

NOTES From MEADOWBROOK FARM



Be gentle with all animals.
The farmer must have a horse.

Examine the collars of your work horses often.

With the better poultry is coming better equipment.

A heated chicken house is a bad thing for poultry.

The proper time to spray fruit trees is during the dormant season.

Well-bred, well-selected pigs, make more profit on the food eaten.

A horse in order to keep in good condition should be well bedded every night.

A machine in the shed is worth just about two machines left in the fence corner.

The brood sows should have all the bright clover or alfalfa hay that they will eat.

The cleaner the feed and feeding places, the better the quality of the pork in all.

It is conducive to health to feed hogs when they can have the range of the pasture field.

Those seeds, like the elm and soft maple, which ripen in May or June, belong to the "sooner" class.

Never work a team of colts together until they are thoroughly broken, as they will worry each other.

Filling up the neglected holes about the drinking tank is now in order. Fill them up now and avoid trouble.

The man who calls improved stock "fancy stock" will have an account to settle with his Maker on the judgment day.

Carry your good care of the ewes this fall as far as feeding plenty of nice bright oats to keep them in condition.

The old troughs will soon have to replace the fountain waterers or there may be a burst fountain some cold morning.

After the strawberry bed has been set and cared for through the summer, it should be mulched through the winter.

The milk should be strained through one thickness of clean white flannel and then should be quickly cooled and well aired.

Wise turkey breeders will not breed from the same tom more than one year unless the same breeding hens are retained.

No matter how highly bred and carefully cultured a colt may be if it is not carefully trained and properly developed it loses its value.

The first thing to do with the newly-born lamb is to get it full of the ewe's first milk, after which its chance for living is equal to that of the calf's.

For general or common use, caustic or burnt lime or ground limestone are employed almost exclusively for the correction of soil abnormalities.

Wetting the hoofs with a sponge and clean water every day, or simply dipping each foot into a pail of water, will keep the feet from becoming dry.

If there are two kinds of roughness for the cows this winter it will be better to feed of both at the same time rather than to feed out one then start on the other.

Look out for a collar that rubs a lap of flesh at every stride of the horse. It is liable to wear a gall on his neck, and much sooner sometimes than suspected.

The neck and shoulders of a horse are points that must not be overlooked when buying. A weak neck and a narrow breast do not go with the most desirable horse.

During the winter the dairy farmer has more time to figure out his plans for improving his system of farming. The great question should be to get a better and more profitable lot of cows.

It would be easier to keep good men on the farm if the dairy farmers would keep better cows. A man appreciates the opportunity of handling good stock, and he realizes that some responsibility is placed upon him if he knows that nothing but valuable and profitable cattle are kept.

Rape is popular with hogs.

Very fat fowls are poor layers.

A horse suffering from colic should be kept quiet.

Asparagus may also be forced near cellar furnaces.

As tillers of the soil, earth worms constitute a great army.

Put kerosene on the roasts frequently to keep down chicken lice.

Teach the colt to eat a mixture of oats, wheat bran and linseed meal.

There is something in the first milk that the calf needs, and should have.

Remember to treat your cow with consideration in these days and nights.

The demands on the fowl's digestive system for nourishment is very great.

A flock of ewes rightly handled should produce 125 per cent. of lambs.

It is the income from each sheep that should determine the value of the flock.

Every progressive keeper separates the light-colored honey from the dark fall honey.

Unless the bird is extremely valuable the ax is the best remedy for a sick chicken.

The cow that is allowed to fall off in her milk flow is seldom made to regain it at a profit.

Skimp your sheep on good pasture and they will skimp you on mutton. Works both ways.

Rabbits do great damage to young trees during winter, especially when snow covers the ground.

The use of fruit is a great help toward keeping in good health, and more of it should be grown.

It's a mistake to expect the miraculous or abnormal from your cows. Better make them work naturally.

If sows are expected to raise a fall litter, it is best to wean the spring pigs at from 8 to 10 weeks old.

When there is good stuff in the feed box the heifer soon learns to be a good barn cow when night comes.

Do not try to winter the cows without grain. Wheat bran, corn-meal and oil-meal will be found valuable.

Sheep are comfort lovers and the man who neglects to provide them with good, dry shelter makes a costly error.

Irregularity in feeding—that is, a good ration one day and a poor one the next, will play havoc with the best of cows.

Peach trees can be planted any time between last and first frost; the earlier in the winter they are planted the better.

A queen bee lives from two to five years, workers from forty-five days to six months, and drones seldom more than five weeks.

Some breeders claim that six or seven weeks is long enough for the pigs to remain with the sow, but this, I think, is extreme.

The pig is merely a meat-producing machine and the more he is fed—with good judgment, of course—the more meat he will turn over.

All living plants have definite needs every day during their growth, and if these needs are not supplied fully or regularly bad results must follow.

While the orchard is coming into bearing try vegetable growing as a side line. This makes one of the surest and best resources of income.

It will pay to buy wheat bran to mix with the barley or corn meal for feeding cows. Bran and barley meal half and half makes good meal for milk.

The best roosting-place for young turkeys is on branches of trees. They will not suffer from exposure, and the open life will make them strong and healthy.

Some milkers handle the teats as if they were made of rubber and devoid of all feeling; but, strange to say, there are nerves in the udder which are very sensitive.

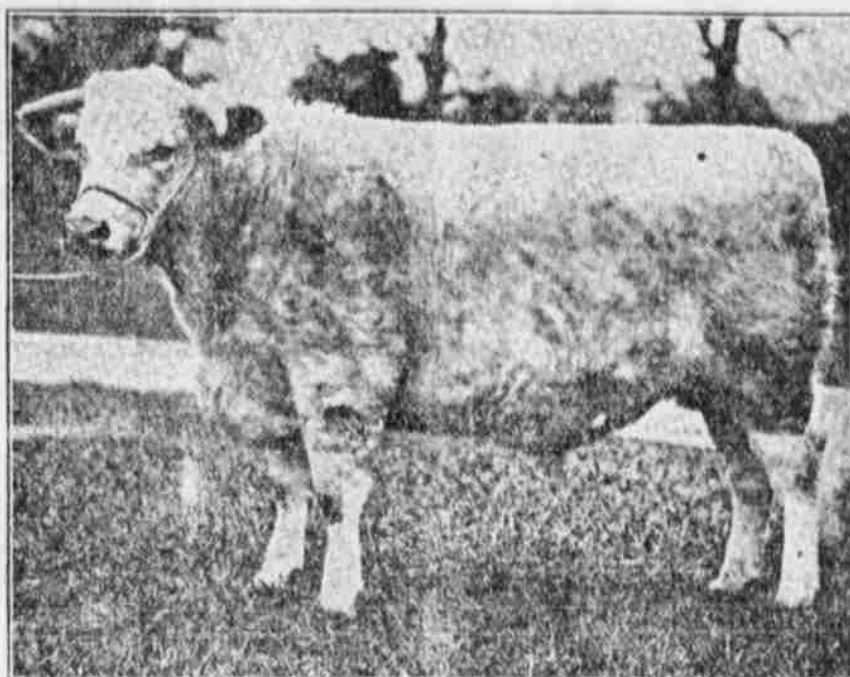
We like to see the cows approach their master in the yard to be scratched and petted. It shows that they are used to kind treatment and are not afraid of him.

In the feeding of live stock there is a chance for a large leak and yet have it unknown. The most economical feed is the one that supplies the animal's needs at the least expense.

The safest bull the dairyman can use is generally a cross bull. At first this may seem a strange assertion. The reason, however, is simple. The bull that is known to be cross will always be watched. On the other hand, it is easy to put too much confidence in a tame bull that may suddenly become cross.

LIVE STOCK IS BASIS OF ALL SYSTEMS OF AGRICULTURE

Crops From Soil Furnish Nutrition for Animal Body and Waste Products of Farms and Feed Lots Supply Food for Plants—Neither Can Exist Long Without Other.



Prize-Winning English Shorthorn Steer.

Live stock is the foundation of all systems of permanent agriculture and agriculture is, in turn, the base upon which rests the superstructure of all national prosperity.

No country on earth has ever continued to prosper without live stock as a vitally important part of its agriculture and none can do so. The crops from the soil supply nutrition for the animal body and the waste products of our farms and feed lots furnish food for the plants. Neither can long exist without the other.

The grain farmer flourishes for a time, but with every load of grain he sends to market he sends a portion of his farm. If not during his lifetime, then in the time of his children, will his farm become worn and worthless.

High-priced land or high-priced feeding stuffs should not shorten the production of live stock. The cheap cattle of the ranges were possible only because of the cheapness of the land. With the increase in the price

of land has come an improvement and more general distribution of high class cattle and these are more profitable and more economical than the range steer ever was or could become.

Farmers generally are a conservative people and this is one of their most valued characteristics, yet it seems to stand in their own way at times. The farmer who gives thought to the matter can easily see how impossible it is for him to hope for success in raising cheap, poorly bred and hard feeding animals on his high priced land.

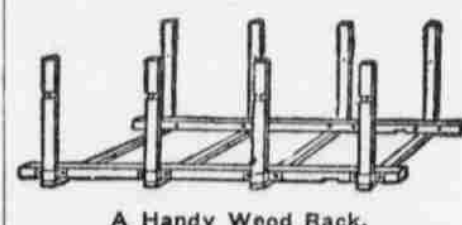
On the other hand, he can easily see that a good animal which will put on flesh rapidly and that of the highest quality and which will reach a marketable condition in a few months, instead of several years, is the only one he can afford to grow.

The farmer must have live stock and present conditions demand that he keep good live stock or fail.

PRACTICAL RACK TO CARRY WOOD

Useful Implement May Be Made by Using Two Strong Pieces of Timber as Illustrated.

Directions for making a practical wood rack, with an illustration, is given in the Farm and Home as follows: Take two 4x5 pieces of very strong wood 11 to 12 feet long, and cut a notch in each, so as to fit down over hind bolster of wagon to prevent rack from slipping backward or forward. Use four or six standards on each side and the same number of crosspieces, so placed that the standard in going down through the socket catches



A Handy Wood Rack.

against the end of the crosspiece, as shown in cut. Make standards 3 1/2 feet long. They may be cut off afterwards if desired.

Make standard sockets from old wagon tires to admit a standard 1 1/4 inches and with holes for one-half-inch bolts. Bolt all crosspieces firmly. Have wagon near by when making rack and place the rack so far forward that in turning the front wheels will just miss the end.

WINTER SHELTER FOR THE SWINE

Natural Instinct Is for Cozy Quarters, Which May Be Accepted as Suitable for Them.

(By W. R. GILBERT.)

No animals enjoy freedom more in the summer than hogs, but their desires are altogether different in winter. The natural instinct is for cozy quarters, which may be accepted as altogether suitable for them.

No one need ever look for the pigs on windy hill-tops when winter sets in, but if any disappear they are almost sure to be found in the best protected and snug spot within their reach.

Warning words are often given not to have sows farrowing in the shortest days, when cold weather prevails, as they can make no progress against low temperatures.

In summer pigs at large pick up a great deal of their food in the fields, but little is available now that will do them any good, and although those in store condition may still be allowed a run out daily, they should all be housed at night and some altogether.

All being fattened for pork of bacon should be kept in constantly. And sows suckling little pigs should never be allowed to take them out and around as absolute shelter and constant comfort assist their develop-

ment, while chills hinder or are indeed dangerous.

Some have a fashion of letting the pigs run about the yard in winter, sometimes shutting them in at night, and in other cases letting them find their own accommodations, but this is a bad way.

They certainly make themselves most comfortable at times, but the exposure which is equally freely indulged in has the reverse of a satisfactory result, and it is much better to confine them all to their proper quarters.

These should be in good order, with absolutely waterproof roofs and surroundings that will prevent draughts. There should be no holes in the floors, as these make the bedding muck very quickly, and comfort is thereby reduced and progress impeded.

LIGHT NEEDED FOR ALL TREES

It Influences Transpiration and Consequently Metabolism of Green Plants—Other Effects.

Light is said to be absolutely indispensable for the life and growth of trees. In common with other green plants, a tree, in order to live, must produce organic substance for the building of new tissues. Certain low forms of vegetable life, such as bacteria and fungi, do not require light. They exist by absorbing organic substance from other living bodies; the higher forms of plants manufacture their own organic material by extracting carbon from the air. The leaves, through the agency of their chlorophyll, or green coloring matter, absorb from the air carbon dioxide, and give off a nearly equal volume of oxygen. The carbon dioxide is then broken up into its elements and converted into organic substances which are used in building up new tissues.

Light also influences transpiration, and consequently the metabolism of green plants. It influences largely the structure, the form, and the color of the leaf, and the form of the stem and it largely determines the height growth of trees, the rate at which stands thin out with age, the progress of natural pruning, the character of the living ground cover, the vigor of young tree growth, the existence of several storied forest, and many other phenomena upon which the management of forests depends. A thorough understanding, therefore, of the effect of light upon the life of individual trees, and especially on trees in the forest, and a knowledge of the methods by which the extent of this effect can be determined are essential for successful cultural operations in the forest.

Lime for Sour Soils.

For a soured soil, a liberal application of lime is the only thing that will remedy the trouble. This comes in many forms, but the cheapest and most beneficial is ordinary ground limestone. The cost of ground limestone is about 60 cents a ton at the pit.

THREE DISTINCT VITICULTURAL REGIONS IN UNITED STATES

American Native-Grape Section Comprises All That Part of Country Lying East of Rocky Mountains—Fan and Hudson Horizontal Systems of Training are Illustrated.

Fig. 1

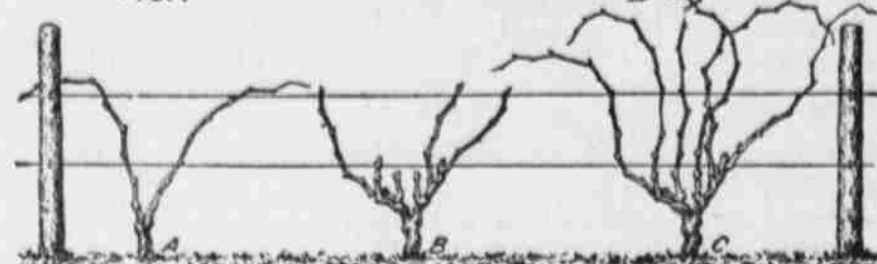


Fig. 1—A vine at different ages, showing the method of training by the fan system; A, an unpruned vine in its third year; B, a pruned vine in its fourth year; C, an unpruned vine in its fourth year.

Fig. 2

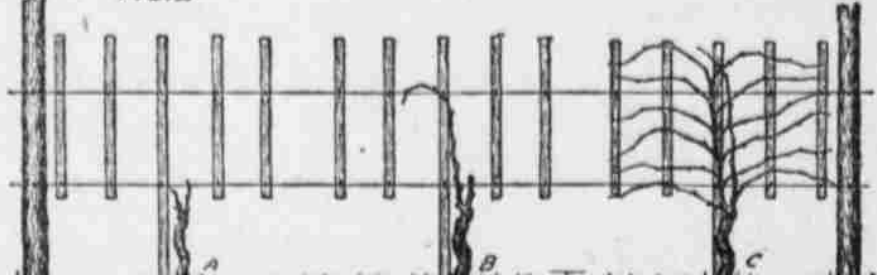


Fig. 2—A vine at different ages, showing the method of training by the Hudson horizontal system; A, a pruned vine in its third year; B, a pruned vine in its fourth year; C, an unpruned vine in its fourth year.

(By GEORGE C. HUSMANN, Pomologist, United States Department of Agriculture.)

There are three distinct viticultural regions in the United States which segregate themselves by the grape species grown in them.

The Vinifera region, in which Vinifera varieties are almost exclusively grown, is located almost entirely west of the Rocky mountains, so much of it being in California that those not conversant with grape varieties erroneously call them California grapes. With few exceptions either the spur, stool, or short pruning system is used for the stockier growing varieties, and the long or cane pruning system is usually used for the longer growing varieties, but either system is often modified to suit individual varieties. Thus the spurs are sometimes left longer in the spur system, and either spurs and canes left longer or spurs cut on the laterals in the cane system.

Stakes only are used to give the vines the necessary support; this method allows the vineyard to be cultivated crosswise as well as lengthwise. Vines trained on trellises are comparatively rare in California.

The Muscadine region of the South Atlantic and Gulf states includes the entire southeastern coastal plain extending from the Potomac to Florida, reaching well up into the Blue Ridge mountains and along the Gulf coast to the Rio Grande river, spreading to the north along the Mississippi river into the great central plains to southeast Missouri and the Tennessee river. In this region improved varieties of the Rotundifolia and Munsoniana species are grown for various purposes, the better-known varieties of these being the Eden, Flowers, James, Mish, Scuppernon and Thomas. The multiple crosswire system or overhead arbor is almost exclusively used.

The third or American native-grape region is the one in which improved varieties of the more northern native grape species and hybrids of them and the Vinifera species are grown. This region comprises all that part of the United States which lies east of the Rocky mountains. Of late years a few plantings have also been made in parts of Oregon and Washington, but the industry is most extensive in the states west of the Hudson river and north of the Ohio river that border on the Great Lakes and in the more centrally located states of the Mississippi valley. In this district the high-renewal, horizontal-arm spur, horizontal block, fan, Hudson horizontal, four-cane Kniffin, umbrella, or two-cane Kniffin, Munson, overhead Caywood, and Chittenden systems are used, the localities in which they originated or are most common being stated in the description of the various systems.

In the fan system the vine growth, which is trained to an upright trellis, is annually renewed to within a short distance from the ground. The vines are cut back usually to four canes and as many spurs each year; the canes

are spread out and tied to the trellis, giving the vine the shape of a fan. Figure 1, A and C, shows an unpruned vine in the third and fourth years. Figure 2, B, shows the same vine pruned the fourth year for this system.

The advantages claimed by the advocates of this system are (1) that most of the old wood is dispensed with each year, (2) that the vines can be easily laid down and covered in winter when needful in the extreme northern sections, and (3) that if after pruning the canes are tied and spread fan shaped on the trellis, as they should be, the young upright-growing shoots fasten themselves by their tendrils and need practically no tying. This system has the disadvantage of bearing the fruit too low and is not now so generally in use as formerly.

The Hudson horizontal system, extensively practiced, as its name implies, along the Hudson river, uses an ordinary two-wire trellis. A strong stake reaching to the top wire of the trellis is driven behind each vine. Four perpendicular slats which do not touch the ground are fastened to the trellis, two on each side of the vine and 12 to 15 inches apart. Woven-wire fence could be substituted for the slats. The vine is annually renewed back to the trunk, which is about a foot high, and a single cane and spur are left at each pruning, the cane long enough so that when tied it reaches to the top of the stake. About six bearing shoots left to grow on each side of this cane are fastened horizontally to the slats. The clusters hang free from the shoots. When the shoots become too long they should be summer pruned. From the spur left on the trunk the cane is grown erect and tied to the stake, to become the fruiting cane to be left the next year. Figure 2, A, shows a vine at the end of the third year pruned according to this system. Figure 2, B and C, shows the same vine before and after pruning a year later.

The advocates of this system claim for it a more uniform distribution of the young shoots and say that the fruit hangs well supported and protected.

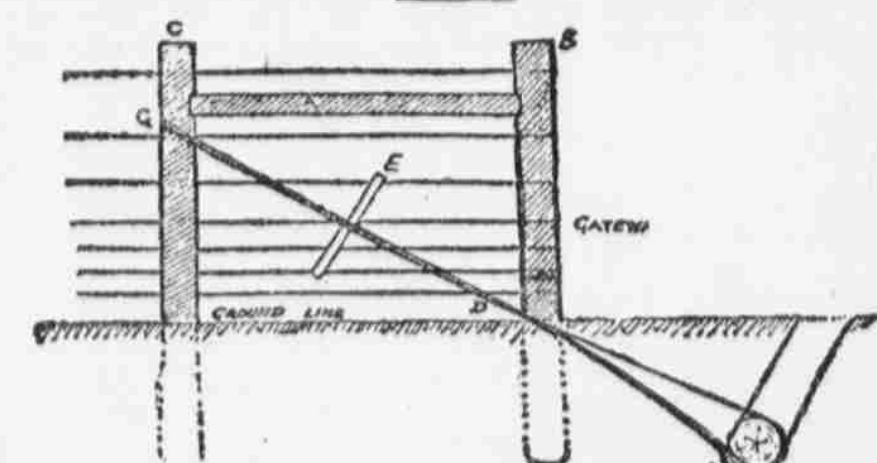
Silage Production to the Acre.

Ten tons of corn ensilage per acre is regarded by experiment stations as a reasonably conservative average, though fifteen tons per acre is a frequent yield under fairly good conditions of tillage, soil and seed. It is estimated by competent authority that this ensilage, when placed in the silo, costs about \$1.95 per ton.

Selecting Ducks for Breeders.

Pick out the young ducks and drakes that grow and develop the fastest, and that attain good size, for next season's breeders. Some ducks will be heavier at eight weeks than others at ten, and are therefore more profitable.

SUBSTANTIAL BRACE FOR POSTS



An excellent plan for making a substantial brace post is given below: In the illustration (B) and (C) are two posts about five feet six inches apart; (A) is a rail, say 3x3, let into each post about one inch. The anchor cable (D) consists of double No. 8 wire which goes round (C) and is kept in position by two notches (G). It also goes round (B) and then to the anchor (F). A twitch stick (E) serves to twist the cable as required to keep the post square. Holes are bored in both posts for the wires.