

PRUNING THE ORCHARD.

PRUNING is a means to an end. In the practice of pruning there should be in the mind of the operator, some definite purpose in view. The kind of pruning will depend on the purpose for which the tree is intended, whether for wood, for fruit, for shade, or for ornamental purposes.

NATURAL PRUNING.—Trees under natural conditions are constantly being pruned. Every fall nature strips the trees of their leaves. This is their regular annual prun-

ing knife, comes along and removes the dead branch. In this way trees are constantly ridding themselves of useless branches, and the pruning so effected is undoubtedly a benefit to the branches that remain, and to the general growth and improvement of the tree.

ARTIFICIAL PRUNING. The trees of the orchard by virtue of selection, hybridization and cultivation are in a highly specialized condition, and to be maintained so must receive special treatment. The fruit tree is in

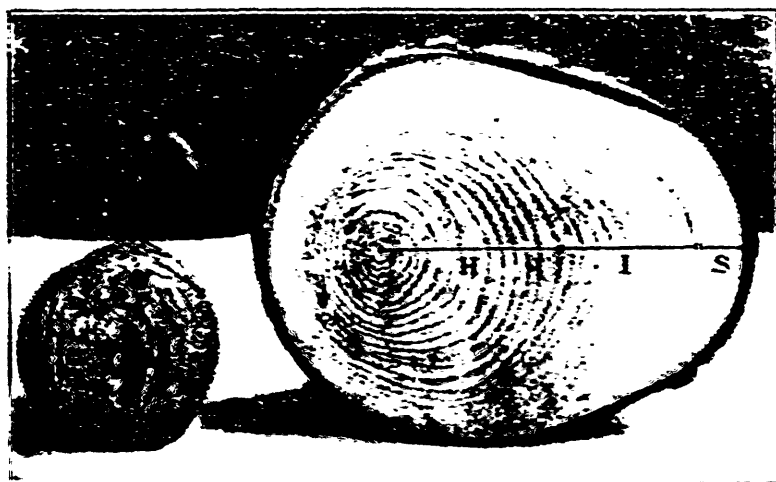


FIG. 2216.

FIG. 2217.

FIG. 2216. A pointed wood almost healed over.

FIG. 2217. Cross section of trunk of apple tree. S—Sapwood, H—Portion changing from Sapwood to Heartwood, I—Heartwood. At the outer end of the line is the thin cambium layer under the bark.

ing. Besides this, there is a continual pruning of buds and branches. If every bud on a tree were allowed to develop, the tree would become a veritable brush-pile. The buds most favorably situated as regards light, get most nourishment, and the less favored become starved and drop off. The lower limbs of trees and those within the crown become weakened and die from lack of sunlight; then the wind, nature's prun-

ing sense a machine for manufacturing fruit, and intelligent pruning is one of the means by which it can be made to manufacture the most fruit of the best quality in the shortest time and to keep up the output for the longest possible period. A correct understanding, therefore, of this machine and all its working parts, is necessary to its most successful manipulation.

STRUCTURE OF THE TREE. If the trunk of