

## AGRICULTURAL.

TOPICS OF INTEREST RELATIVE TO FARM AND GARDEN.

ALL MILK IS NOT ALIKE.

The Wisconsin Dairy Commissioner declared that the sooner dairymen pull out of the old rut into which they fell many years ago, that rut being nothing more or less than the hallucination that "all milk is alike, pound for pound," the sooner will the dairy business be put on a firmer and better paying basis in that region. The weight of milk given by certain cows is daily being vaunted, but the amount of cheese or butter which the milk produces is kept an unknown quantity.

SETTING FRUIT TREES.

For setting and handling fruit trees the following directions, from an experienced fruit grower, have been successfully followed. As soon as ground will work, dry plow deep, harrow thoroughly, lime each way, set stake where each tree is wanted. Dig holes twice as deep as required, fill with surface soil to the paper size, cover roots, then put in some water, fill, rounding up with dry dirt, and if mulched or cultivated, your trees will do well. In this way I set 450 peach trees, with part in wheat and a dry season, and all but four were alive the third year.

LEARN TO GRAFT.

Every farmer should himself understand grafting, and be able practically to do it. The art is simple and easily learned. It may not always pay the farmer to do all the large jobs of grafting that he has to do, since his time may be worth more at something else. But it is the little jobs, the setting of half a dozen grafts not worth sending for a professional grafted to that thus are neglected from year to year, simply because no one is hand qualified to do the work. Professional grafters make good wages setting grafts at so much apiece. Most of them have an assistant who saws off the limb to be grafted, while the grafted fits the scion to the cleft which he makes, and covers the wound to exclude air. This and connecting the scion with the outer wood of the branch is all the art there is in grafting.—*Boston Cultivator*.

SOFT-SHELLED EGGS.

The shells of eggs consist mainly of lime and the lime must come from food, that is, from material eaten and digested. Grain food alone does not and cannot furnish all the lime required for the shells of 100 eggs which a hen would lay in a season, and lime is not stored up in the system as fat is; consequently when hens confined in the winter cannot get mineral lime and are not furnished with such food as broken or burned bones, a good many of the eggs are soft-shelled and as these are easily broken the hens learn to eat them. An excellent way is to procure fresh bones with the meat on them from a butcher and break them up fine enough to be swallowed, and the fragments are digested easily. Or the waste of bones may be burned in the stove and the ashes thrown out where the hens can pick out the bone. The avidity with which the fowls will get rid of the bones will be convincing as to the necessity for more bone material than can be got out of the ordinary food.

TO PRESERVE THE HEALTH OF HORSES.

The best treatment of disease is to prevent it by judicious attention to keep the animal in health and avoid injuries which may result in disorder of the joints. The food should be given in moderation and regularly, and never when the horse is weary from hard work, and water should be considered as food. Water should never be given directly after feeding, but always a few minutes before, allowing time for it to be absorbed. The coat should be thoroughly carded and brushed to keep the skin in good condition twice a day. The shoes should be flat and without calks, which, if possible, thus avoiding wrenches and sprains, which produce disease of the joints and limbs. Exposure to cold rains, or cold wind when the animals are heated, are to be avoided. If the owner of a horse would think of these things as he does for himself or his children, or, in fact, a little more and better, there would be fewer diseased horses. Lastly, an unsound or diseased animal should never be used for breeding.—*New York Times*.

A WORD FOR DUCKS.

It is now the season of the year when the value of a good flock of ducks should be impressed upon the farmer. Most people think that ducks are fearful eaters and that they cannot exist without water. A farmer who has tried the experiment of raising a flock, and allowed it to destroy all the water on the farm, is convinced that he has made a great mistake, and when fall comes kills all his duck, and no amount of persuasion can induce him to have any more ducks upon his place. How different his views on the subject would have been had he made good pen and kept his ducks as he does, or should, keep his sheep and cattle, and give them only water enough every day to drink. Ducks do not need a pond, and can be very profitably raised without any swimming place. A number of farmers have told me that their farms did not make expenses. I always ask do they pay any attention to fowl, and in ninety nine cases out of one hundred they will say "No."

No more profitable fowl can be raised than ducks. Not only on account of their quick maturity, but from the large number of eggs a duck will lay and the immense flocks that can be raised from a very small breeding pen. Many farmers let fruit and vegetables go to waste because of the absurd idea that it is cheaper to buy them dried or canned in winter than to preserve them at home while they are plenty and right at hand.

For ventilating and warming poultry-houses the *American Agriculturist* advises that the air be always brought in and discharged near the roof, as the birds will then crowd and become lame, as they will when the warmth is below them.

ten feet square will be large enough for thirty duck—and you will not be thinking how you will procure money enough to buy him an overcoat or more and new schoolbooks for next winter. Make a watertight box deep enough for them to wade, but not swim in, and give them fresh water twice a day, and they will prove a mine of profit instead of a nuisance.—*New York Herald*.

DRAWS FOR SMOOTHING PLOWED LAND.

Many farmers prefer drags to rollers for smoothing the surface of fields when seeded to grass, especially when the land is comparatively free from stones. These drags are made of hardwood planks, two or two and one-half inches in thickness, and about a foot in width. The width of the drag must be adapted to the strength of the team, or from six to eight feet. Four such planks will be sufficient. These planks should be lapped upon each other about two inches, and should be bolted to a couple of bed pieces on the top of the drag. These bed pieces should be about four inches in width and two in thickness. The forward end of each should be turned up something like the forward end of a sled runner. The angle, however, should be less than that of a sled runner, or only enough to raise the upper edge of the forward plank some four inches from the ground, when the drag lies upon a flat surface. This will enable it to glide over the clods and crush them or bury them in the soil. After getting the measurement of the planks, and making allowance for lapping them two inches, bolt the rear edge of the plank, which is to form the hind end of the drag, to the bed pieces above mentioned. Lay the next planks with the rear edge lapped two inches upon the front of the first plank; bore through the two planks and the bed pieces with a three-fourths inch auger, and bolt them solid. Put on the other planks in the same manner until the drag is completed. The device for attaching the drag should be nearly on a level with the bottom plank. By boring a two-inch hole from the top of the bed pieces through the centre of the forward plank, snarl pieces of chain can be arranged which will make a convenient attachment for fastening the team to the drag. If the drag is not sufficiently heavy to accomplish the desired result it can be weighted with any convenient object.—*Boston Cultivator*.

FARM AND GARDEN NOTES.

Clean up the fence corners. If you wish some music get a pair of guineas.

A red head in a fowl denotes health. Kept it so.

Don't put dung or coarse manure upon the garden.

Don't plant beans yet, that is, unless you live in the south.

A shingle roof is far better than felt or tar paper, and in the long run the cheapest.

Don't forget to get onion seed in as soon as the ground will work up nice and flat.

An apple orchard when it gets to be forty years of age, has passed beyond its glory.

A strong point in the Plymouth Rocks and Brahmans, is that they are very hardy fowls.

If you set out tomato plants—look out for frost for awhile and cover the plants at night.

Sow grass seed early in the spring on the knolls in the pasture and on thin spots in the field.

To thresh small lots of beans or peas without waste tie them up in a bean sack and thresh the sack.

An acre of land devoted to small fruits will often give a larger return than five acres devoted to grain.

Successful dairymen believe that a cow, to be a success, should earn an annual sum equal to her entire value.

Never yard chickens, ducks, turkeys and geese together. Their habits and appetites are too much at variance.

In proportion to cost, even at the low prices of the season, eggs return more profit than anything else sold from the farm.

Don't forget to clean the poultry-house thoroughly. Scrape out the nests, remove the droppings and fumigate with sulphur.

If manure is to be stored in barn celars, let it be kept sufficiently moist and solid to prevent rapid changes from taking place.

Give the boys a chance to earn a few dollars by disposing of the surplus garden truck, and see if they don't show energy enough.

Corn, whole grains, saturated with kerosene oil, is a good preventive and sure cure for cholera. This is the poor man's cholera cure.

Eggs from hens that are two years old will hatch better offspring than those from the younger stock. Young hens are preferable for laying eggs for market.

When a hive of bees begin roaring it can be quieted by placing a wet sponge over the holes on the broad chamber, or covering the broad chamber with a wet cloth.

Patience must be the rule on a farm. All improvements take time. But there is one form of patience that is not to be recommended; that is, patient waiting for something to happen.

According to Professor Henry, of the Wisconsin Station, milk made from ensilage is much more curable than milk made from dry fodder; less butter fat goes out in the buttermilk.

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## SUNDAY SCHOOL.

SUBJECT FOR SUNDAY, MAY 10.

"The Last Supper," Mark 14: 12-20  
—Golden Text, Luke 22: 19—  
Explanatory Notes.

12. "The first day of unleavened bread, when the lamb was killed." The last day on earth in a mortal body had come to His world. He would keep the Passover with His disciples, and on the morrow be crucified. Christ our Passover sacrificed for us (1 Cor. v. 7)—and He went forward calmly, unwaveringly, knowing every step of the way beforehand. It was over fourteen hundred years since the first Passover was kept in Egypt, when by the blood of a lamb the first born of Israel were saved from death and the nation brought forth from their bonds by the only-begotten Son of God.

Paul tells us that He kept it to witness every sacrifice from the beginning pointed to it when He was slain, whose blood saves from eternal death to whom it is applied, and who shall yet accomplish for Israel a greater deliverance than that from Egypt. We cannot think of His omitting a single Passover feast since first He went up to Jerusalem with Joseph and Mary at the age of 12, when He uttered His first recorded words: "Wist ye not that I must be about my Father's business?" Paul adds: "He kept it to witness every sacrifice from the beginning pointed to it when He was slain, whose blood saves from eternal death to whom it is applied, and who shall yet accomplish for Israel a greater deliverance than that from Egypt." We cannot think of His omitting a single Passover feast since first He went up to Jerusalem with Joseph and Mary at the age of 12, when He uttered His first recorded words: "Wist ye not that I must be about my Father's business?" 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