Propagating Forest Timber, Especially Nut-Bearing Trees.

BY HENRY IVES, BATAVIA, N. Y.

Editor FARMER'S ADVOCATE,—I have been very much pleased and interested in perusing the able prize article on the very important subject of growing the nut-bearing trees, and I would add a word or two in favor of (artificial) plantings for groves and belts of timber, all of the most desirable kinds of our native timbers, also a few others which, though native of other countries, prove to take kindly to our soil and climate, such as the Scotch Larch (tho' not an evergreen), Norway Spruce, among the evergreens; the Norway Maple, the Swiss Linden, and, possibly, some kinds of foreign oak, among the deciduous trees.

Many of us can remember when "a man was famous according as he had lifted up axes upon the thick trees," but in time this business was carried too far, and before an agricultural community was scarcely aware of it, the face of the country had been so far robbed of its native forests, which were its natural protection, equalising and utilising the effects of sun and wind and rain, and they were obliged to encounter winds and drought and floods, in consequence of their reckless destruction of the native timber growth. Then, when first realising their situation, they saw that their forests were gone, and it seemed as though their loss was irreparable, but some of the more enterprising ones commenced by planting some trees for shade about their buildings and along the high ways, and finding these to grow so well, it is quite common now to see groves and heavy double rows for shelter belts, and plantings for shade and ornament and protection along the windward side of fields, around orchards, and on the lawn, on many of the best farms througnout the country, and with those who have gone still further, and tried it, they demonstrate the fact that a judicious planting for timber growth is not only practicable but profitable, for it will better ensure the growing of the most thrifty and profitable kinds, but they will be placed where the stand of timber growth will do the most good, and be most ornamental to the farm, and they usually grow twice as thrifty as native growth in the reserved woodlot, besides having a stand of two or three times as many trees growing to the acre on grounds thus planted. This, I have found to be so practicable, that within the last thirty years I have on two farms wholly removed the old timber growth from the native wood lot as I found it on the farms, and have replaced them by planting much more timber, though on fewer acres of land I planted many kinds that were more valuable timber than the native stock, and with a judicious mixing of the kinds am more economical of space than a natural growth generally is. For intance, with the nut-bearing trees I plant alternately in the row the oak, the black walnut and the hickory. With these the black walnut will first obtain a growth, so as to be removed in twenty to thirty years, and the oak might remain to wholly occupy the land after this for one hundred to two hundred years, and so with planting all the other kinds, it is economy to alternate the fast growing ones with the slow growing, so as after a time to give up the land to them, or what is better, as the first ones are removed fill their places with a native cedar or some evergreen. The effect will be fine, and their growth very practical, and this whole plan of planting for the timber growth on the farm always proves to be more satisfactory for those who have tried it than the original growth of native timber, as we usually find it left on the back end of the farm.

Besides the addition of many nut-bearing trees and evergreens that are not natives of the soil, but will make valuable and ornamental additions to the products of the farm, I would say, too, for the encouragement of the farmer only just commencing these improvements on his premises, (and every farmer should at once, if he has not) that my latest principal planting, some eighteen years ago, covering a few acres, and including many thousands of trees, both for timber and nut-bearing trees and evergreens, for timber lot and groves and sugar orchard and lawn, besides heavy double rows along the bordering highway, the first thinning out of these (for they were first planted thick in the row) brought me in a few hundred dollars, selling for others to plant, and for the last five years the thinning out and the trimmings have furnished quite an amount of fuel, and the trees now stand about three hundred to the acre, and about 30 feet in height, in rows one rod apart, with an orchard grass turf under all. Planting these where they will protect the orchard and buildings from the westerly winds, and in belts along the windward side of the farm, I have as the result more than twice the timber growth, and more than twice as thrifty a growth, all on less than half the ground occupied by the former wood lot, while that has been cleared and given me my best tilled land for some ten years past, and the black walnuts have given me fruit for about that time, and the farm today is much better provided with timber than before, besides the sales of trees have well paid for the use of the land so far.

Now as for the advantages of planting the nut-bearing trees, Mr. Editor, your correspondent in the article referred to has set that forth so much better than I could, that I only wish to endorse all that he has said in advocating their merits, but would not wholly follow his advice in the planting and management in growing them; he says it is sound advice which almost all writers give, "that the nuts should be planted where the tree is to grow," and this on account of the long and strong tap root, which, he says, "looks as if it was a skewer thrust into the soil to keep the top from turning over." Now quite likely he may be right in this, or if not, then there surely must be some other just as good reason why nature's law should always provide this tap root for all her nut-bearing trees, and I would not, just to suit the convenience of transplanting, or for any other reason, undertake to regulate nature in anything so essential as that "skewer" appendage seems to be, and, in fact, I believe that the most and the best that we can do, either in horticulture or agriculture, is to assist nature in best developing such plant or growth as we may wish to propagate, and believe that if we venture to break one of nature's laws in so important a matter, we do it at our peril in transplanting these trees, as we do others; we will first encounter more or less difficulty with the top root, and then many of them will die, even after lingering along for a year; others will make only a feeble growth for the first few years, while most of them will lack that robust and healthy growth shown by these trees growing in their native seed-bed. I have found by experience that two ways of planting and one of transplanting are reliable in propagating the nut trees, first to have a seed-bed prepared in the fall, where it is designed the trees are to grow, and plant them soon after they fall from the trees. To do this, if in a black soil, mark for the row two or three inches deep, drop the seed two or three nuts to the foot along the row, and procure a light-colored sandy loam to cover them with, about one and a half inches deep, thus shallow so they can feel the effects of the winter freezing, else they will not grow, and being covered with such soil the rows can readily be seen for cultivating in the spring before the trees are up, which is quite important to do, as they are late in germinating. Another way for planting in the spring is to spread the nuts on the ground, say on the lawn near the house, cover with a slight litter of straw or brush, and after keeping and freezing properly here they will be in good condition for planting out in the spring, where they are to grow. But in case the planter is in a hurry to get these trees started, but wants a year to properly prepare the ground, he may plant these nuts in nursery rows quite thickly, to be carefully taken up (top roots and all), and the first fall or the following spring transplant into the rows for permanent growth, and there they might grow one in two or three feet at the first, but the rows should be a rod apart, and these rod strips tilled to corn and potatoes for a few first years, then after trees are growing well, sow them to orchard grass, and mulch the trees enough to keep them free of grass or weeds about them. In this way every farmer can easily propagate all such trees, and in doing so will add greatly to the value and attractiveness of the home farm.

Planting the Walnut.

In spite of the high price of black walnut timber and its great scarcity, there is one consideration which prevents the general planting of the tree. It will not flourish on thin soil, says the Philadelphia Press. It only reaches its best development upon deep rich land, which is so valuable for agricultural purposes that no one wishes to set it apart for a crop that will be the best part of a century in maturing. It does thrive, however, in certain rich clay bottom lands of the West, which are too low for the production of corn or wheat. Even an occasional overflow does not seem to injure it, and Dr. Berry suggests that these slough lands can be utilized for walnut planting. Since the stumps of black walnuts that were cut and burned to make room for corn have since been dug out and sold by the pound, the planting of these low lands would seem to be worth a trial.

Dr. Daniel Berry writes some interesting memoranda to the St. Louis Planter to illustrate the power of these woods to resist decay. In the Wabash bottoms lives a man whose business for years has been the manufacture of shingles. As the standing timber of these varieties became scarce in his neighborhood, he hit on the novel expedient of hunting for it under ground, much in the same way as cedar logs are hunted for in the marshes of the Jersey coast. He got an iron rod and went about probing every long mound of humus and sand that looked like the grave of some ancient monarch of the forest. Strange as it may appear, he finds only the three kinds of timber—catalpa, black walnut and sassafras—in these mounds, in the order named. He has become an adept in the business. He says these are the only kinds of timber that will last long enough to enable the moss and other growth to cover and hide them as he finds them. Dr. Berry's house is covered with catalpa shingles, part of which were made from a log that, he says he has no doubt, laid on the ground a hundred years.