

GROWING TREES IN DRY AREAS.

BY PROFESSOR THOMAS SHAW.

THE care called for in making a success of growing trees in dry areas is in a way proportionate to the dryness of the climate. It is also influenced by the character of the soil and subsoil. This paper will deal with conditions where the land is not underlaid with hardpan coming up near to the surface. Where the rainfall is short and where hardpan comes near the surface, it is very difficult to grow trees in the absence of irrigating waters. But fortunately these conditions are not very prevalent in really dry areas.

On the dry prairies of the West it is greatly important that trees shall be grown. These treeless areas are more or less wind swept. In the winter the absence of a protecting grove in such areas adds greatly to the discomfort of the inmates of the home and also to the discomfort of the live stock. While in areas that are very dry it is not to be expected that trees can be grown in large numbers and with marked success in providing lumber, they may be made in time to furnish posts and poles and also some firewood. The greatest end, however, by far to be served by them is to furnish protection against the winds. To furnish such protection should be one of the very first considerations of those who locate on the treeless prairie. It is in a way incomprehensible that so many allow long years to pass without taking any steps to protect the home in this way.

Many who plant trees in the dry country fail. They fail through the adoption of wrong methods. The plan is common to dig a hole in the prairie and where a tree is to be planted. This means that the soil around that tree cannot be cultivated unless the cultivation is done by hand. This is too expensive and it is liable to be neglected. Trees can be grown on the prairie and bench lands where the annual rainfall exceeds twelve inches, but the work if it is to succeed must be done in a certain way.

When trees are to be planted in such areas, the ranchman should prepare the land the year before he plants. He should do so to allow the moisture to go down into the soil. The roots of a tree cannot go down into the soil in advance of moisture. He should do so to put the land in shape for future cultivation on the surface after the trees have been planted, and he should do so to make success more sure after the planting.

A strip of land should be broken on

two or three sides of the buildings. The grove should not be placed so near that snow will pile up against the buildings or in the yard, should they drift over the trees. The width of the strip should be gauged by the number of the rows of the trees, but it should be wide rather than narrow. It should be deeply broken and when the ground is quite moist. If the subsoil can be made to follow the plow the conditions will so far be improved. A dust mulch must then be kept on the land throughout the season.

The following spring the trees should be planted, and as soon as the ground is dry enough to be stirred without injury to the same. Open up a furrow, plant in the same without cuttings about a foot long of the white or gray variety. Put these in any three feet apart. Slant them a little in one direction along the line of the furrow. Then fill in the earth around them and firm it, but leave about three inches of the cutting above the surface. The first row should be five or six feet from the outside of the broken ground. If a second row is planted it should be twelve to twenty-four feet distant from the first row, or if some other kind of tree forms the second row, it should be equally distant, as snow will pile in there. The trees should be of some quick growing kind, as cottonwood or Norway poplar, and they should be planted about twelve feet distant in the line of the row. Between each two of these should be in the line of the same row, some slower growing tree as the green ash. Next row may be about ten or twelve feet distant, and the trees in it may be the same. Usually three or four rows will suffice. The soft, quick growing trees will force the slower growing to push upward and in due time the quick growing varieties may be cut out. All the trees should be planted when they are quite small, and the roots should be shielded from exposure to the air.

The ground should be cultivated like a corn field for several years. All weeds and grass must be kept out. Either will rob the trees of moisture. If asked how long should the cultivation be kept up, the answer is until the trees are large enough to form a mulch of leaves. The cultivation should usually be shallow, but if a crust should form three or four inches below the surface, it should be broken. The aim should also be to secure the trees somewhere near the same parallel.

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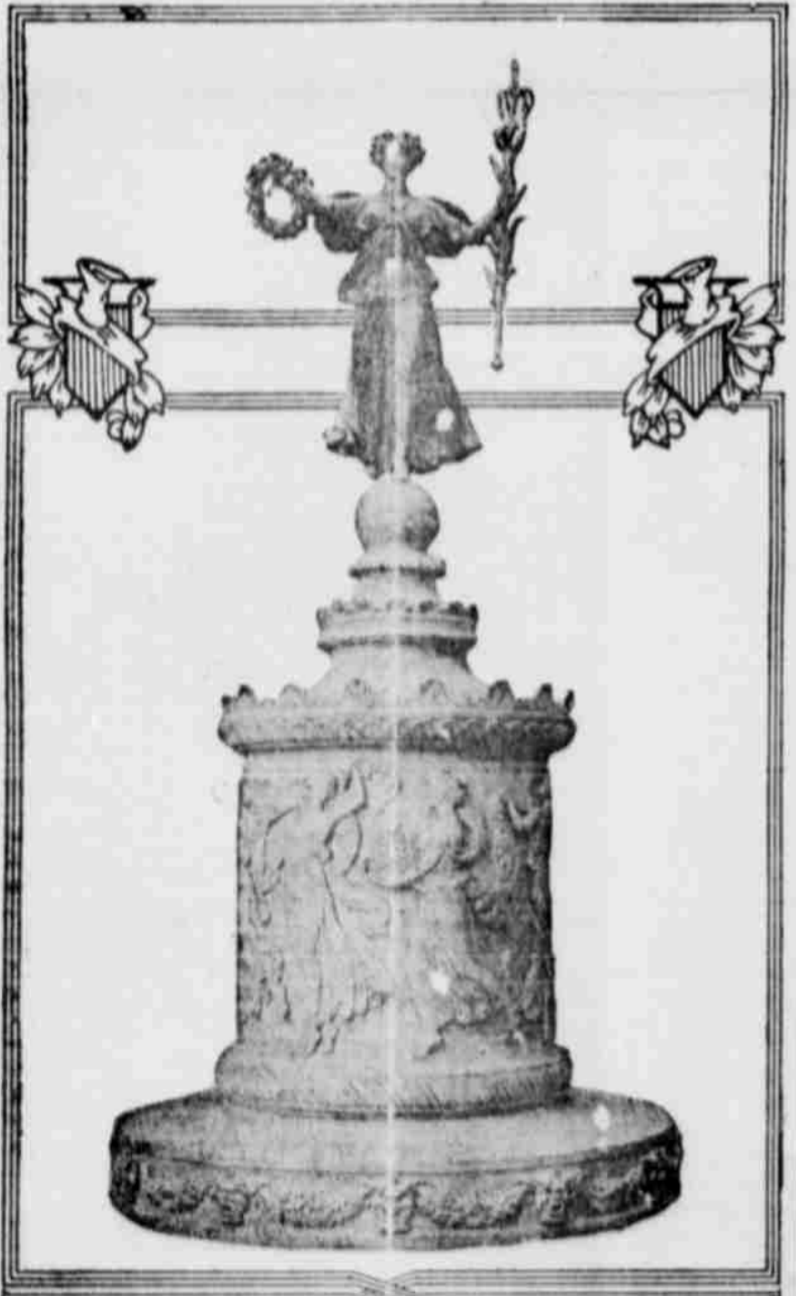
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