

# NOTES FROM MEADOWBROOK FARM

By William Pitt



A hot bed is handy.

Birds destroy weed seeds.

The beet root is about one-eighth sugar.

Nearly one-fifth of the area of France is forest land.

This is the best time of year for culling out the poor cows.

The person to run the incubator is the first condition of success.

Agriculture in Germany supports about 19,000,000 of the population.

In one month a caterpillar will eat six thousand times its own weight in food.

Newly laid eggs need never become shopworn. They're in too good demand.

Don't buy seeds just because they are cheap and come in highly colored packages.

Sheep seem to be able to subsist on the poorest land of South America's farthest extremity.

Under no circumstances should the beginner think that "any old eggs" will do to learn on.

Pea vine hay, if properly sowed, makes a most excellent forage for sheep and stock cattle.

After the third month the calf will begin to want extra water, and some may be mixed with the milk.

The object should be to feed for large and continuous milk flow. This means both summer and winter.

If all the implements were cleaned and painted last fall, a great deal of time will be saved when you must "get busy."

Pigs should have slop three times a day, all they will clean up, and a little corn morning and night, also given on a clean floor.

About testing seeds, in most cases your experiment station will gladly test a sample of your seeds if you will send it to them.

Those who treat their horses kindly can work the brood mares up to the very day they foal their colts without harming them.

Hens or chickens can never do their best when confined in yards so small that a sufficient amount of green food cannot be grown.

Prominent breeders of geese claim that there is at least 100 per cent profit in them; more than twice as much as there is in raising hogs.

Waste milk is now being profitably used in Irish dairies, where it used to be a nuisance, but is now made into a fertilizer resembling bone ashes in value.

Turkey eggs may be hatched in an incubator very nicely, but unless you have a number of hens it is hard to get enough fresh eggs to fill a machine.

While the principal food of the goose is grass, and needs hardly anything else during spring and summer, still it will eat any of the farmer's grains.

Profitable "side-lines" for the creamery man are eggs and ice cream, to say nothing of buttermilk, the sweet cream trade, casein, hogs and other lines of profit.

You can test the germinating power of your seed after you buy it, which, while it insures your not using it if it is untrustworthy, does not save you the expense.

Be careful to remove all the flowers as soon as they begin to fade. Leaves that show any decay should be cut and burned. They are apt to encourage disease and malignant insects.

With automobiles coming into common use, the prices of horses rose from an average of \$95.64 each in 1908 to \$108.19 a head in 1909. In numbers the horses of the United States increased from 20,160,000 to 21,040,000.

The brooder should be large, having not less than nine square feet of floor space. The work demanded of a brooder is not exacting as with an incubator. The heat and circulation of air may vary a little without damage, but they must not fall altogether.

Silage is a cheap feed.

A portable engine is handy.

Great Britain imports 10,000,000 apples a year.

Australia raises nearly 10,000,000 acres of wheat a year.

The yield of the tomato is materially increased by proper training.

For vegetables always use rotted manure from grain-fed cattle or horses.

Shopworn eggs always must be sold at reduced prices. If they can be sold at all.

If air slaked lime be used in earth in which plants are potted it will keep worms away.

The calf need not be kept rolling fat, but it should be kept thrifflily growing from start to finish.

Sow clover seed twice to be sure it will take, and don't forget the aisles along with the red.

Grade your seed oats with a good fanning mill or grain grader and sow only plump, heavy grains.

Many times one hill will produce six 8-ounce potatoes; which is at a rate of 520 bushels per acre.

Milk cooled in a temperature of 35 1/2 degrees may be kept several days at any temperature under 53 degrees.

The neglect of your incubator at a critical time will result in a poor hatch with the best of attention and care.

Incubators improve morals, eliminating the heated temper too often produced by the sitting hen's peculiarities.

To grow crisp early vegetables the soil must be deep, thoroughly pulverized and well filled with rotted stable manure.

From the feed the hen must get lime for the shell, oils and mineral matter for the yolk and albumen for the white.

Every can of milk entering a lot of cheese or butter should be properly cooled if the make is to be of high standard.

Give the birds clean nests and roosting places, study their likings and needs and the egg yield should be increased.

Though but a small nation, Switzerland makes 100,000,000 pounds of honey a year, so well is its flora adapted to bee culture.

To be certain about your seeds buy them only from a reliable seedsman, who puts his name and his reputation behind his product.

To destroy the hatchability of eggs without injuring the market value dip in a five per cent solution of water glass; this is satisfactory.

Don't keep the incubator doors open very long at a time, while the machine is hatching, if the room temperature is below 70 degrees.

All seem to agree that it is best to get the manure onto the land daily while it is fresh, but all of us cannot do this because of other work.

A single union of a male and female turkey fertilizes all the eggs a hen will lay for the season, hence one gobble will suffice for 20 or more hens.

The most costly portion of an egg is the white or albumen. This is derived from the protein in the nitrogenous matter of grains and animal foods.

Profitable farming and gardening calls for more thought put into the business, but it also calls for considerable labor, and that given at the right time.

While it is necessary to feed the breeding ducks liberally, yet at the same time feed so as to keep them hungry, in order to keep them active and healthy.

The largest olive orchard in the world is situated at Syamar, near Los Angeles, Cal., where there are 120,000 bearing trees, yielding fifty pounds of fruit to the tree.

In plowing it is well to remember that a deep, rich soil should have a deep plowing, providing it is done in the fall and does not render the soil too loose and dry.

A young sow seldom has as many pigs as an older one, they are seldom as large or as strong, neither does she take as good care of them as does the experienced mother.

The farmer who sells his eggs at the store will not for the present receive much encouragement in his efforts to sort out his largest eggs and sell separately from the smaller eggs.

Clover is very rich in protein, and contains potash, soda, phosphoric acid and other ingredients that make it one of the best feeds for fowls that can be named. It contains all the essentials in well balanced proportion, and is palatable to the fowls as well as healthful.

## SPRAYING PREVENTS DISEASE AND DESTROYS INSECTS

Established Fact That Intelligent Use of Spray Always Pays—Formula Given That Is Accepted as Safe and Reliable.

Two classes of enemies attack fruit trees and plants, viz.: insects and fungous diseases. The application of substances, usually liquid, to the tree or plant for the purpose of preventing or destroying these constitutes spraying.

We spray to destroy insects and to prevent fungous diseases. Spraying is no longer an experiment. It is an established fact that intelligent and persistent spraying always pays. The effects of spraying are cumulative. The effects of spraying last year and this year may result in an increased yield next year. An instructive bulletin issued by the Wisconsin Horticultural society, has the following to say regarding spraying: The insects affecting fruit may be divided for convenience into two classes, which are distinguished by their mode of feeding, viz.: eating or chewing insects and sucking insects.

Eating insects consume the affected tissues, commonly the leaves, and thereby hinder the functions of the plant. The common example is the potato "bug" or beetle. Insects of this class are destroyed by poisoning their food. Sucking insects do not consume the external tissues of the plant, but feed only on the sap. In order to accomplish this the insect thrusts its proboscis through the external coverings and sucks the juices in the same way as a mosquito sucks blood. As these insects do not consume the tissue of the leaf or branch, poisons are of no avail. We must therefore attack the insects. This is done by covering them with some substance which will penetrate their bodies, or with substance which closes their breathing pores. To repeat:

(1) Biting or chewing insects are destroyed by placing poison on the parts on which the insects feed.

(2) Sucking insects are destroyed only by attacking the insects and for this class poisons are of no avail.

Apple scab, brown rot of plums and peaches, potato rot, blight, rust and other destructive plant diseases are commonly ascribed to weather conditions. Indirectly this is often true, but neither rain nor drought nor any other atmospheric condition is ever directly the cause of plant diseases.

Rainy weather does not directly cause plum rot, but provides conditions favorable to the development of the fungus, and probably unfavorable conditions for the development of the plum and its ability to resist the invasion of the disease.

Fungi (plant diseases) are propagated by spores, minute bodies which



Making Bordeaux Mixture.

are of no avail. In other words, spraying for plant diseases must be wholly for prevention.

The following formula for Bordeaux mixture is used as a preventive of fungous diseases, as potato blight, apple scab, etc. Various formulas are quoted, but the following is now accepted as safe and reliable:

Copper sulphate, 5 pounds; fresh lime, 5 pounds; water, 50 gallons.

Either arsenate of lead or Paris green may be safely combined with

Bordeaux mixture. In fact, in all orchard spraying operations it has come to be a common practice to add either Paris green or arsenate of lead to Bordeaux at every application. By this means biting insects and fungi are controlled at a single operation. No other fact is more important than this in spraying.

Arsenate of lead is a poison for biting insects and is less liable to injure foliage than Paris green. It adheres better to foliage. It may be used for any purpose for which Paris green is employed in liquid sprays. The formula is: Arsenate of lead, 2 to 3 pounds; water, 50 gallons.

## BEST WAX FOR GRAFTING

Recipe Given for Making Mixture That Is Essential in All Orchards—Convenient Sizes Made.

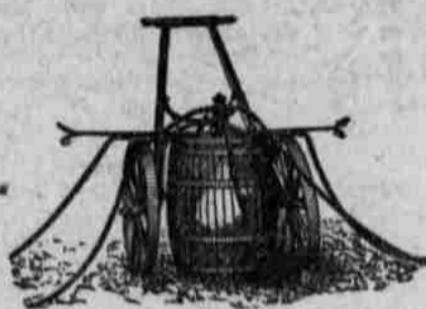
Rosin four parts (ounces or pounds); beeswax, two pounds; tallow, one part; melted, slowly, in an iron vessel, putting in the rosin five or ten minutes before the beeswax; and all completely mixed together by much stirring.

In 20 minutes or so it will be thoroughly mixed, and a convenient portion is to be poured into a bucket of cold water. In a minute or less it will be cool enough to take up with the hands (which must have been greased with tallow) and pulled like taffy. When it becomes light yellow in color it is done and can be made into sticks or balls and put into another vessel of cold water to harden.

Other portions can be treated in the same way until all is used up. These balls, or sticks, of convenient size can be laid away until required for use.

### Up to the Farmer.

When a farmer breeds indifferent cattle, horses or sheep he receives less for his labor and feed than he should receive, adds less to the wealth of his state than the up-to-date farmer, and is at a disadvantage when he undertakes to secure for himself and family the things which help to make life worth living, says a writer in an exchange. I do not mean to say that the individual farmer owes more to the community or to the state than the laborer, the lawyer, the doctor, the educator, the preacher or the business man; but we do expect more from them as a whole, because there are more of them than all these others combined.



Barrel and Cart Spraying Outfit.

may float in the air and are usually too small to be discerned singly without using a compound microscope.

These spores alight on leaf or fruit and under favorable conditions of heat and moisture germinate, giving rise to threadlike projections which penetrate the plant's tissues.

The main fact to be borne in mind is this: The spores which may be present in innumerable numbers may be destroyed or their germination prevented by the application of certain substances known as fungicides, while existing as spores on the outside of plants, but after these have penetrated the tissue of leaf, stem or root,

## MANNER OF CONSTRUCTING PRACTICAL SHEEP HURDLES

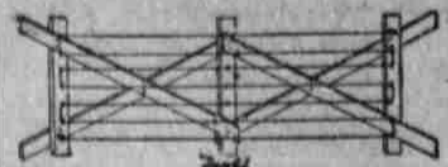
Great Objection to More General Use of Devices Seems to Be Their Liability of Blowing Over—Materials to be Used.

The great objection to the more general use of sheep hurdles seems to be their liability to blowing over. I submit illustrations of some that offer less resistance or are better fortified against the effects of the wind, writes Richard H. Mitchell in the Country Gentleman.

Fig. 1, while not strictly a movable hurdle, is nevertheless, considered as such, and is the one in most common use. I can only give measurements from memory, but should say that they were 10 feet long and 5 feet high when set up. The figure shown is made of sawed stuff, but they are more often made of split saplings; the construction, however, is precisely the same. Holes are made with a bar, and they are set end to end and pinned together at the top. These, like those supported on the A crutch, form a perfectly straight fence, which is not so proof against the force of the wind as one built zig-zag or worm fashion.

In Fig. 2 I have shown two panels that are intended to be set up in this

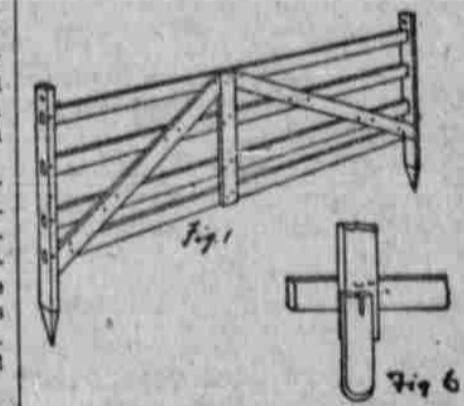
closer than it is used on longer stretches, but that number of wires seems to me about right for a good job. They might be placed closer at the bottom and wider at the top, perhaps. That hurdle (Fig. 4) made with 4-foot uprights and 14 feet from end to end of upright, would weigh about 65 pounds, and cost about as many cents for material. The cost of the



all-board one would not be much different, and it would weigh 40 pounds more.

As to manufacture, I should say, as has already been suggested, that pretty close to where they are to be used would be the best place to make them, as one freight on the material would be saved. Machinery does not enter very largely into their construction; so nothing could be saved in that way. It ought not to require any great skill to saw up boards and nail them together, and also stretch wire on them, if that form was desired.

In drawing these hurdles, I have allowed the center uprights to come down as far as the others; in practice, it might be found better to make them shorter, especially if they were to be set up on uneven ground. The diagonals in Fig. 4, being on opposite sides of inch uprights, will of course be an inch apart where they cross. I should not fill this in, but draw them together in nailing, as it will make the frame all the stronger. Hemlock is probably the best material for making these, and it would undoubtedly last enough longer to pay to have it dressed. If ordered in carload lots, enough would be saved in freight to pay for



manner. The left-hand end of panel b slips in the right-hand end of panel a, and a section of the fence is shown in Fig. 3. These panels are supposed to be 10 feet long and 4 feet high, and the lumber 1 by 6-inch stuff, but these dimensions can be varied to suit the idea of the user. With these dimensions, however, the distance between the end uprights on panel ought to be 11 inches. On panel a the end uprights ought to be 15 inches from either end. This ought to make the fence worm about 4 feet. As can be readily understood, more or less worm will be given to the fence by moving the second upright from either end in panel a.

A panel using wire instead of lumber seems desirable, and in Fig. 4 I have shown one that seems to me the most desirable, as combining the great

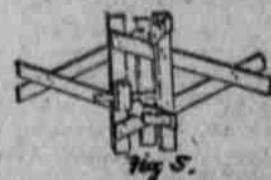


Fig. 5.

strength with the least surface, and with the surface low. The panel, as there shown, can be used on the A crutch. Fig. 5 shows it modified, to meet the requirements of a worm fence. By substituting a post in the place of the end uprights, you have the Fig. 1 form.

In Fig. 5 you will notice that I am not satisfied with cleats, but have introduced a bar sliding in a slot on the front side of the end upright and on the back side of the second upright. This makes a complete lock, and seems to me quite essential on that style of fence. I should also recommend the same device on the board

panel, as on uneven ground one end might spring up and allow the panels to separate.

Of course on this skeleton any kind of wire can be used. Personally, I would not use barbed-wire of any sort as a gift. The illustration is intended to show a two-strand twisted wire, placed six inches apart, which is much

It would be absolutely wind-proof around a stack if locked with the sliding-bar, and would have the advantage of being movable when the ground was frozen.

Fig. 6 shows an iron that I think would be a great help in clinching the nails. A slot is cut in the end of a flat piece of iron, so that it will slip easily on the nail, and it is beveled from the slot to either edge. By slipping this on the nail, the end can be bent over at more than a right angle. The iron is then slipped back, as shown in the illustration, and the nail bent over and driven into the wood, as shown to the right. For fencing stacks and turning corners, both ends of the panels would have to be alike, instead of reversing, as shown in the cut. If this fence should prove reasonably wind-proof, it ought to solve a large problem in fence economy, as very much less fence would be needed if the fence could be easily moved from place to place as occasion demanded.

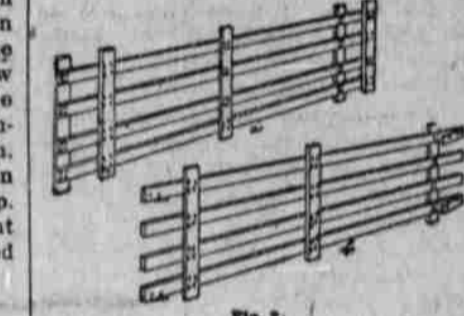


Fig. 2.

Some horses eat so greedily that they become choked on oats. We have one that troubled us in that way, so we often had to send for a veterinarian, who inserted a tube down her throat to dislodge the grain, says a writer in an exchange. Later he told us how to avoid the trouble in this way: He advised us to place a dozen or more smooth stones, the size of a small hen's egg, in the feed box, taking care to have them well distributed through the oats. This compels the horse to eat less greedily, as he must eat carefully to avoid biting on the stones. We had no further trouble as long as we owned the horse.

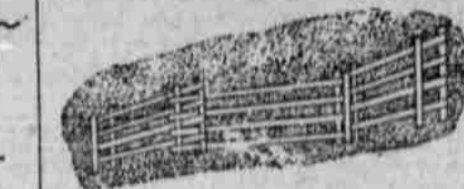


Fig. 3.

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## WHERE WOMEN DRAW THE PLOW



A great many Russian peasants are going into western Canada, and as many of them are poorly equipped for farm operations, they work in the co-operative plan. These Russians settle in villages according to their custom in their native land and when there are not enough horses to draw

the plows, the women of the village act as substitutes. It is said to be not an uncommon sight to see a dozen or more women attached to a plow by a long rope on which there are fastened at intervals sticks of wood which may be placed against the breast or across the arms to aid in pulling.

## DIFFERENT KIND OF SPRAYS

PLANT	FIRST APPLICATION.	SECOND APPLICATION.	THIRD APPLICATION.
APPLE—(Inch, adding wash, lead wash, and other wash.)	Spray before buds start, using copper sulphate solution. For apple use bordeaux mixture.	After the blossoms have opened, but before they open, spray with Bordeaux mixture and Paris green.	Within a week after the blossoms fall, Bordeaux and Paris green.
CABBAGE—(Inch, adding wash, lead wash, and other wash.)	When worms are first seen, spray with Bordeaux mixture, or Bordeaux mixture and Paris green.	If worms appear, repeat, but before they open, spray with Bordeaux mixture and Paris green.	After buds form, use Bordeaux mixture, or Bordeaux mixture and Paris green.
CHESTNUT—(Inch, adding wash, lead wash, and other wash.)	When the buds are first seen, spray with Bordeaux mixture and Paris green.	When the fruit has set, spray with Bordeaux mixture and Paris green.	10-12 days later, if signs of signs of signs appear, repeat.
CURRENT—(Inch, adding wash, lead wash, and other wash.)	When fruiting, set out all bushes that contain worms. As soon as worms are found on leaves and lower leaves, spray with Paris green.	27 worms appear, repeat, adding Bordeaux mixture and lead wash.	If worms still trouble, Bordeaux mixture and Paris green.
GOOSEBERRY—(Inch, adding wash, lead wash, and other wash.)	As soon as green, Bordeaux and Paris green.	Repeat in a few days repeat with lead.	10-12 days later use Bordeaux mixture and Paris green.
GRAPE—(Inch, adding wash, lead wash, and other wash.)	Before buds burst, spray with copper sulphate solution. Use Paris green for leaf beetles.	When buds have set, Bordeaux mixture and Paris green, 100-150 lbs. Bordeaux mixture.	When buds are set, use Bordeaux and Paris green.
PEACH, APRICOT—(Inch, adding wash, lead wash, and other wash.)	Before buds burst, spray with copper sulphate solution.	When buds have set, use Bordeaux mixture and Paris green, 100-150 lbs. Bordeaux mixture.	10-12 days later repeat.
PEAR—(Inch, adding wash, lead wash, and other wash.)	Before buds burst, spray with copper sulphate solution.	When buds have set, use Bordeaux mixture and Paris green, 100-150 lbs. Bordeaux mixture.	10-12 days later repeat.
PLUM—(Inch, adding wash, lead wash, and other wash.)	Cut and burn black beetle wherever found. Before buds burst, spray with copper sulphate solution.	As soon as the blossoms open, Bordeaux and Paris green.	10-12 days later repeat.
POTATO—(Inch, adding wash, lead wash, and other wash.)	Each end for each in morning, Bordeaux and Paris green. Use Bordeaux mixture.	When foliage of plants has set, Bordeaux and Paris green.	Repeat whenever necessary.
QUINCE—(Inch, adding wash, lead wash, and other wash.)	Before buds burst, spray with copper sulphate solution.	When buds have set, Bordeaux and Paris green.	10-12 days later repeat.
RASPBERRY, BLACKBERRY—(Inch, adding wash, lead wash, and other wash.)	Cut and burn black beetle wherever found. Before buds burst, spray with copper sulphate solution.	When buds have set, use Bordeaux mixture and Paris green.	10-12 days later repeat.
STRAWBERRY—(Inch, adding wash, lead wash, and other wash.)	Each end for each in morning, Bordeaux and Paris green.	When buds have set, use Bordeaux mixture and Paris green.	10-12 days later repeat.
TOBACCO—(Inch, adding wash, lead wash, and other wash.)	If other disease appears, Bordeaux.	Repeat if disease continues.	Repeat if necessary.