of it, a succession can be kept up all summer and late in fall.

The size of the udder is not the only point to be considered in judging an udder. It should be soft and pliable and milk down until it is left like a dish rag at the end of a milking.

They are plowing with dynamite now to such an extent that one manufacturer of explosives sold to farmers 500,000 pounds in 1908, 750,000 pounds in 1909, 1,500,000 pounds in 1910, 3,000,000 pounds in 1911, and the indications are that this one concern will ship 5,000,000 pounds to farmers this year.

BORDEAUX MIXTURE IS MOST POPULAR FUNGICIDE NOW USED

First Essential is to Secure a Sufficient Supply of Lime and Sulphate of Copper to Last Through Second Spraying After Blooms Fall—Harmless to Fruit and Foliage.



Equipment for mixing Bordeaux mixture. No. 1, elevated water supply tank, No. 2, stock solution tank for sulphate of copper. No. 5, stock solution tank for lime. No. 6, elevated slaking box for lime. No. 3, tank for diluting sulphate of copper solution. No. 4, tank for diluting lime solution. Nos. 3 and 4 each have attached a hose through which the diluted solutions are run together through the strainer into the spray tank. No. 7, a strainer.

(By W. H. CHANDLER, Missouri College of Agriculture.)

Bordeaux mixture is a fungicide made by combining a solution of sulphate of copper (blue vitriol) with a solution of lime. This resulting substance is not soluble in water, but very slowly goes to the bottom of the liquid. It is a flocculent, pasty substance that sticks exceedingly well to the leaves.

The strength of Bordeaux mixture is generally given in terms of 50 gallons. Thus standard Bordeaux mixture 4:4:50 means that there are four pounds of sulphate of copper, four pounds of lime and 50 gallons of water. Bordeaux mixture 2:3:50 means that there are two pounds of sulphate of copper, three pounds of lime in 50 gallons of water.

Bordeaux mixture is one of the oldest and best known and most widely used fungicides. It will control more fungous diseases than any other known fungicide used for spraying. Thus it is effective on Apple Scab, Bitter Rot, Apple Blotch and practically all other fungous diseases which may be controlled by summer spraying. It sticks to the foliage better than any known fungicide, and is probably slightly less expensive than any other fungicide of equal effectiveness.

While Bordeaux mixture is a very effective spray, it is usually fairly harmless to the fruit and foliage. However, there will likely be a slight yellowing and browning of the leaves, due to the injury from the use of Bordeaux mixture. Another more serious injury is observed on the fruit. The apple may be sometimes coated with russet, caused by injury to the skin from Bordeaux mixture. The two sprayings at which this injury is to be observed are those just after the bloom when the apple is still coated with a tender, hairy covering. At this time the skin is very easily injured, and if Bordeaux mixture is used it is used at a strength not greater than two pounds of blue stone and three pounds of lime to fifty gallons of water.

The first essential for making Bordeaux mixture is a supply of lime and sulphate of copper from which it is made. Before the spraying season begins, it is certainly desirable that enough sulphate of copper be purchased to last through the second spraying after the blooms fall. If the orchard is in a section where there



Equipment for mixing Bordeaux mixture in a small way. No. 1, lime slaking box. No. 2, stock solution barrel for lime. No. 3, stock solution barrel for sulphate of copper. No. 4, barrel spray pump. No. 5, bucket for dipping and measuring stock solutions. Two such buckets would be highly desirable.

has been great danger from frost, it may be desirable not to order more than this amount and to place a second order where it is plain there is going to a crop. However, the first three sprayings may be given before we know whether or not there will be a crop, and it is so important that they be given at the right time, that sufficient sulphate of copper to give them should always be ordered during the winter.

The price of sulphate of copper will vary from five to eight cents. If the lime can be secured from local dealers, of course it may be purchased as needed. The lime used should be good in quality and of fresh stone. If it is impossible to secure this stone lime, a fair grade of Bordeaux mixture may be made from hydrated lime.

The sulphate of copper and lime must be brought together in very dilute solutions for the best Bordeaux mixture. The sulphate of copper requires a considerable time to dissolve in water, and considerable time is required for slaking lime. For these reasons it is best to have a mixing plant for making Bordeaux mixture. This mixing plant should consist of a stock solution tank in which enough sulphate of copper may be dissolved to last through one spraying, if not through several. The sulphate of copper is usually dissolved in water at the rate of one pound to the gallon, so it is only necessary to dip from the stock solution tank one gallon in order to get one pound of sulphate of copper. Then there is necessary for the lime an elevated slaking box in which the lime may be slaked and drawn down into a stock solution tank. In this case, also, one pound of lime should be dissolved in a gallon of water. The lime of course should be weighed before this slaking. Two dilution tanks, such as is shown in the figure, are also necessary, one for sulphate of copper and the other for lime. In these tanks the substances are diluted before they are run together into a mixing tank or the spray tank. All of these tanks should be on an elevated platform so that the liquid can be run out of them into the spray tank below.

Where water pressure is not available an elevated water tank is needed to supply water to these stock solution tanks, or in some cases a good pump run by a gasoline engine may take the place of the elevated water tank. In this case the water would be pumped direct from a pond or well into the stock solution tanks and the dilution tanks. A good strainer is an essential part of the equipment. There are various types of strainers, but probably one like that shown in the figure where the strainer comes together in the center making four slanting surfaces through which the liquid can run is the most desirable type. This allows the sediment to settle down toward the bottom, leaving plenty of straining surface about it.

The process of making Bordeaux mixture with a plant like this would then be as follows: First in making the sulphate of copper stock solution, assuming that the tank holds 100 gallons, the tank should be filled nearly full of water, then 100 pounds of the sulphate of copper should be weighed out and placed in a gunny sack or some other porous material and suspended just in the top of the liquid. If it is poured into the bottom of the barrel it will be some months before it would all be dissolved unless hot water is used. Then assuming that the lime stock solution barrel holds 100 gallons, we should weigh out 100 pounds of good stone lime, slake it in the elevated slaking box and draw it out, usually through a strainer, into the lime stock solution tank and fill the tank up to 100 gallons.

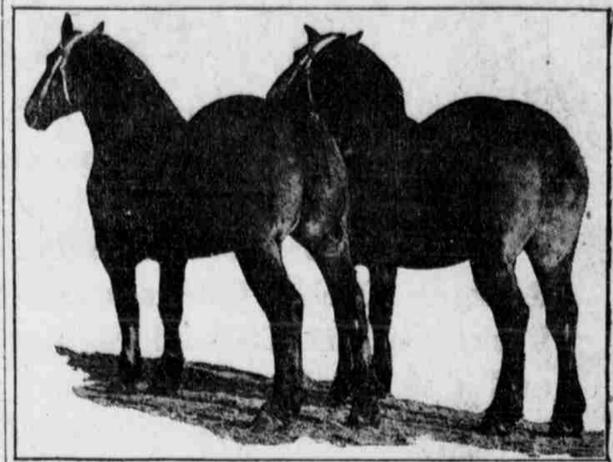
Now suppose it is desired to make 200 gallons of Bordeaux mixture at a strength of 4:4:50. After stirring, 16 gallons of the sulphate of copper stock solution should be dipped into the sulphate of copper dilution tank and this tank filled up to 100 gallons. Then the lime stock solution barrel should be stirred thoroughly and 16 gallon dipped from it into the lime dilution tank. Then the contents of these dilution tanks should be run through a strainer into a separate mixing tank or directly into the spray tank.

If it is desired to make only 100 gallons of the mixture, one-half of these quantities should be used in all cases, or if it is desired to make only 50 gallons of the mixture, one-fourth of these quantities should be used.

Big Egg Center.
Petaluma, California, ships four and one-half million dozen eggs every year.

IMPORTANCE OF PROPER CARE FOR HORSE OFTEN OVERLOOKED

Most Dangerous Time to Give Animal Water is When He Has Cooled Down From Hard Work and Has Partaken of Hearty Meal—Large Open Shed Is Recommended for Shelter.



Excellent Farm Draft Horses.

A horse should be watered before feeding, and never given a large quantity of water after a meal, for the simple reason that the water will wash the food out of the stomach before stomach digestion has taken place, and the food will not be well prepared for absorption; and besides it is sometimes the cause of colic.

There is a popular idea that a warm horse should not be allowed to drink and, unlike a great many other popular ideas, there is a little truth in it. If you water a warm horse in the ordinary way, letting him drink all that he will, you are likely to have a foundered horse on your hands. This is especially so if, at the time, the horse is fatigued. Nevertheless, it is always safe to allow him from six to ten swallows, no matter how warm he is. If this be given on going into the stable and he be allowed to stand and eat hay for an hour and is then offered water, he will not drink nearly so much as he would had none been given before.

The danger is not in the first swallow, as we often hear it asserted, but in the excessive quantities he will drink if not restrained.

John Splan, the great trainer, writes:

"As to water, I think that a horse should have all that he wants at all times. A man says: 'Why will you give your horse water before a race?' Yes, before the race, in the race, and after the race, and any other time that he wants to drink. When I say give your horse all the water he wants before the race, I do not mean that you shall tie him in a warm stall where he cannot get a drink for five or six hours on a hot day, and then take him to the pump and give him all that he wants. What I mean is to give him water often and, in that way, he will only take a small quantity at a time."

After long, continuous exertion the system is greatly depleted of fluid. Nature calls for its replacement, and this is the cause of a thirst which is so intense that, if the animal is not restrained at this time, he may drink much more than he needs.

The custom, almost universally followed, of giving the morning meal before water, is not very objectionable, either theoretically or practically. At this time there is no depletion of fluid, consequently the horse is not very thirsty and does not drink rapidly or excessively and apparently very little evil results from this method. However, the writer much prefers that the horse should have an opportunity to drink what is good for him before the morning meal.

Personally, I much prefer keeping horses, both summer and winter, in an open shed, with a large water tank in the yard, to tying them by the head in a barn.

Not only in giving water to horses must care be exercised but in every other way.

Many a good driving horse has his years of usefulness cut short by being left in the hands of some person who does not know how to take care of a horse or does not care what happens to the horse that happens to come into his hands.

One of the most common ways of injuring a driving horse is by driving him hard in cool weather, and when the horse has been brought into a sweat, leaving him uncovered and exposed to cold winds or to drafts in a stable.

It is seldom necessary to drive a horse so hard on a cool day that he will be in a sweat. In warm weather it is different, as the horse, then sweats with little exertion.

When the horse has been driven until he is covered with foam and sweat, he should be taken into a stable, rubbed down with whisps of hay or piece of rough cloth, and then blanketed. The neglect of such precautions has resulted in many a horse catching a cold that has proved serious.

Driving is a science itself, and there are many mature people who have not learned how to drive a horse. They have no idea as to the amount of work he is able to perform without lessening his vitality.

It must be remembered that a horse as well as a man, is limited as to what he can do.

PRODUCING GOOD CREAM AND MILK

Farmers Not so Much to Blame for Their Carelessness as Price Paid for the Poor Article.

The education of dairymen in the way of producing good cream and milk is progressing. Some of the large creameries, particularly those of the west, are paying for cream according to its real value and are carefully grading it.

Time was under sharp competition when the creameries took all kinds of cream just as it came and paid the same price for good, bad and indifferent. It was not long before the creameries found out that this did not pay and now many of them are separating the cream and grading it according to condition. For instance, number one consists of separator cream which is delivered twice a week in winter and three times a week in summer. This must be reasonably sweet and in good condition and test at least 30 per cent butter fat.

Cream graded as number two includes all hand separator cream delivered not less than once a week in winter and twice in summer. It must be reasonably clean, in good condition and test not less than 20 per cent in butter fat. The lowest grade, number three, includes all gravity cream and all hand separator cream which tests less than 20 per cent. This grade also includes all cream that is in poor condition even if it should test more than 20 per cent.

The creameries ought to have adopted some system of this kind long ago and it is their fault largely that they have not been able to produce better butter than they have. Much of the creamery butter on the market is mighty poor stuff and it comes from mixing good and bad cream.

For their carelessness, as they have been paid as much for poor cream as good. Of course this sort of business did not offer any inducement to send good sweet, clean cream to market and to send it often. Now that many of the big creameries have started into this campaign of education the farmer who produces the best cream will have the advantage over the careless and indifferent dairyman that he should have, as it puts a premium on good cream.

QUALITIES OF ARABIAN HORSE

Best Authorities Claim There Never Was One of That Breed Spotted or Calico in Color.

The best authorities on the Arabian horse claim there never was a really pure one of that breed that was spotted or calico in color. Even the circus men, however, have not nearly so much use for the skewball horse as they once had. The small supply fills their demand. They find that horses of the draft breeds pull their wagons better, while for ring uses the tougher bone and sinew of the thoroughbred or trotter recommend them. Still some attractions die hard and a few spotted freaks are always to be found beneath every big canvas. The Arabian horse may briefly be described as a thoroughbred on a small scale. There are many fine specimens of the breed in this country but more in England. It is difficult to get really good specimens out of the Sultan's domains. Not only is their exportation prohibited by imperial decree, but rivalry among the sheiks of the nomadic Arabians which own the best bands is so keen that good stallions can hardly be bought at first hands and no one wants to pay much money for a poor individual and then go deep down in pocket two or three times more to place it on ship board.