

down at once, keeping 4 to 6 feet in diameter spaded and hard around each tree. The first disease that attacks young trees generally is the Bark Louse. They are easily destroyed by scraping and washing with soft soap. For young or old trees there is no wash that I know of equal to this, and it should be applied at the latter end of April, before the buds begin to swell.

PRUNING.

Pruning properly considered, is one of the most important operations connected with the growth and management of trees. In this country almost all fruit trees are grown as standards, that is to say trees having 5 to 6 feet clear stems. In this way they develop their natural forms, attain their largest size, and produce the greatest quantity of fruit with the least care. Orchard pruning may be considered the simplest and plainest of all pruning. There are many erroneous notions that it is a mere mechanical operation that any man can perform, and that, in rare cases only it is necessary. Nature, they say, never prunes, and why should we? There is no such thing, in reality, as growing well shaped, symmetrical trees and plants and sustaining them in a vigorous and fruitful state, without pruning. A tree is composed of a multitude of parts, each of which has its functions to fulfil, and all these parts bear relation to each other, and to the life and growth of the tree.

Trees have roots and rootlets, stems, branches leaves, and buds, all of which are designated by certain names and have distinct offices to perform in the process of vegetation and fruit bearing. The intelligent cultivator must be familiar with the names and functions of all these parts, the peculiar structure, mode of growth a bearing of the different genera, and species, and varieties. Every man of experience will endorse this statement—the pruner should know well what he does and the precise reasons for so doing.—Pruning is not lopping off a branch at random; but every cut that a pruner makes upon a tree or plant should be guided by a knowledge of the habits of growth and blossoming and bearing of the subject, and have a well-understood and determined object in view. A feeble tree and a vigorous one must not be pruned alike. By way of illustration, I may here mention as a general rule, in all nurseries where trees are cultivated for sale, that pruning is one of the principal modes of cultivation. We take a seedling from the seed-bed, or a cutting from the nursing-bed, to transplant into stationary or nursery rows, and it is an invariable rule to cut back both the roots and tops, according to what their habit may be, to cause them to increase both the size of the rootlets and shape of the tops, which is done years in succession, until they are considered saleable and fit to plant permanently. After leaving the nursery, too much neglect, in many instances, has been the case in not attending to the preceding rules of cutting, or what is termed heading back the tops, of the shoots or young branches, one half of the young wood of the preceding year, also shortening and cutting in the long thick roots, to cause them to establish and furnish the heads with fresh shoots of young wood, from whence the cultivator can obtain the desired effect of it in a proper position. This is one of the principal objects to insure a successful growth after planting. It is no uncommon occurrence for one to plant trees as posts, neither cutting roots nor tops; consequently the extreme points are exposed to the influence of the weather, which has the effect of drawing up the sap from the roots too rapidly, consequently when there is no check from not being headed back, the wood dries up and the tree dies. I might here mention that there is another bad practice in the operation of pruning, that is to say, when a person applies the knife to a branch. The thought does not strike many that are not acquainted with pruning, that there is any particular mode of cutting a shoot or branch off; now what I alluded to is that the cut should be clean, drawing the knife from heel to point in a sloping position, and the cut to be made from the opposite side of a bud so as to leave no more than a sixth part of an inch of wood, or less, if possible, to heal over. Pruning is therefore commonly resorted to only for the purpose of increasing the vigour of feeble trees, or to regulate and improve the form of healthy, luxuriant trees, when established, to cause them to fruit. Pruning in general applies to all trees or plants less or more. We very frequently see the difference between some that have been pruned and some that have not. Pruning should invariably be done in this country in the month of April, when the severe frosts are over.

Since writing the above I find that I have extended my remarks more than I intended to have done; therefore, I leave some time for discussion, I consider it better to reserve the last three subjects mentioned above, namely: Manuring and after-management of an orchard; Diseases, &c.; Costs and profits of an orchard; to which may be added a few