

Tree Planting.

By PERCY J. SHAW, Agricultural College, Truro, N. S.

The chief object of Arbor Day is to interest the children in trees and to impress upon their minds the value of forests to the welfare of the nation. To this end they should be led to discover something about forests by their own efforts, and if possible they should have something to do with trees. Much of educational value, and incidentally of useful information, may be taught in connection with the planting of a few trees on Arbor Day.

Some time before Arbor Day arrives, attention should be called to the importance of forests as a source of wood which is used in so many ways, and as a reservoir for water which it catches when there is an abundance, and gives out gradually to the streams later when there otherwise would be a shortage. The special conditions of the forest should be noticed, such as the canopy, the carpet and the atmosphere of its own. Its use as a home for birds and other wild animals might also be pointed out.

Attention should be drawn to the planting of trees around houses, and the object of such planting. Trees are planted here to please the eye or to afford protection from the hot sun in summer or cold winds in winter. The deciduous trees, as maple, birch, elm, ash, poplar, etc., are chiefly used for shade, and the evergreens as spruce and pine for shelter. A good arrangement of these trees is one which helps to form a picture with the building as the central object and the trees forming the background and framework. In the Arbor Day planting the trees will naturally follow the boundaries of the school ground, and be in straight lines if these boundaries are straight. But if shrubbery is planted, three rules of landscape art are useful. Keep open centres, plant in masses, and avoid straight lines. Flowers will look well around the borders or the basement of the building, but should not be put in formal beds in the centre of the lawn.

Most trees for Arbor Day planting are obtained from the forest, usually they are selected and dug by the older boys of the school. Notice and account for the difference between the forest tree and the same species growing in the open. In which case is the character of the tree best shown? The size of maples usually selected for planting is from one to one and a half inches in diameter

at the butt, and from eight to twelve feet in height if they have been crowded in their growth. A good size for evergreens is from eighteen to twenty-four inches in height.

The trees should be dug with care, leaving the main roots eight or ten inches in length and without breaking or splitting them from the trunk. The roots should not be allowed to dry. This can be prevented by covering them with damp bags or with moist sphagnum moss as the trees are dug. If the trees are not to be planted for a day or two after being dug they should be heeled-in, or the roots well covered with fresh earth, near the school ground until the time of planting. The same care should be exercised to keep the roots from drying up when the trees are being planted as at the time when they were dug.

Before planting, the tree should be pruned by shortening any long roots to about the same length as the others, cutting the ends from below upward and outward, and leaving smooth cut surfaces, and by shortening the main trunk, if a maple, to six or eight feet in length, and taking off any large branches, leaving a few small twigs, if there are any, to help form a new top.

The reason for taking off so much of the top may be readily understood when it is borne in mind that over half of the root system of the tree has been lost in the transplanting, and that the part which is left has not yet formed a union with the soil. New fibrous roots must be formed before the root system can take up nourishment from the soil, and even then it cannot push out the same number of buds as the original roots could. Hence the top must be cut back to balance the roots.

The hole should be dug somewhat larger than is required to admit the roots, and the tree should be planted two to three inches deeper than it stood in the forest. This extra digging loosens and pulverizes the soil in the vicinity of the new roots and favors their development. When a tree is planted a little deeper than it stood before, the root system is placed in moister soil, but it should not be planted too deep. Which soil is moister, the forest soil where the tree grew or the soil of the school ground? Why?

In digging a hole for a fruit tree it is usual to place the top soil in one pile and the subsoil in another. Then in replacing it a shovelful or two of surface soil is first put in the bottom and the