

FARM AND GARDEN.

DIRECTIONS WITH ILLUSTRATIONS FOR MAKING A ROLLER.

Importance of Careful Preparation
Soil in Wheat Culture—How to Save Seed Corn—A Staff That Insures Safety in Handling Bulls.

The subject of horns on cattle has been very much discussed of late, and it has been proven in many cases that they are expensive appendages. This is frequently demonstrated in the handling of bulls. It often occurs that even a pet bull will become enraged and inflict serious injuries when led only by a ring in the nose.



A BULL STAFF.

In the accompanying figure is shown a device vouchsafed by a Rural New Yorker correspondent, who claims that with it the handling of horned animals is comparatively safe. If the chain from any cause should come loose, a weapon of defense is still in the leader's hands. Take a long fork handle, rivet or iron pipe over it with six or eight inches of light chain attached, to which fasten a good malleable harness snap. Put the snap in the nose ring and the animal can be led without the rope if so desired.

Agricultural Fair in October.

The following state and provincial fairs have been announced for October:

Akansas—Montgomery, Oct. 17-23.
Canadian Exposition—Toronto, Oct. 6-17.
Colorado—Pueblo, Oct. 4-8.
Georgia—Macon, Oct. 24, Nov. 2.
Missouri—St. Louis, Oct. 3-8.
Missouri—Fat stock, Kansas City, Oct. 27, Nov. 3.
Mississippi—Jackson, Oct. 17-22.
North Carolina—Raleigh, Oct. 19-21.
Piedmont Exposition—Atlanta, Ga., Oct. 10-22.
Texas—Dallas, Oct. 20, Nov. 5.
Virginia—Richmond, Oct. 26-28.

How to Make a Good Roller.

The importance of a good roller on the farm is too well known and appreciated to require comment. It is often a question, however, how to secure one. The following description, therefore, of a home made roller by a correspondent in Indiana Farmer will be welcome to many readers:

FIG. 1.—A GOOD ROLLER.
Cut three logs 18 inches in diameter 3 feet 2 or 4 inches long; around each make a frame. Set two rollers end to end, with a space of about 7 or 8 inches between them; make your tongue so high that the piece across the end (b) will be about 8 inches longer than it is from the middle of one frame to the middle of the other; about 4 inches from each end of said cross piece bore a 5-8 inch hole, and with the same bit bore in the center of each frame, both front and back. Now when the tongue is raised level with the frames, the holes through the cross pieces in the end of tongue will correspond with those in the centers of the two frames, front; slip a washer about an inch in thickness between the frames and said cross piece, and bolt them with 5-8 inch bolts.

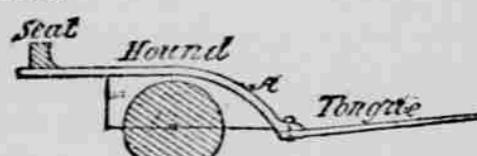


FIG. 2.—A GOOD ROLLER.

Now make a bar (c) the same length of the cross piece on the end of the tongue, bore a 5-8 inch hole in each end, same distance apart as in cross piece (b) and it will correspond with the holes in the center of the two frames, back; slip an inch washer between said bar and said frames and bolt with 5-8 inch bolt. Now you have a roller to roll corn, or a dead furrow, or a ridge, only the tongue is "limber" or weak. To remedy this, fashion a piece something like the half of a wagon hound, fasten that part that would be front in hounds, just behind the double-tree on the tongue (a), Fig. 2. It will then arch or raise above the rollers, and should extend twenty inches or two feet back of the bar that connects the two frames back; fasten a support from said bar up to said hounds, place a seat on said hounds where the weight of the driver will balance the tongue, and you have a roller that will roll the two insides of a ditch or the outsides of a ridge. Fasten the third roller by a coupling pole twenty inches or two feet long to the middle of the bar that connects the two front rollers together, and it will roll the space left between the two front ones.

Sowing Wheat.

The manner in which wheat is sown is of vital importance, for its influence is felt to a great extent right on to the harvesting of the crop. An all important matter is the thorough preparation of the seed bed. That it pays to carefully prepare the soil for wheat has been proven time and again, and yet not one field in ten is properly stirred and pulverized before the seed is sown. Remember that it is impossible in the care of wheat to make the soil too mellow or too fine. All work done in this direction is amply paid for by the future crop.

It also pays to drill in the seed, even if one has to hire the drill. It insures the even dropping and covering of the seed, and is a saving of seed. Avoid the use of foul or imperfect seed; it is a waste of time, labor and land to sow wheat that has not been carefully screened and winnowed to free it from foreign and imperfect seed. In sections where smut is likely to appear

avail yourself of such preventive measures as treating the seed to brine or a solution of vitriol.

Each farmer must decide in great measure the question as to what variety of wheat to sow. It is not a safe plan to make an entire change in any one season, and especially where the previous yields have proven fairly satisfactory. A safe rule is to sow the soil devoted to the main crop in some well tested wheat in your own locality, and experiment with promising new sorts on a small scale. A bushel of good, clear seed, drilled in, is considered an ample quantity for one acre by many farmers. The usual rule is from one bushel to five pecks, drilled in, and about one-half bushel more sown broadcast.

Saving Seed Corn.

The importance of saving seed corn by careful selection has been preached from time to time out of date, and repeated experiments have proven the necessity for care in the storing of the corn selected for seed. In sections where short seasons prevail early varieties are desirable, hence earliness ought to be promoted even in sorts already early by selecting such from stalks that first ripen their ears. The importance of choosing fair-sized, well-developed ears, taken from stalks which bore at least two ears, is apparent to every one who has given the subject any thought.

In the selection of seed corn too much care cannot be exercised in keeping a well-established and desirable variety pure. It should be borne in mind that two sorts growing within a quarter of a mile of one another are liable to mix, hence it is not wise to save seed from such corn.

There does not appear to be any safer, easier or better mode of saving corn for seed than the old time one of pulling back and braiding the husks of twenty or more ears together, and then hanging these braided strands from the rafters of a corn house, a smoke house, the attic or other dry place. The corn must be kept dry and out of the reach of rats and mice. It is a wise plan to select only the perfectly matured ears for seed; these dry more quickly and are not so liable to mold. Not a few farmers always plan to hang their seed corn between the rafters of their smoke houses, believing that, in addition to the dry atmosphere there found, the smoke that permeates the kernels acts as a preventive to insect pests after the seed is planted.

The Hessian Fly.

There are two broods of the Hessian fly in the fall and one in the spring. The mature female insect deposits its eggs upon the leaves of the young plant soon after these appear above ground. As soon as the eggs hatch the young worms make their way down the leaf to its base, where they remain between it and the stem near the ground. They feed here for a week for the larvae to attain full size. It is then hard and brown, and to the unaided eye, the insect presents the appearance of a small flaxseed. In this condition it remains until spring, when the fly comes forth and lays its eggs, and so the operation is repeated. The preventive measures that have from time to time been devised by scientists and practical farmers may be briefly told as follows:

Sow a part of the wheat early, and if affected by the fly put in the rest of the seed after Sept. 20. The idea is that by destroying the first brood the second will not appear.

Partially affected wheat is sometimes saved by the use of fertilizers and careful cultivation and if winter wheat, the fields may be recuperated in the spring.

Many of the eggs and larvae may be destroyed by pasturing with sheep and close cropping of winter wheat in November or early December. Some claim that rolling the ground will answer nearly as well.

Another remedy is to sow hardy varieties of wheat, especially those that tiller vigorously.

Lime, soot and salt are named as special remedies, and it is also very generally recommended to rake off the stubble. Objections are, however, urged by scientists against too close cutting and burning of the stubble, as this is liable to result in destroying useful parasites, the ichneumon among the rest. It has been estimated that these parasites (which, by the way, farmers often mistake for the pests) destroy at least nine-tenths of all the Hessian flies hatched.

Keeping Cider Sweet.

There is no process known that will keep cider sweet without deteriorating its quality somewhat, but there are various methods for arresting fermentation and preventing it from becoming sour. Professional cider makers sometimes use Shaw's Antiseptic Solution; others, who prefer to avoid patented articles, employ sulphite of lime, which is added after fermentation has proceeded until the cider has acquired the acid taste desired. The powder is first mixed in a quart or so of cider and then poured into the cask and thoroughly shaken. Do not mistake sulphite of lime for sulphite of lime; the latter is the correct article.

The Cabbage Worm.

The cabbage worm has not been visibly affected by the hard things said against him, nor have the numerous cure remedies sensibly affected his appetite.

Peter Henderson suggests the application of alum water, one pound of pulverized alum to three gallons of water. This will not injure the plant and may kill the worm. Pyrethrum, either in powder or solution, is effective. The great difficulty is to get any preparation on the worms, and to repeat the application as often as the successive broods hatch.

Agricultural News.

But few apples are expected outside of New England and New York.

T. V. Munson has been re-elected president of the Texas Horticulture society.

The honey production the present season is reported generally to be a poor one.

The experimental work at Houghton farm, Orange county, N. Y., has been discontinued.

A botanical museum is to be established in connection with the experimental farm at Ottawa.

According to Bradstreet's the New York hop crop will be about one-half of a former average, but the Pacific coast promises a larger yield.

The tomato crop is almost a failure in Delaware.

South Carolina is to have two experimental stations.

The corn crop of the south is unprecedentedly large.

The Louisiana sugar crop is reported to be ahead of every crop since the war.

The Illinois state board of agriculture declines to recognize the Galloway breed of cattle as a breed, but classes them the same as the Aberdeen-Angus.

FARM AND GARDEN.

HOW GESE MUST BE MANAGED TO INSURE PROFITABLE RETURNS.

The Preservation of Garden Seeds—All About the Popular Pyrethrum Insect Powder—Barbed Wire Fences with Growing Trees for Supports.

In the constructing of barbed wire fences it sometimes happens that growing trees are used as posts for support. If the wire is fastened directly to the tree, as some have practiced, the growth of the tree buries it in the bark and wood, where the presence of continual moisture and the retention of the water of every shower tend to produce rusting, and renewing, if ever necessary, is rendered difficult.

FIG. 1.—BARBED WIRE ON TREES.

The accompanying figures represent a mode which has been successfully adopted for using growing trees as posts for the support of barbed wire fences and recommended by The Country Gentleman. The usual objections to barbed wire on trees in this mode are obviated, as will be seen in the cut, by placing a narrow board or plank against the face of the tree, securing it with two or three nails, and then fastening the wires to this board, as shown in the figures. A board or plank three or four inches wide answers the purpose, and it may be pine or cedar. If the trees to which the wire is fastened are in a line where there is no danger of animals becoming injured with the barbs, four wires will make a good and durable barrier. But if injury is feared from the wire to cattle and horses, a visible obstruction must be provided, such as a small rip rap wall, which may be eighteen or twenty inches high, more or less, the stones being laid loosely in a straight line (see Fig. 1). This plan will in most cases serve as well as a regularly laid wall of stones. Animals are not disposed to tread on the stones.

FIG. 2.—BARBED WIRE ON TREES.

Many rules are given by which the number of bushels of corn in a crib may be ascertained. But these are more or less untrustworthy from the fact that they assume that two bushels of corn on the ear are equal to one of shelled corn; whereas, in point of fact some corn will not make it, while some will more than do so. These rules, however, often serve a convenient purpose, affording a fairly reasonable estimate, a much closer one than may be had from mere measurement of the eye. Following are a few such rules, any one of which may be employed as an approximate estimate; the first is most generally used:

1. Measure the length, breadth and height of the crib, inside the rail; multiply these together and divide by two. The result is the number of bushels of shelled corn.

2. Level the corn so it is of equal depth throughout. Multiply the length, breadth and depth together, and this product by four, and cut off one of the figures to the right of the product. The remaining figures will represent the number of bushels of shelled corn.

3. Multiply length by height and then by width, add two ciphers to the result, and divide by 124. This gives the number of bushels of ears. Another rule is to proceed as above to obtain the cubic foot, and then assume that one and one-fifth cubic feet make one bushel of ears of shelled corn.

4. Multiply length by breadth and then by width, add two ciphers to the result, and divide by 2,748, and the quotient will be the number of bushels of ears. From two-thirds to one half of this will be the number of bushels of shelled corn, depending on the kind and quality.

Management of Geese.

Geese are far harder and much easier to rear than turkeys, and, if fat, bring always a good price in the market. In a word, these fowls pay very well indeed for keeping, and the farmer will, as a rule, find it worth his while to have a few of them in the autumn when his grain crops are off the land.

Of the various breeds of geese the Toulouse is the best known, and with the Embden, are the chief ones for commercial purposes. The Toulouse is also called the gray goose, because its plumage is of that color, while the Embden is called the white goose, its plumage being white throughout. Notwithstanding the fact that the feathers of Embden geese bring a higher price than to those of the Toulouse, the latter, as has been intimated, is the more popular breed. The Toulouse are good layers and their flesh is tender, juicy and well flavored. They often reach an enormous weight. Their heavy bodies fit them for close cooping and they are easily confined by a low fence and will thrive on less water than other varieties of geese.

Pyrethrum Insect Powder.

Powdered pyrethrum, sold under various names, as buhach, Persian insect powder, Dalmatian insect powder, etc., has the past few seasons grown steadily in favor as an insecticide in farm and garden. It has, in a word, assumed sufficient importance to entitle it to a familiar acquaintance with every farmer and every housewife. Some confusion exists owing to the number of names by which pyrethrum is introduced in our markets. That grown in the United States, notably in California, is sold under the name of buhach. The imported powder, Pyrethrum roseum, is grown in the region south of the Caucasus mountains, and is known in commerce as Persian insect powder, while that grown in Dalmatia is termed Dalmatian powder.

Pyrethrum is not poisonous to higher animals, hence its present popularity among those who dislike to handle such poisons as London purple and Paris green. White is not a poison to man and beast, although it has been a valuable remedy for many farm and household pests. Its active principle is a volatile oil which acts on the nervous system of the insects. The powder should be kept dry and stored in closed packages until required for use.

It is employed both dry and in solution. At the Ohio Experiment Station the best results have been gained with the dry powder diluted not more than five times with flour, finely slaked lime or other finely powdered substances. At this station the powder is thoroughly mixed with the diluent and allowed to stand for twenty-four hours in a closed vessel before using to gain the best results. It is applied with a good hand bellow. From the nervous system of the insects. The powder should be kept dry and stored in closed packages until required for use.

Items of General Interest.

The New York State Dairymen's association is agitating the question of dairy schools.

Many of the states show a revival of the Grange order.

The leading cranberry growing states are Massachusetts, New Jersey, Wisconsin and Connecticut. In New Jersey there are some 5,200 acres under cranberry cultivation.

as cabbage worms and others like them. On the woolly caterpillars it had little or no effect and did not prove a sure remedy for beetles.

On the experimental grounds of The Rural New Yorker, where preference is given to the California buhach, successful results have been obtained by using the buhach in solution. Mr. Carman, who made the experiments, insists upon the use of a hand force pump and the cyclone nozzle for best effects.

With the above solution applied as here stated, he has been able to destroy the rose bugs, which were present in large numbers this season on his farm. The economy of the use of pyrethrum or buhach, in Mr. Carman's opinion, depends upon its application as a fine spray or vapor, when the same quantity of water will go fifty times as far as if sprinkled on the plants, while the time required to do the work will be perhaps twenty times less. At the Ohio station the powder is applied through a bellows. One pound of pyrethrum diluted with other powdered substance three to five times was found abundant to dust an acre of cabbage.

Directions for Saving Garden Seeds.

Seeds of all kinds, says American Agriculturist, should be fully ripe when gathered, but it is also important to harvest them as soon as they are ripe. For keeping small quantities of seeds, paper bags are preferable to cloth, as they afford better protection against moisture and insects. Always mark each package with the name of the seed contained in it, and the year in which it grew. Cold does not injure the vitality of seeds, but moisture is detrimental to all kinds.

Melon, cucumber, squash and pumpkin seeds should be taken only from ripe, perfect shaped specimens. In a small way the seeds may be simply taken out, spread on plates or trays and dried. Larger quantities have to be washed before drying, to remove the slime that adheres to them. When the seeds are thoroughly dried, tie them in bags, and keep in a dry place secure from mice or rats.

Beets, parsnips, turnips, carrots, onions, cauliflower and cabbage will not produce seed until the second year. Set out in early May strong, well matured plants of last season's crop. When the seed is ripe, cut the stalks and put under cover to dry, then beat out the seeds and tie in paper bags.

Measuring Corn in the Crib.

Many rules are given by which the number of bushels of corn in a crib may be ascertained. But these are more or less untrustworthy from the fact that they assume that two bushels of corn on the ear are equal to one of shelled corn; whereas, in point of fact some corn will not make it, while some will more than do so. These rules, however, often serve a convenient purpose, affording a fairly reasonable estimate, a much closer one than may be had from mere measurement of the eye. Following are a few such rules, any one of which may be employed as an approximate estimate; the first is most generally used:

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