

# NEWS AND VIEWS OF THE FARMER

## SELECTION OF THE BROOD SOW

The sire is often considered half the herd but the females are very important also. The typical sire will transmit his qualities of excellence to his get, but the best results will only be had when he is mated with proper dams. The dam should have the same combination of size and quality requisite in the sire.



A Berkshire sow possessing the conformation and quality of the ideal brood sow.

to be so compactly built and may be somewhat finer in features and bone. The sow that is quiet and docile in temperament proves a good mother and is careful with her litter. These characteristics can to some extent be judged before the sow has been used. The ideal sow has 10 to 12 well developed, sound teats. Sows occasionally have "blind" teats that are rarely detected before farrowing. The number of sound teats sometimes is considered an indication of prolificacy in the sow.

Prolificacy is a family characteristic and it is wise to select a prospective brood sow from a large litter of robust pigs. The strongest pigs of a litter, most suitable for prospective sows, usually nurse from the teats nearest to the front of the udder. The prospective sow may therefore be chosen before she is taken from her dam. In selecting brood sows the highest possible standard of excellence should be retained and all others should be marketed for pork.

## GROWING BEANS FOR THE LOCAL MARKET.

I make a nice sum each year growing beans, for which I receive \$2.50 to \$3 per bushel. The variety I grow and the one most in demand is the Navy, a small white bunch bean which yields remarkably well, even on very thin land.

I break the ground for this crop the latter part of May, then thoroughly harrow and drag the same and drill the beans in rows three feet apart. Three days after planting I go over the field crosswise with a light weeder in case the weeds spring up quickly or a crust is formed by rain. I go over them again just before they come up. They must not be far enough up so that the weeder teeth will strike the plants, as they are very tender, and the least touch will spoil them.

As soon as the beans drop off the lead I begin cultivating them, first using narrow shovels next the plants, so that the dirt will not be thrown on them. I cultivate three times, but never while the vines are wet, as the dirt will stick to them and injure the plants. Nor do I cultivate them while they are in bloom, as many of the blossoms would be knocked off and the yield be lessened.—Wm. H. Underwood.

## HIGH OR LOW HEADED TREES?

At the present time many orchardists believe that the nearer to the ground they can head their trees the better and thousands of trees have grown up like bushes without any training at all, each shoot from near the ground striving to become the body of the tree.

The trees grown in this way will come sooner into bearing and have a greater bearing surface, but are short lived and unsightly, are easily broken down by the wind and weight of the fruit. In certain parts of the country where the trees are exposed to droughts and hot winds I would advise low headed trees as a rule. I am in favor of medium high training. The branches after the tree comes into bearing should protect the trunk of the tree from the sun during the summer.

The heading should be high enough to secure a growth of branches at nearly right angles with the trunk, otherwise they will form what is termed mal-formed crotches, owing to the natural tendency of the branches to an upright growth. Every tree should have a central shaft and the branches should be evenly distributed. Care must be exercised in pruning not to allow a side branch to get ahead of the center.

## SPRAYS FOR FUNGUS DISEASES

Bordeaux mixture is by far the most generally useful fungicide we have. The copper sulfate or blue vitriol is the active fungicidal agent, while the lime is added to prevent the burning of the foliage, which would result from a pure copper sulfate solution. The usual formula is: 5 pounds copper sulfate, 5 pounds lime, 50 gallons of water.

Many prefer to modify this formula by reducing the quantity of blue stone to one pound and increasing the lime one pound.

Certain precautions must be observed in making Bordeaux, in order to obtain the most efficient mixture. The secret of success is to put together as dilute solutions as possible. The copper sulfate may be conveniently made up into a stock solution by dissolving it at the rate of one pound to one gallon of water. The amount needed at any time can then be readily obtained by stirring up the solution and measuring out as many gallons as there are pounds required. The lime can likewise be slaked in quantity and kept till needed as a stock solution of known strength. The blue-stone may be dissolved quickly in hot water, or more slowly, in cold water by suspending near the top of the water in a burlap or coarse basket over night. Good stone lime should be used. Air-slaked lime is not satisfactory. Hydrated or process lime of good quality may be used if the proportion of lime to copper sulfate is increased from one-fourth to one-half. If a barrel (50 gallons) of the Bordeaux is to be made, it is easy to secure the required dilution of material by the use of three vessels. Put 25 gallons of water in the barrel. Dilute the blue-stone solution containing five pounds to 12 1/2 gallons. Dilute five pounds slaked lime likewise, then dip alternately from each solution into the 50 gallon barrel.

Whatever the particular method employed, however, the end is the same. Put the copper sulfate and lime solutions together after diluting each as much as possible. Don't mix concentrated solutions. If this is done, with the idea of diluting to spraying strength later, the mixture curdles, and a thick, heavy precipitate is formed which settles so rapidly that it is impossible to do a good job of spraying. A properly made Bordeaux should remain for half an hour with almost no perceptible settling. When putting the spray mixture into the tank, always strain carefully. For peaches use at not over half strength.



An outfit for making Bordeaux. Stock solutions are kept in two of the barrels; the lime water and copper sulfate solution are diluted fully in the other barrels and are mixed by being run together through the trough into the spray tank.

## WORKING NOTES ON THE FARM.

This is the best time in the year to kill trees—if they must be killed. Girdle them entirely around the trunk while the sap is running strong and they will die quickly.

This is a good month in which to sow orchard grass. It is a good forager and grows rapidly.

If you wait another week to get the summer's wood pile big enough to last the season through you may see your wife trying to wield the ax some hot day this summer—and then you would feel very much ashamed.

Now the troubles of the turkey raiser begin. The birds are sure to hide their nests and the only way to save trouble, if your neighbors keep turkeys, and your own are not confined, is to put a numbered leg band on each one. This may save disputes over outlying nests.

Shear the sheep early—just as soon as you feel certain there will be no more cold rains.

Plant young, medium-size trees. Onions stand a good deal of cold. If you have new ones earlier than your neighbors, you must take some chances.

Start an asparagus bed. It thrives on a sandy soil.

## IN THE ORCHARD.

Apple pickers should remember that the least puncture to the skin of an apple results sooner or later in a rotten spot.

The bruise on an apple may not at once develop into rot but it will make a brown spot which disfigures and lessens the value of the fruit.

The Oregon Experiment Station has decided that the scab on the prunes which is more or less troublesome to them is caused by the weather and not by fungus growth.

It does not pay to plant crops in the peach orchard, some people do it but we believe it is a bad practice.

A man who was asked where he would rather have a boll replied: "On one of my wife's relatives." We feel that way about most of our troubles in spite of our professed willingness to bear them with fortitude.

Up in Dakota and Minnesota, some orchardists claim that the trees which carry sap late in the fall produce the best results. This is doubtless because unless the moisture is preserved the ground dries out early and cracks open allowing the roots to dry out. In this climate mulching has been found to be highly beneficial.

## ECONOMY OF THE ROUND DAIRY BARN

### THE POINTS OF SUPERIORITY THAT THE ROUND BARN SHOWS OVER THE RECTANGULAR FORM ARE CONVENIENCE, STRENGTH AND CHEAPNESS

By Wilber J. Fraser.

In the early days when lumber was cheap, buildings were built of logs, or at least had heavy frames. Under these conditions the rectangular barn was the one naturally used, and people have followed in the footsteps of their forefathers in continuing this form of barn. The result is that the economy and advantages of the round barn have apparently never been considered. This is because they are not obvious at first sight, and become fully apparent only after a detailed study of the construction. For these reasons, the rectangular form still continues to be built, although it requires much more lumber. As the price of lumber has advanced so materially in recent years, the possible saving in this material is a large item, and well worth investigating.

The difficulty with most round barns that have been built, thus far, is that they do not have a self-supporting roof, and consequently lose many of the advantages of a properly constructed round barn. This is the principal reason why round barns have not become more popular. A straight roof necessarily requires many supports in the barn below. These are both costly and inconvenient, and make the roof no stronger than a dome-shaped, self-supporting roof which nearly doubles the capacity of the mow.

Many who have thus disregarded capacity have also wasted lumber and made a needless amount of work by

chopping or hewing out the sill and plate, thus requiring more labor and lumber, besides sacrificing the greater strength of a built-up sill.

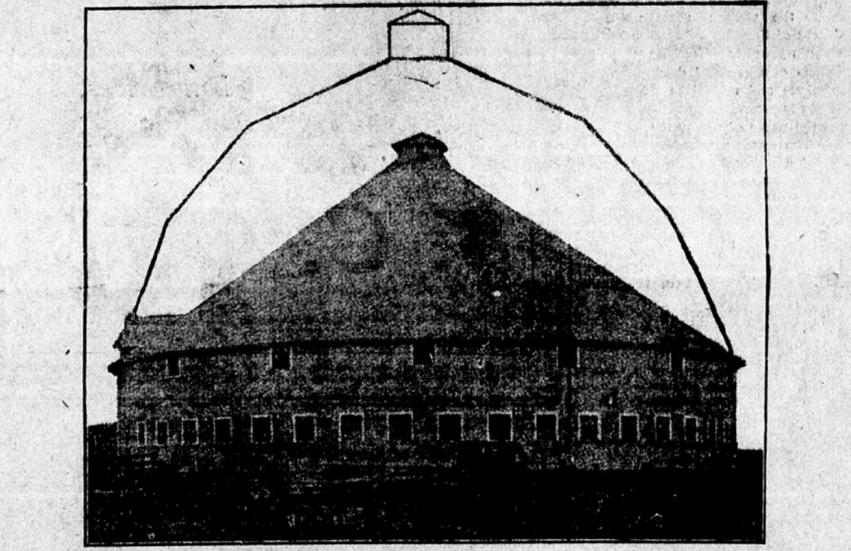
Another reason for the scarcity of round barns is the difficulty in getting them built. Most carpenters hesitate to undertake the work because in the erection of a round barn the construction should be entirely different from that of the rectangular form. Many new problems present themselves, but when these are once understood, the round barn offers no more difficulties in construction than the rectangular form. It is, however, important to have a head carpenter who is accustomed to putting up round barns, as a man with ingenuity and experience can take advantage of many opportunities to save labor and material.

The first thing to consider in the erection of a barn is a convenient arrangement for the purpose for which it is to be used.

Considering that the barn on a dairy farm is used twice every day in the year, and that for six months each year the cows occupy it almost continuously, and that during this time a large amount of the labor of the farm is done inside the barn, it is evident that the question of its convenience is a vital one. The amount of time and strength wasted in useless labor in poorly arranged buildings is appalling. People do not stop to consider the saving in a year or a lifetime by having the barn so conveniently arranged that there is a saving of only a few seconds on each task that has to be done two or three times every day.

The circular construction is the strongest, because it takes advantage of the lineal strength of the lumber. Each row of boards running around the barn forms a hoop that holds the barn together. A barrel, properly hooped and headed, is almost indestructible, and much stronger than a box, although the hoops are small. This strength is because the stress comes on the hoops in a lineal direction. Any piece of timber is many times stronger on a lineal pull than on a breaking stress.

All exposed surfaces of round barns are circular, as both the sides and roof are arched, which is the strongest form of construction to resist wind pressure; besides, the wind in striking it, glances off and can get no direct hold on the walls or roof, as it can on the flat sides or gable ends of a rectangular structure. If the lumber is properly placed in a round barn, much of it will perform two or more functions. Every row of siding boards running around the building serves also as a brace, and the same is true of the roof boards and the arched rafters. If the siding is put on vertically, and the roof built dome shaped, no scaffolding is required inside or out. These are points of great economy in the round construction.



100 Feet in Diameter, Scale: 20 Feet to One Inch; Showing Increased Mow Capacity given by Self-supporting Roof.

## GIVE THE BOY HIS CHANCE

By E. Russell.

There is one particular point in which the average farmer is contemptibly mean with his boy. He sets himself up as a standard. If he didn't want so and so why should his boy?

If he had to turn out of bed at 4 o'clock A. M. and work until dark why should his boy be spared? He did not have a decent suit or fine boots or any spending money, why should his offspring go into such extravagance?

The farmer who reasons that way has a selfish motive under it. He knows as well as other people that the boys of today cannot be and are not treated like the boys of fifty years ago.

He will admit that his father wore a hickory shirt without collar to meet while he must have a white one well starched and adorned with collar and neck tie, but he won't admit his son has any right to improve on him. If a boy feels enthusiastic to learn to be a printer, harness maker, or wood engraver no father with any

sense will command the boy to learn the trade of a stone mason.

Why then should a farmer decide that his son who has exhibited a taste for mechanics, spoil his whole life by ordering him to stick to the farm?

If a boy who wanted to learn the carpenter's trade is made to learn to be a harness maker and thereby become a botch workman, why should not a farmer's son who ought to be an architect, make a poor farmer?

He certainly will, figure it as you may. Let the farmer seek to discover what his son's taste runs to. If to agriculture, he should be given a fair show. He should have the best of agricultural papers and every chance to improve the system his father has worked under.

Some of the land and the live stock should be his and he should be to a certain extent a partner. No man will dig and delve for you without pay as an incentive.

A boy who is expected to put in his best efforts on the farm because the

law says his father is entitled to his services will certainly disappoint you.

If his taste runs to a trade or profession the father must argue the matter as a reasonable man would. He has no right to encumber the earth with another botch farmer. He has no right to condemn his son to poverty when he might be rich by his own exertion. If he is wise he will even encourage the boy to follow out the bent of his inclinations.

Nine times out of ten where you hear of a farmer boy being set down as "a hard case" you find his father to blame for it.

He has been too harsh and arbitrary. He has gone on the idea that his son was a drudge. His idea has been to make money out of his tired muscles and back aches, and give him the least possible reward.

All farmers are not so, but too many still are, no matter how much other classes have improved. The results have been and will ever be disastrous.

## CHICKEN PESTS.

Chickens are attacked by a number of parasitic insects and mites, the most common being various species of chicken lice, chicken fleas and ticks. These pests when present in great numbers are a great drain upon energy of the birds. Spray the hen house walls with kerosene or use a white-wash to which carbolic acid has been added in the proportion of four ounces to one gallon of white-wash. Pyrethrum powder or other suitable dust insecticide may be applied to the bodies of the poultry.

A Kansas farmer, with \$2,000 in the bank, land, horses, and cattle, worth many thousands more, returned his household furniture at \$25, for assessment purposes. He proved that this sum was all it was worth as he had made most of it out of drygoods boxes. His wife said she was proud of the furniture, which supplied all the needs of the family and those of the weekly bible class which met at her home.

## ROOSTS FOR THE ASIATICS.

Roosts for Brahmas or Cochins should not be more than a foot above ground. Being very heavy birds they cannot easily fly, and it is better that they should not be compelled to.

Some breeders do not allow them to roost at all, but instead heavily bed the floor of the pen and allow the fowls to squat wherever they feel inclined.

But in allowing them to roost on the floor, care must be taken that there are no draughts, which often is the case if the doors do not fit tightly.

Leaves or cut straw makes good bedding for such fowls, and if each morning the droppings are collected the birds will do as well on the floor as on roosts.

The Forestry Department has turned 300 Angora goats on the mountain slopes in the west in the hope that they will keep the weeds from growing on the firebreaks. This work has been a serious expense and the goats are an experiment.

## GARDEN NOTES.

Keep the hoe going in dry weather and you will not need the watering pot often.

The wheel hoe will save many a backache and do the work of three hand hoes.

Plant the rows all one way—north and south—so the sun can strike both sides.

Do not plant short rows but let them run the whole length of the garden if need be—why not?

Wild strawberries have the most delicious flavor. They are easily transplanted to the garden.

The only really successful garden is the clean garden.

Making a good garden is a man's job. Do not leave the hard work to the women folk.

Cauliflower can be grown more easily than cabbage. It is always in demand and at good prices.

## GROWING PEANUTS IN THE SOUTH

To most persons the peanut suggests only the article as it appears for sale, whole, shelled or salted, but during recent years the uses of peanuts have become numerous, and include a wide range of utility. The demand for peanuts for use in the manufacture of food preparations is constantly increasing. By-products of the peanut are now being employed extensively in the manufacture of feeds for farm stock and dairy cows.

The peanut is rapidly becoming an important farm crop throughout the Southern States. Its vines are valuable as forage and the peas that are not marketable can be used for feeding purposes. Throughout the boll-weevil district of the cotton belt the peanut is rapidly becoming of importance as a money crop, and special oil-producing varieties will doubtless assist in keeping the oil mills of the Southern States supplied with raw materials. The peanut plant, in common with other leguminous plants, has the power of collecting the free nitrogen of the atmosphere and storing it in little nodules upon its roots. For this reason the peanut is one of the more desirable of our soil-renewing and soil-improving plants. It should be borne in mind, however, that in

order to benefit the soil the nitrogen so gathered should not be removed, but that the main portion of the roots should be left in the soil.



Roots of peanut vine, showing the value of this plant as a nitrogen gatherer. The nodules on the roots are formed by the bacteria which collect the nitrogen.

## IN THE INTEREST OF THE HORSE

Feed molasses to the horse by mixing it with hay chopped rather than with corn. The mixture should be mixed with a little ground feed.

I bought a pure bred Percheron, a six year old filly and when she was twelve years old I sold her in foal. She and her colts had made me a profit of \$3,350 and she was a regular worker on the farm.—John F. Lewis, Va.

A horse that is afraid of the electric cars can never be taught what they are by whipping.

Many farmers imagine that they are saving money when they breed to the seven or eight dollar horse, but the truth is they are losing five or six times that amount.

We frequently see young colts following along the fields after the dams, walking many miles during the hot weather. Useless and poor business.

A very young colt, like a baby, should have a great deal of rest and sleep.

## THE SCIENCE OF FARMING.

If the world's attention determines the importance of a science, then the science of farming is receiving deserved recognition. For the world is certainly giving much attention to the farm and the people who work upon it. This is not to be wondered at for upon the farm and its products depend all other industries. Without this science all other things must fail, whereas the farmer could if necessary, make a fairly good shift at doing without all the rest.

Knowing how is just as valuable on the farm as in any other branch of industry. The subject of Dry Farming is an illustration very much in point. One man experimented until he learned the secret and as a result many people have profited. What he learned does not seem very wonderful but it was the thing needed to be known, and in the semi-arid west, where crops are being grown by his method, they deem it quite an achievement. It always pays to study one's business.

## BLISTER CANKER ON APPLE TREES

This disease is usually found on the larger limbs, and sometimes attacks the trunk. Old cankers are often a foot or more in length. The fungus attacks the wood as well as the bark. In the early stages of the disease the bark is brown and slightly sunken and usually set off from the healthy bark by a distinct boundary. As the season advances circular fungous masses develop on the diseased area. They are formed beneath the bark, but soon break through to the surface, furnishing the most characteristic feature of the disease. They are firmly fastened to the wood by means of a hard ring of fungous tissue, so that they remain attached to it even after the bark has fallen away. Summer spores are produced on the surface of the stroma. Later in the season, numerous flask-shaped perithecia are formed within the stroma, but opening on its surface. These produce many club-shaped spores, each containing eight spherical, brown spores.



Blister Canker of Apple—The Bark Has Been Removed from the Upper Portion Showing the Circular Markings Produced in the Wood.

The fungus seems to be dependent upon wounds for entrance to the host tissue. The best method of treatment is found in avoiding unnecessary injuries to the tree and in the proper care of all wounds. All cankered limbs should be destroyed.

## MAKING A GOOD SEED BED.

In planting alfalfa and many other grains the seed bed must be made fine enough to allow the particles of soil to come directly in contact with the seed. This work can be accomplished by an ordinary float or roller to compact the soil, followed by a disc harrow and then with a smoothing harrow so that a light surface mulch may be formed for the conservation of the soil moisture. The disc harrow may be used to very good advantage on fields where small weeds and grass get a start.



Disc Harrow will Discourage Weeds.

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It is said that a Louisiana man has invented a machine that catches and destroys the cotton boll weevil. The machine can be made at a cost of \$7.00 and two boys can operate one. It is made principally of cotton cloth and is drawn over the plant, when the weevils and all injured bolls are shaken off. The bottom of the machine is coated with tar which prevents the insects from flying away.

## GROWING HERBS.

No garden can be considered complete that does not include a goodly variety of herbs for nothing can quite fill their place in the household.

The seeds of annual sorts should be sown early, but of the perennial varieties (and many of the best are that) the seeds sown in mid-summer will produce strong plants that may be freely cut from the following year.

Make the soil rich, mellow and fine before sowing the seed. When the seedling plants are large enough they may be transplanted to the border-beds, or the fence-row where they can grow undisturbed year after year.

When the roots become large they may be divided and new plants started if more are wanted, though two or three plants of one variety will furnish all a good sized family will need, as the leaves should be cut several times during the season.

The leaves should be cut when fully grown and before the plant blooms, choosing a clear, dry day for the work. Spread in a cool, shady room to dry, as drying in the sun or by the fire spoils both color and flavor.

## WITH THE FLOCK.

As the summer days come on, foot rot is likely to make its appearance. As soon as discovered every hoof on the place should be treated with a strong solution of blue vitriol.

First pare away with a sharp knife, every particle of the hoof that hides the diseased portion; then apply the blue vitriol and keep the animal on clean, dry footing.

Foot disease could often be avoided if before the sheep are turned on pasture in the spring, their hoofs were all carefully trimmed.