

duration to our brave, hardy sons of the north, and richer bloom and greater freshness to our daughters. We have ever hope that this hard, cold winter will be followed by an abundant harvest.

"WOODMAN, SPARE THAT TREE!"

Farmers! we would give you a word of advice on the subject of trees. Similar advice has been given you before, but we are so apt to forget advice that repetition becomes necessary. Always in the bush spare some trees for shade and ornament, as well as for future use. It is a very easy way of enhancing the value of your farms, and that, too, without expense. We do not mean merely allowing some acres of bush to stand for use in the year that are yet to come. This all farmers do when clearing their farms; but we advise you, in addition to this, to let trees stand in various parts of the farm where they will be of most service for shelter—clumps and belts of trees. If ever your farm be to be sold, it will bring the highest price, and if it be not ever offered for sale, it will be the more valuable for yourself and family. A belt or clump of trees, shading your cattle from the heat or the storm, or, it may be, sheltering your crops from the north wind, will pay you better than the culture of the little place they occupy. We must also take into account the fact that timber will be continually increasing in value, as the country becomes stripped of its forests. In the older settlements it is now getting scarcer and dearer, and this scarcity and increased value must increase with the increasing population. As an instance of the rapidity with which forests are disappearing, we give you the following extract from a Pennsylvania paper:—"The forests of Pennsylvania are rapidly melting away. For ten years past the consumption of timber to supply the numerous sawmills of Williamsport alone has been immense. The amount of log rafted out of the boom for the present season will cut over 215,000,000 feet of boards. It is safe to assume that 300,000,000 are annually manufactured at Williamsport. If we go back for ten years, we have the enormous aggregate of 3,000,000,000 feet. That this fearful consumption of the raw material can continue for many years is impossible. Our mountains in ten or fifteen years will be denuded of every pine tree."

HEALING GIRDLED TREES.

Take strips of good thrifty grown wood of the last year's growth, cut in suitable lengths, and fit them nice and snug into suitable places cut into the live bark, something like grafting, only my slips are cut square, and are set so snug that the ends crowd a very little at the top and bottom of the notches cut to receive them in the girdled tree. I then take strip of old cotton cloth well spread with good graining wax, and bind it around the tree where the grafts are set in, and the work is done. The cloth may reach above and below the girdled. I believe I have not lost any tree thus treated. Before I learned of this method I lost more or less every winter.

As a preventative I keep a good rat dog to kill the mice, and it does me good to see him pay off the little vermin. If the tree be large it will take five or six slips, or more if it is thought necessary.

I examined some of my trees the other day, and I found the slips grown to the size of two inches in two years, and consequently the trees were almost healed over.

This method saves time and a new tree, which is a great item when a tree has been girdled that is large enough to bear two or three bushels of fruit.—*McHuan Farmer.*

EARLY PEAS AND SPINACH.

The seeds of peas and spinach germinate in the earth at quite a low temperature, and the plants will endure considerable frost without injury—hence they are among the first garden crops sown in the open air. As but little skill is required to grow peas, our city markets are liable to become overstocked with them, and the prices to decline below paying rates. But the markets generally open very high, and they who have a warm situation, or a gravelly soil—and a warm situation—descending towards the south, so that the rays of the mid-day sun fall almost vertically upon it, can make the growing of early peas profitable.

But to raise early peas, we must not only sow them very early, on a warm soil, but we must sow the earliest varieties. There is a difference in time of maturing between our earliest and latest varieties of three or four weeks.

Tom Thumb is the most easily grown of all the early peas, but I think about three days later than Carter's. As the latter grows only 3 or 10 inches high, it can be sown in drills 12 to 15 inches apart, and the yield is immense.

McLean's little Gem is more excellent than either of the others, and is especially to be commended for family use. It is dwarf, green in color, wrinkled and fairly productive.

These three sorts make a very good list of early peas for family use; for market, I would omit McLean's.—*Country Gentleman.*

THE SWEET PEAS.

A skillful cultivator of this flowering plant says that if properly grown, it will continue in bloom for months; that failure arises from poor soil, sowing too thickly, and not allowing a well-developed and luxuriant growth. The soil should be as rich as for celeriac, a trench dug, well manured, and the peas sown in small bunches a foot apart, or in a continuous row. To keep up the bloom, the same course must be adopted as with many other plants, namely, the prompt removal of the seed pods as fast as they form, as the growth and ripening of the seed would exhaust the plants. Pinching in occasionally is useful. Some of the English gardeners, by a process similar to the preceding, keep up flowers from May to November.

RAISING POULTRY.

See that the roost is clean, and have no openings excepting where the hens go in and out and a glass window or two for light; keep the door locked, and have the entrance for the fowls only at a large enough for the heaviest to creep in. Let the peas for them to roost and the hens for them to lay in, be numerous enough for at least four times the number you have, which will give room for them to rest at night unmolested by the many quarrelsome dames to be found in a secure roost, and it will prevent so many hens wanting to use the same nest so late and hatch out young in. If there are more than thirty hens in one roost, have another one made, above 100 yards away, and leave two or three roosters only with those left, as one fine healthy male bird is sufficient for ten or fifteen hens. And do not have more than this number at one place if you have to contrive ever so many new roosting places; then feed well, never heeding what some miserable old stinging moral says to the contrary, giving them just as much in ring and evening as they will eat up clean. Feed early in the morning when you let them out of the roost, as they will then all at once, by scattering the corn or grain all around, for it is a lazy and foolish way to throw what you give them on such a small space as to have the master fowls fighting the underlings. Feed just before sundown, at a regular time as possible, and never between times, unless in frost and snow, when they can get nothing on their range; then give them baked vegetable food, such as potatoes or turnips, mashed well and mixed with oatmeal or any meal ground from a different kind of grain from that which is fed either at morning or night. Put eggs under the first hens which want to sit, and mark them all with ink, so that if any more should be laid to them after, they can be taken away, and this should be seen to daily—13 to 15 eggs, according to size of hens, will be sufficient for any hen to cover and keep warm.

When the hens hatch their young brood, put them in warm little movable coops, so that the hen cannot drag them about in the cold and wet. Place these coops on some nice sunny bank, far enough apart to prevent the broods mixing, and attend to them every two or three hours, as in cool weather and so early in the season they require feeding often, and when storms come on or it is very cold, the coops require closing up so that it will be dark inside, and the hen will nurse them all the while. When the chickens are a month old, the hens can be allowed their liberty during the day, and when they commence to lay again, can go back to their former roosting place, the little ones using the coop till they are sold or taken to a roosting place, which should not be with the old fowls, as they would get a deal of punishment from their roosting together—besides which, as the weather becomes warmer, it is unhealthy to be at all crowded, and disease, lice and death follow in succession. The art of raising poultry ranges, and keeping the families small; then there are no limits to the numbers any one wishes to have, but any poultry fancier has much better expend \$300 in the construction of fifty roosts placed at a distance from each other, to prevent intermixture, than to lay out \$1,000 in a fine paternal edifice to accommodate the same number under one roof; and, say what any one will to the contrary, any one of the fifty little ten-dollar roosts would pay more profit than the great one thousand dollar structure.

Turkey and Guinea birds should never be permitted to enter the roosting or laying departments of the common fowls, for they are quite as cruel in worrying and disturbing generally as Pea Fowls, which also should be excluded.

Ducks require a separate place for their own good, as they get dirty by lying under hens at roost, and if they have a comfortable and convenient shed with snug laying places on the ground, they will hatch out and raise their young better than by bothering hens, pool things, to sit extra time and dance attendance along ditches or around ponds.

Any youth who has premises of his father to commence raising poultry on and around should look to the eggs, as a source of profit equal to the chickens raised, and if he has several separate roosts it would be good policy to have the perpetual laying varieties of hens at all but one, keeping one lot to use for sitting and raising, and the others for laying.—*Country Gentleman.*

To CAUSE THE HAIR OF THE MANE AND TAIL TO GROW.—In reply to S. C. Lake, in the *Rural New Yorker* of Dec. 9th, I beg to give the following recipe, which I have personally proved to be efficient in restoring a healthy growth of hair on the tails and manes of horses: Corrosive sublimate (hyd. bichloride,) oxymuriate of mercury, each four grains in one ounce of distilled water. Wash the parts where the hair is thin with warm water and soap, then rub dry with a linen cloth and immediately after rub in some of the above ointment. If the hair has been rubbed off by the animal's own endeavours to annoy cutaneous irritation, then dress with the following ointment: One ounce of fine flour sulphur, one ounce of pulverized saltpetre, make into a soft ointment with fresh butter or fresh rendered hog's lard; rub in at night and wash out in the morning with warm water and soap; repeat three or four times. If the hair is scant from natural debility of the capillary or ans, then simply use cold water applied with a soft sponge; avoid all combing or brushing, and clean the mane and tail, as the Arabs do with a coarse flannel rubber.

Never Prove False to a Friend.
Never prove false to a friend,
In love and in friendship be true;
Never prove false to a friend
So long as he's faithful to you.
He may be dishonest; a knave
In other's opinions; but then
To you he is generous and kind,
And one of the noblest of men.
Is any man free from each fault,
All righteous and good in his ways?
Lies there a woman so perfect on earth
That she can be named but in praise?
Never speak ill of a friend,
To gossipers keep closed your ear
An excellent rule on the main,
Is to credit the tenth that you hear.
Stand by a friend in distress,
When you know he is really in need;
Heed not if he fails; none the less,
There is honor for you in the deed.
That one may deceive you tis so—
Then his, not yours the disgrace;
Because we find one man untrue,
Shall we wrong or distrust a whole race?
Censure a man for his faults,
Give him honor, where honor is due;
But never prove false to a friend,
As long as he's faithful to you.

CULTIVATING WHEAT FIELDS IN THE SPRING.

Many farmers have harrowed their winter wheat in the spring, when the soil was in proper condition for working, and the reports of such culture have been, in the main, favorable. In England a machine is in use adapted to the working of the soil between the drill rows and sweeping the same breadth as the grain drill.

Horse-hoeing is the name applied to this kind of culture, and it is, of course, more perfect than the work of a common harrow. It destroys weeds, breaks the winter crust, and if it does not directly benefit the crop it helps that following, inasmuch as it cleans the soil. Drilled wheat is in much better shape to be benefited by the use of a common harrow than that sown broadcast; its roots are firmer and deeper in the soil, so that fewer are torn out and more dirt is worked up loose between the rows. The roller is deemed a better implement by many of our farmers, and is more frequently used on their wheat fields in the spring than the harrow. It is certainly a safe tool to use on the wheat field; it breaks the crust, presses the soil firm around the plants, and smooths the surface of the field. The soil must, however, be quite dry when it is used.

In this connection we give the experience of some of the farmers belonging to the Klnira Club, in cultivating wheat in the spring and in sowing spring wheat where winter wheat had been badly killed.

J. R. Conklin had a field of winter wheat much injured by heaving. In the worst spots when

the plants were apparently dead he dragged the ground up mellow and sowed spring wheat, and after harrowing in the seed, rolled all the field. All this was early in spring. The result was a good crop of spring wheat, and nearly as early as the winter wheat, and where dragging had lapped on the latter it was evidently benefited. Have since dragged and rolled separate parts of the winter wheat fields, applying drag to the "dead" spots. Improvement to the crop has always followed.

Mr. Conklin.—Why drag and roll too?
Mr. Conklin.—Dragging loosens the ground, and the roller presses into that soft ground the loosened roots.

Mr. Samuel Chapman.—Last spring I resolved to make a test in my wheat by dragging part and leaving part. I took out a thirty-two teeth sharp drag, and started it myself to note results. The first two rounds I kept watch of the teeth as they tore through the roots. It looked as though all were torn out. At the end of those rounds I raised the drag to see how much the teeth had gathered. It was surprising to see how little. I don't believe one plant in a hundred was torn up. So I concluded to trust my man for the rest of the job, but I instructed him to leave certain strips which were staked out, in order to make a comparative test. Now for the results. Those parts which were harrowed took on a darker green and gave evidence otherwise of increased vigor. They retained all their advantage over the undragged parts until harvest. I could not separate the harvest, and cannot therefore tell how much I was benefited by the work, but the advantage was very plainly in favor of the harrowed portions. The field the previous year had borne barley, the year before corn, and before that was a timothy sod. Some fear to undertake an operation which looks so hazardous to the crop, but I can assure you that if you will put your harrow on the wheat and drive it a while, and then examine the extent of the mischief, you will be surprised there is so little. I would recommend dragging as a sort of spring cultivation of winter wheat, on all pieces not troubled with many flat stones. On such the injury might outweigh the advantages.

Our own experience in harrowing wheat for two or three seasons has satisfied us of its utility. Our practice has been to harrow soon after the ground was well settled and dry after the wheat had commenced growing. Indeed we have harrowed, as an experiment, the second time after the wheat was six or eight inches in height. It makes the soil in fine tilth, seems to give a clean appearance to the field and a thrifty look to the wheat. Of course this cannot be done where the ground has been seeded with clover without damaging that. We prefer sowing our clover seed just before the harrowing. It is then nicely covered in a good seed bed and escapes danger from late frosts which damage so much early sown clover.

FECUNDITY OF DUCKS AND HENS.
Some interesting experiments have been made upon the comparative fecundity of ducks and hens, so as to determine from which of the two the larger number of eggs can be obtained in the same time. For this purpose three hens and three ducks were selected, all hatched in February, and nourished with suitable food. In the following autumn the ducks had laid two hundred and twenty-five eggs, while the hens in the case laid none. In the following February the laying season began again with the ducks, and continued uninterruptedly till August. They showed no inclination to sit and became very thin, but subsequently fattened up somewhat. In the meantime the hens had not been idle. The total number of eggs laid by the hens amounted to two hundred and fifty-seven, or eighty-six eggs each; and the ducks produced three hundred and ninety-two, or one hundred and thirty-one each. Although the eggs of the ducks were rather smaller than those of the hens, yet they proved to be decidedly superior in nutritive material, so the superiority in productiveness appears to be altogether on the side of the ducks.

GAME HENS AND DUCKS.
A writer in the Canadian Poultry Chronicle gives the following as his experience with the laying qualities of game hens and ducks:—"There are few fowls more prolific than game, and where there is a good wide range of any kind, no fowls will prove more profitable, the black-breasted red variety being the best. They eat little in proportion to larger fowls, and are very good layers; but they cannot be kept in close confinement on account of their fighting propensities. No fancier that can find a suitable place in his poultry yard but should have a few ducks. Their appetite is such that a most any kind of food will supply them; they pick up the waste food left by other fowls and grow fat on it. In the barn yard, in gardens, and in pasture land they are alike useful and beneficial. There are three kinds which now stand high among breeders, namely:—The Aylenbury, which is pure white; the Rouen, which in color resembles the wild Mallard; and the Cayuga, which are pure black, except occasional white spots on the