

APPENDIX No. 1

arsenic and paris green agitate thoroughly. Now you are ready for the orchard and keep well agitated and a good pressure. Always clean out lime box with water every time after using. Always pump some clean water through your pump, nozzles, &c., every night when in use and keep tank well cleaned out.

A great many of our orchardists in Ontario will this year use concentrated lime sulphur and arsenate of lead for second, third and fourth spraying. Good result was obtained last year by using this formula, prepared as follows:—With foliage on the tree concentrated lime sulphur giving a 32 degree Baume test dilute 32 part water and 1 part concentrated lime sulphur, adding 3 lbs. of arsenate of lead to each 50 gallons of the mixture. Some also add five pounds lime to 50 gallons of mixture. If Baume test is 33 dilute 33 parts water 1 part lime sulphur. In other words divide Baume test by one when the trees are in leaf. It is very necessary that you have a hydrometer showing that Baume and specific gravity test if you use lime sulphur.

Thinning of apples.—This should begin not later than the last week in July. All heavy loaded trees should certainly be thinned and the better the thinning is done, the better will be the quality and better the price: besides, it is not such a heavy burden on the tree. A small apple has just as many seeds as a large apple, and it is the seeds in the apple that take the large amount of plant food.

THE CARE OF A YOUNG APPLE ORCHARD.

First: Location and soil.—A good orchard soil possesses at least three strong characteristics: good water drainage; good texture and plenty of plant food.

Preparation of the soil.—Before starting to plant, the soil should be deeply ploughed and thoroughly cultivated.

Purchasing of Nursery Stock.—Other things being equal, it is best to buy from the nearest nursery as the stock is usually acclimated and better adapted to the location than stock grown under different conditions. Buy only the very best from reliable nurserymen; second class stock and culls are dear at any price and should never be planted; diseased, stunted or injured trees rarely if ever develop into a first-class tree.

Distance apart to set.—33 feet apart is customary in Southern Ontario for winter varieties of apples. My own orchard is planted for permanent varieties 40 feet apart, and in the centre of each square is a filler apple tree giving 54 apple trees to the acre, and then I have a peach tree placed between each apple tree, giving me 54 peach trees to the acre. The marking of your orchard is best done, if your field is fairly level, by the use of a No. 12 galvanized iron wire; first with a square, two boards and stakes; square your field then stretch your wire with even pressure with stakes at each end, drive slanting or pulley and block across the field, then get a coil of small brass wire and wire pinchers. If you are planting your trees 33 feet apart, wind firmly around the No. 12 galvanized wire at about 12 feet from the end four or five rounds of this small brass wire, pinch down firmly and put on some white lead so it will not slip. Repeat this every 33 feet across the field (use a steel tape or measuring stock for measuring), leave two or three days to dry well, then place a few cross sticks over this wire so it will not get out of line, and you are ready for the digging of the holes, so the wire knot will come in the centre of each hole, then place your tree so the trunk is against the knot, slant the tree to the west (owing to prevailing winds) and work rich top soil well around the roots and tramp in firmly. Always prune all bruised roots, leaving a smooth cut. Now you are ready to prune the tree.

The building of an apple tree should begin when the tree is first set. Give the tree the proper shape you want it to grow and cut back at least one third of all branches. All trees should be pruned each year, in order to shape them properly and not grow any waste wood. It is also necessary that these trees should be sprayed each year while the trees are dormant, with lime sulphur.