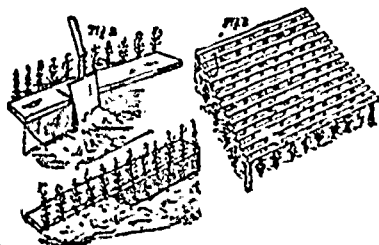


Forestry Matters.

HOW TO RAISE EVERGREENS.

The best possible time to plant evergreens is in the spring when the ground has become warm and mellow, usually about corn planting time. Great care



should be taken to have the ground in proper condition for planting. mellow soil that has been cultivated to some hoed crop will do. Spade it deep, rake it fine and level, lay out beds 4 ft wide, drawing a garden line along each side, lay a board across the end of bed and cut a trench, as shown in the lower left-hand figure. Place the plants in the trench, filling in moist soil, and tramp firm.

Lay a board down and cut the next trench. Put in the next row the same as the previous one and proceed with the planting, and after shading the bed will appear as in the right-hand figure. If one, two or three-year seedlings are planted, they should be shaded as shown. While hoeing and weeding the plants, the shade may either be removed from the bed or raised. One, two and three-year evergreen seedlings should be planted 2 to 6 in apart. In the row, according to age and size. In planting it is well to use a board from 6 to 10 in wide.

Keep free from weeds, the ground mellow, and the growth they will make will be surprising. After they have had 2 yrs growth, plant where you want the shelter, have the soil in good, mellow condition, just as you would to plant corn; cultivate as you would corn, hoe them thoroughly and don't let a weed grow near them. The frames for shade are made of strips 1x2 in and lath nailed to them 1 in apart. If transplanted plants are used, the shading is not needed, although a little straw or hay should be sprinkled over the tops to shade them for a few days.—[D. Hill, Kane Co, Ill.]

TAPPING WORM-EATEN MAPLES

Whether or not to tap will depend upon circumstances of which the sugar maker is the best judge. Sugar is the reserve food of the tree stored last season to feed buds this coming spring. The amount of sugar taken from an ordinary maple tree by tapping is from 2 to 4 per cent of its total sugar content. This is so small a fraction as usually to cause no appreciable loss to the tree. But if the tree has been so badly eaten by worms during the past seasons as to have its life endangered it might be undesirable to make even this small drain, which would somewhat decrease the chances of life for the tree.

All the stored sugar was manufactured in the green leaves last season. If those leaves were eaten by worms there would be proportionately less sugar in the sap, and in case the damage to the foliage was really serious the sap will be of so low a quality as regards sugar content that it will not pay to tap the trees in any case. On the other hand, if there is enough sugar present to make tapping profitable then there is enough so that the removal of the 2 to 4 per cent will not appreciably affect the tree. The safest way for one who is in doubt is to determine the quality of sap from his trees, selecting several representative trees and taking samples from these before tapping all. If the sap is of good quality he may safely tap. If, however, it is of poor quality—that is, deficient in sugar—it will be both unsafe and unprofitable to tap.—[Vt Exp Sta.]

An Error Corrected—F & H April 1 contained an illustrated article on measuring height of a tree by means of triangle attached to a stake. The exact height of the tree should equal the distance from the tree to the stake, plus the height of the stake, provided the top of the stake was exactly even with

the upper acute angle of the triangle. Of course if the tree leans, the measuring apparatus must be given the same inclination.—[A. Faul, Denver, Mo.]

Trees Properly Pruned, in which small and shaded growth in interior of top is cut away, are not so apt to be attacked by insect pests as those left to themselves. Shaded branches, like shaded plants, being unable to perform assimilative processes perfectly, are, by the enfeebled conditions thereby entailed, apt to become harboring places, from which armies of scales will sail forth whenever the physiological condition of the tree is for any reason deranged. For similar reasons, groves in which trees are adequately spaced are more immune than those in which they are crowded. It is almost impossible to lay too much stress upon the necessity for free circulation of air and the admission of sunlight.—[Prof H. A. Gosard, Fla Exper Sta.]

The bulk of Wis and Mich lumber lands are owned by lumber kings. Economy in production is being practiced as never before. A few years ago a tree was not cut without it made one big or two smaller logs, now anything from 4 in up is used. Pine and hemlock are going fast and cedar is now being cut in large quantities. Gang saws cutting from 5 to 20 boards from a log at one time do rapid work. Band saws on wheels 8 to 10 ft in diameter are now in quite general use.

Yale university, New Haven, Ct, is to have a school of forestry. H. S. Graves, Yale '92, is dean. A large tract of land in Pike Co, Pa, will be used for practical demonstration.

The Handy Mechanic.

LAYING A DRAIN.

First of all, an ample outlet must be assured. Underdrains work wonders on wet land even if laid on a level, but some fall toward the outlet is to be desired if possible. A main drain must be located into which the laterals must empty, where tile is used. A 4-in main with 1½ to 2-in laterals will do excellent work, but a large volume of water might be better accommodated with a larger main. If there is no running brook on the land which must remain there and there is an inclination of the land in one direction the work can very easily be laid out as follows:

It is undesirable to have laterals empty direct into an open ditch or brook. If labor is cheap and tile high it will be economy to have laterals 4 ft deep and 40 ft apart, but if the conditions are reversed then laterals may be 3 ft deep and 30 ft apart. In digging drains the top or coarse material must be thrown on one side and the finer or lower stratum on the other. This latter material must always be put back in the drain first and never the coarse, which must be put on top. If soft places are found in the digging, these must be either dug out entire to hard bottom and some firm material as gravel filled in to maintain the proper grade and fall, or pieces of sharpened plank driven into the soft bottom at intervals and a board laid in the bottom on which the tile can be laid.

Begin to dig at the outlet and either dig the whole main first, putting in a length of lateral at intervals where these side drains will enter, taking care to stand up a narrow piece of board which will keep dirt from going into the drain and mark the exact spot where later work will begin, or complete the main only as far as where the first lateral will enter, putting this in immediately and thereby advance the improvement across the whole field. Use tile with collars every time. An excellent and serviceable drain, especially where there is much wet, is made by nailing together 16-ft lengths of 6-in spruce fencing stuff laid upon a piece of board in the bottom of the drain to resemble the letter V inverted. This is one of the best drains, but the cost of the material ought to decide what to use.

The cost of draining must depend entirely upon circumstances. It will not cost far from \$40 p a. The benefits to be gained would be like comparing the profits of a frog pond with that of an acre of grass that will turn off five tons of cured hay to an acre the first crop. This is no exaggeration, and no extreme comparison, for it is perfectly easy to gain a result of this kind if the work

BOYS

We Set You Up in Business

We want boys for Agents in every town, to sell

THE SATURDAY EVENING POST

(Of Philadelphia)

We will furnish you with ten copies the first week. FREE OF CHARGE; you can then send us the wholesale price for as many as you find you can sell for the next week.



A handsomely printed and illustrated magazine, published weekly at

5 Cents the Copy

You can find many people who will be glad to patronize a bright boy, and will agree to buy of you every week if you deliver it regularly at the house, store or office.

You can build up a regular trade in a short time; permanent customers who will buy every week. You can in this way earn money without interfering with school duties, and be independent.

Send for Full Particulars

Remember that THE SATURDAY EVENING POST is 172 years old; the oldest paper in the United States, established in 1728 by Benjamin Franklin, and has the best writers of the world contributing to its columns. So popular that a hundred thousand new subscribers were added to its list the past year.

Address, The Curtis Publishing Company
Philadelphia, Pa.

is properly done and the cultivation as it should be.—[A. A. Southwick, Bristol Co, Mass.]

Stone Sidewalk—To lay a sidewalk in black ground mixed with clay, dig a trench 2 ft deep and 4 in wider than the sidewalk. Fill the trench with rock by breaking them in the ditch with a sledge hammer. The idea is to pack

them well in the trench as it is filled. Top rock must be knapped up very fine and left 1 in lower than the top of the ground. On this the rocks for the walk are laid and will not move by frost if properly done.—[W. A. Sharp, Greenbrier Co, W Va.]

Top grafted trees bear much heavier than nursery stock.—[J. T. Graham, Vandeleur, Ont.]