

IMPROVING THE FARM WOODLOT HOW TO HANDLE YOUNG TREES

BY ARTHUR HERBERT RICHARDSON.

Every woodlot, whether it is established naturally, or planted, must receive some improving if it is to produce the greatest number of valuable trees in the shortest period of time. If the forest is left to itself it will produce much excellent timber, but there will also be present many stunted and misshapen trees which might have been removed to advantage at the proper time. Just as the field crops on the farm are tended in order to enable them to produce their maximum yield, in like manner the forest crop must be cared for.

The kind and amount of improvement work which can be done in any woodlot depends, of course, on its age and condition. In this article, the improvement work outlined is intended to apply to those parts of the woodlot consisting of groups of very young trees.

The purpose of improvement work in a very young woodlot is to determine early in the life of the area, which species are to be allowed to continue, and to make it possible for them to develop under the best conditions. As such work will be done when the trees are small, not much of the material cut will be suitable for use, except perhaps, some of the hardwoods which could be included in pole material for the buzz-saw. Nevertheless, such cleaning or weeding will repay the owner in that the trees that remain will grow faster and will be of the greatest value. In a good many cases a few days' work will mean, in years to come, the divergence between a stunted woodlot composed of poplar, red cherry and other poor specimens, or a woodlot composed of all desirable and valuable trees.

(a) Seedling growth—in one section of the woodlot there may be a prolific growth of one kind of tree which has sprung up in an open space, following a year when that particular species shed an abundance of seed. Such is often the case with maple and pine. When such a stand is between fifteen and twenty-five feet in height the trees will begin to crowd each other for light and space. If they are allowed to grow in this manner they will eventually kill one another out, but this would be at the loss of much vitality which could be put to better growth in a few individuals by some judicious thinning. Such an area should be improved by thinning out some of the poorer trees much in the same way as a gardener thins his carrots and beets; care being taken, of course, to leave the tallest, straightest and healthiest trees.

RESULT OF IMPROVEMENT.

When improvement of this kind is completed the trees should be not more than six feet apart.

(b) Mixed growth—When an area has been cut over for logs and cordwood there are always a number of small trees left which are too young for any purpose, including seedlings from a few inches in height, to trees the size of a man's arm in thickness. Some of these are worth-while species including pine, while others are inferior trees such as poplar, cherry, ironwood, etc. If such an area is allowed to grow without any improving it is likely that in a few years most of the trees will consist of specimens of little worth, and a few better hardwoods, while most of the young pine will have been choked out.

When such a woodlot is quite young, two or three years after having been cut over, it should be improved by cutting back the inferior trees which are overtopping and choking out the better species and those it is desired to save.

In doing work of this kind the trees to be taken out should not be cut through with one stroke of the axe as is commonly done, but cut only part way through and then bent over to the ground away from the tree it is intended to release. If the tree is cut right through and the top is thrown aside to die, the stump will sprout again and be as bad as ever in two or three years. If it is cut and bent, much of the new growth will continue up into the old top which, lying on the ground, will produce

To Avoid Tainted Milk

It is a rare individual who relishes garlic-flavored milk. Nor do we like "grassy" milk much better.

These unpleasant flavors, which are most noticeable when the cows are first turned out to pasture in the spring, may, to a very considerable extent, be avoided. It will help if the cows are not put on pasture too soon, waiting until the grass has made a substantial growth. Then, too, the flavors will be greatly reduced if the cows are brought in from the pasture each day two to four hours before milking time.

Aeration and the forcing of air through the milk will not completely remove the unpleasant flavors. Pasteurization will help, but only when the milk is mildly affected.

shade, but will not choke out the favored species.

(c) Coppice growth—This is a form of growth which is not fully appreciated by the average woodlot owner, but which is responsible for a large number of trees growing on hardwood areas.

When the common hardwoods are cut, providing this is done in winter, there will grow up from the stump, the following spring, a prolific growth of sprouts. If this is allowed to continue without some improving when young, the result will be a number of small trees, sometimes as many as eight or ten in a group all from the same root, instead of one or two good-sized, worth-while specimens.

When trees in the woodlot are reproduced in this way, and when the coppice is three to five years of age, it should be thinned out, leaving not more than three sprouts for the final crop.

The trees which respond best to this kind of treatment are as follows:—sweet chestnut, basswood, elm, ash, poplar, willow, birch, cherry, hard and soft maple and the oaks.

POINTS TO CONSIDER.

To obtain good tree growth from coppice after cutting, certain considerations must be given attention.

1. Age of Parent Tree. Coppice from overmature trees will not produce strong growth, as the old root system has lost its vigor. Coppice loses its vigor of growth by following the system too far, the third and fourth generations becoming weak and decrepit. In many woodlots dwarfed and stunted growth exists from the above causes.

2. Time of Cutting. Coppice is best produced by cutting in late winter or early spring. Late fall or early winter cutting often allows frost and moisture to loosen the bark. The coppice shoots originate beneath this outer bark, and if it is destroyed there is small chance of shoots developing.

3. Height of Stump. In cutting with a view to obtaining coppice, the stump should be cut as closely to the ground as possible. It is desirable to obtain new shoots from near the level of the ground. Coppice which originates high up in the stump does not become vigorous. Frequently we find trees in the woodlot with the base partly rotted, and such trees are often of coppice origin.

4. Frequency of Application. As above stated, coppice loses its vigor for reproducing after a few cuttings, therefore when two or three generations of trees of coppice origin have been taken off it is advisable to endeavor to obtain a new growth of trees from seed. Nuts may be dibbled in where favorable spots can be found; or planting may be resorted to if desired. In any case the area should be gradually restocked with trees of seedling origin.

Crumbling Stumps.

We cover the stumps with old straw or potato vines. This makes them rot faster and become easier to remove after a few years.—A. G. H.

Use of Poultry Manure.

Poultry droppings are a valuable by-product. They should be collected frequently and stored in a dry and airy place. To make a balanced fertilizer of this manure, about all one has to do is add phosphoric acid. About the farm or garden, this has many special uses.

Being rich in nitrogen, poultry manure is excellent where a quick leafy plant growth is desired. Try it as a top-dressing for grassland.

For top-dressing strawberries and asparagus early in the spring, poultry droppings are especially advantageous. They can be used in the same way around bush fruits, such as raspberries and blackberries, with wonderful results. For lettuce, spinach and any other leafy garden crop they are unexcelled, but whenever they are used directly in the furrows at the time of seeding, they must be well worked in and mixed with an abundance of soil before the seed is planted.

The droppings should not be used directly on land where potatoes are to be planted the same season, or in close connection with any other root crop, as they are apt to burn, blister and bring on scab.

Sunday School Lesson

John 8: 1-10; 21: 1-23. Golden Text.—Blessed be the God and father of our Lord Jesus Christ, which according to His abundant mercy hath begotten us again unto a lively hope by the resurrection of Jesus Christ from the dead.—1 Peter 1: 3.

SUBJECT.

PETER'S REINSTATEMENT BY THE RISEN LORD.

Chap. 20: 1, 2. We have recently studied the religious experience of the two Marys at the grave of Jesus on the first Easter morning. In the Gospel of John, only one woman, Mary of Magdala, is mentioned, though the presence of another is hinted by the "we" which is used in v. 2. The evangelist, while deeply interested in Peter, is also interested in another disciple, not mentioned in another Gospel, as specially dear to Jesus, and he represents the news of the resurrection as carried by Mary to these two disciples. It has always been considered that the unnamed disciple stands in a special close relation to this gospel which bears traditionally the name of John.

Vs. 3-5. The evangelist describes the eager haste of Peter and the other disciples to reach the grave of Jesus. The unnamed disciple arrives first, and finds the grave empty. The graves clothes are lying as though thrown off by one who had risen. A feeling of awe prevents the disciple from venturing into the tomb.

Vs. 6, 7. No such hesitation restrains the impulsive Peter, who at once enters the vault. Mention is made of what he saw. Nothing is said of what he thought. Indeed, it would appear that he got broken by the resurrection light had yet broken on his mind. He simply marks what he sees—like a man as yet unable to rise above the benediction of grief.

Vs. 8-10. The first intuition of what had happened is reserved for the other disciple, who, emboldened by Peter's example, steps into the vault. It is expressly said of him that he "both saw and believed," that is, believed in the Resurrection without as yet having had a vision of the risen one. The conviction was due to faith, to spiritual insight. It is stated that neither of the two disciples had grasped the scriptural prediction that God's Holy One should not remain under the power of death. The disciples go home, the one believing, the other—well, who can divine what Peter was thinking?

Chap. 21: 15. We now turn to the later experience through which Peter found forgiveness and restoration to his holy office as apostle. Peter had appeared to the disciples by the Lake of Galilee, and they have broken bread in the clear consciousness of his presence. Then comes the wonderful experience of Peter, in which he hears his Lord saying to him, "Simon, son of Jonas, lovest thou me more than these?" The words, "more than these," refer to the other disciples. Peter had once said (Matt. 26: 33), "Though all shall be made to stumble because of thee, yet will I never stumble." This was a claim to love Jesus more than the other disciples loved him. Peter remembers, and answers humbly: "Yea, Lord, thou knowest that I love thee." Then he hears Jesus say: "Feed my lambs."

V. 16. The question and answer are repeated a second time. On this occasion the reference to the other disciples is omitted. Love to Christ is all that the penitent can offer, and Peter knows that he has this to give. V. 17. The threefold experience of the question is due to Peter's sad consciousness of having thrice denied his Lord. All the shame of that act is before his mind, and a threefold guilt can only be assuaged by a threefold surrender of the soul. But how great is his comfort to know that love to Christ, the love that fills his soul, is the proof and assurance of forgiveness! Does a man love Christ? No further test of a Christian is necessary. So Jesus reinstates the penitent as an apostle. He himself had come to seek and save "the lost sheep" of the house of Israel, and to Peter he now commits the responsibility of looking after and shepherding his redeemed ones.

We should not miss the lesson that, as a disciple of Christ advances in self-discovery, in humility, and in penitence, the call of Christ to him becomes more definite and clear. At first, Peter was called to be a lowly Christ. Now he is called to assume a much more definite task. So in every life. As we get older, we make discoveries of ourselves which

DISCARDING WHITE TABLECLOTH NEW USE FOR KITCHEN TOWELING

BY ALICE WALKER.

Cash From Cottage Cheese

Like so many other farm women, I longed for extra money, and yet I kept saying over to myself, "What can I do way out here on a farm?" until finally I discovered a plan which has proved most profitable to me.

I knew almost every one in the near-by town liked cottage cheese; so I made my cheese, placing it in little neat paper pails, and took it to town. Customers were not at all difficult to get, and I am really surprised myself when I reflect that from one cow, or five gallons of milk a day, I averaged ten dollars a week. I have learned that the fine quality and the neat appearance of my cottage cheese are responsible for the good price it commands.—M. P.

There are many reasons why house-makers are using luncheon sets instead of table-cloths. Made of materials less expensive than table-linen, the initial cost is smaller; they are more easily laundered; and they wear longer. Women have not all become emancipated from the white cloth for every meal, and it is said that husbands sometimes complain of the "fussy little doily arrangements," but never of the price. So there is a special appeal in the more practical mat-and-runner set made up entirely of 18-inch toweling. The advantages of this toweling are many. The selvedge edges save hemming; besides, towelings are durable, being woven for hard use and frequent tubbings. In the 16- and 18-inch widths one can now get the most attractive materials: the sturdy crash, woven by peasants on hand looms, dainty checked pea-toweling, the modern linens in plain colors or barred with contrasting threads, as well as cotton crepes in white and colors.

USE COLOR-FAST MATERIAL.

The nicest feature about these sets is that they can be finished quickly. Many of them, those of colored linen particularly, need no trimming whatever. Often a group of contrasting threads pulled through the material above the hem suffices. Sketchy running-stitches, large cross-stitches, any of the various blanket-stitch or chocheted edgings, or a binding with fast-color material finishes the checked towelings. Plain crash takes to Italian hemstitching beautifully, and repays the extra work. Applique designs go well, as does the Swedish weaving on plain huck toweling. But whatever the trimming, make sure it is absolutely color-fast.

Edgings and borders work out best on towelings. The best place for an initial or embroidery motif on the place-mat is at the top centre where it will not be covered with the china or silver. Smaller motifs can be put in corners. Runners should be treated to match with an eye to the set table.

Hot-iron transfer-patterns for initials and motifs are issued by many of the large pattern concerns and can be purchased at any pattern agency. There are many pretty designs in cross-stitch, too, that are easily copied from the patterns. Simple geometrical designs are worked in white cotton or colored linens with good effect. To do these, draw rings or squares, using a spool or small box for guide, then work over the penciled lines in brier-stitching.

Runners for round or oval tables should have the corners just meeting the table edge. A runner looks well only when it hangs over straight

edges. In measuring for the round or oval table allow four inches less than the table width for the finished runner. Thus the 48-inch table will take a 44-inch runner. This makes a pleasing arrangement when used with mats measuring 18 x 12 inches, finished.

WASH MATERIAL BEFORE CUTTING.

Four mats (12 x 18) and one centrepiece (18 x 18) cover a round table which is enlarged by replacing the centrepiece with a long runner. A short runner and two mats make places for four, and four mats make places for six. The three sets will take respectively four and three-fourths yards, four and one-fourth yards and four yards, allowing about three-fourths of an inch for each hem and calculating on a 48-inch round and a 64-inch oval table. Allow several inches for shrinkage and wash your toweling before cutting. Napkins to match can be made 18 inches square.

And lastly, a word for the old, scarred table-top. The most hopeless table can be done over by removing the old finish, by filling, staining (if necessary) and giving it three coats of varnish; for the last coat use one of the well-known waterproof varieties. Always rub down between coats of varnish with powdered pumice and rubbing-oil, put on with a piece of old burlap. There is no better protective treatment for the table than the one you give your automobile: the special cleansing with soap paste to remove slight scratches and hot-dish marks, and a rubbing down with a waterproof wax. This gives that clean waxy surface that can be wiped off after meals.

It is really gratifying to see how many unsightly water spots can be removed from delicate garments in this manner.—G. E. H.

One cause of rapid breaking-line wear, especially in these days of four-wheel brakes, is loose wheel bearings. Wheel bearings should be adjusted so there is no perceptible play in them. Furthermore, if the rear-axle shaft is sprung or if because of loose bearings or for any other reason the wheels do not run true, the trouble should be corrected, for this wobbling motion tends to wear out brake-lings prematurely.—E. H.

I have found that a few feet of galvanized water pipe about four feet in diameter can be used as cribbing in a pump well. This saves the work of making concrete or wood cribbings and the pipe is as good as permanent.—A. G. H.

Cutting down on feed is not the best way to avoid the spring surplus of market milk. Cows continually underfed during the early part of their lactation period permanently lose their ability to produce large quantities of milk.

Quantities of milk. Cow-testing figures bear this out. Of twelve dairymen in a Middle-Western association, seven fed less than \$30 worth of grain per cow in the course of a year, and five fed about \$60 worth. The seven received for the year an average return per cow of \$77 over feed cost. The five, by spending twice as much for feed, got an average return of \$176 per cow over the cost of feed.

There is a better way to avoid the glut of the spring market with its low prices. Have the cows freshen throughout the year instead of all in the spring.—C. R. W.

should lead us closer to the Master, and which at the same time should issue in a more practical Christianity.

The Spring Surplus.

Removing Rain Spots.

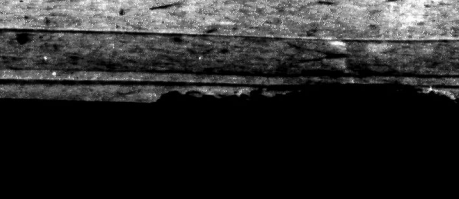
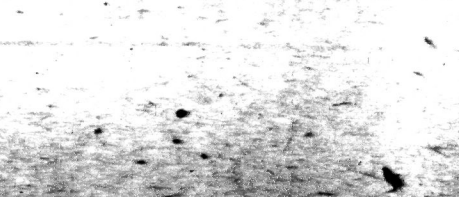
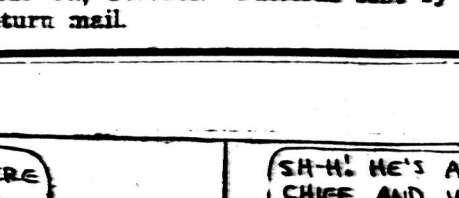
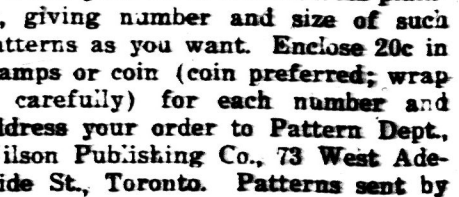
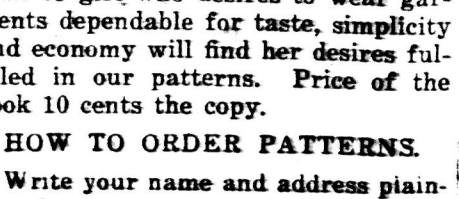
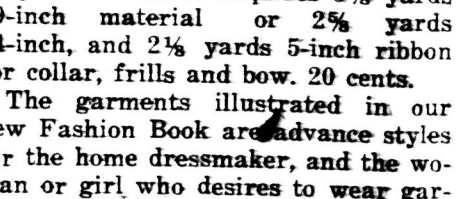
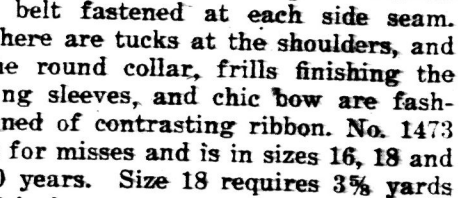
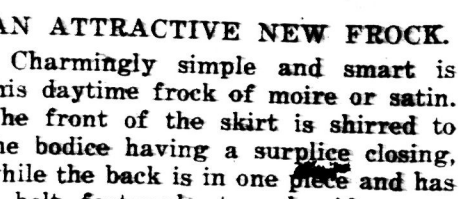
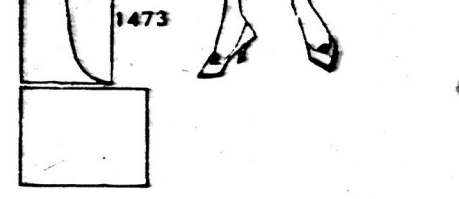
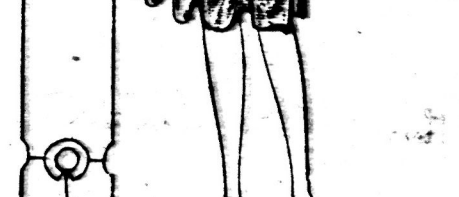
Rain spots and similar watermarks on crepes and other fine fabrics are seldom, if ever removed by cleaning in gasoline. If one does not care to risk the use of a cloth dampened in distilled water, the best method to employ is "dry brushing."

I learned this from a practical dry cleaner and the work is so simple and easy that anyone can use it with astonishing results.

The spotted portion of the garment is drawn over the padded surface of the ironing board and pinned in place so that it is perfectly smooth. A discarded toothbrush, or any fine, stiff bristle brush, is then employed to brush briskly across the "grain" of the fabric.

It is really gratifying to see how many unsightly water spots can be removed from delicate garments in this manner.—G. E. H.

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