

"I have no use whatever for the Japans," said he. They are not good enough in quality, and he had found them almost as subject to yellows as the peach. He had considerable experience with them, but it was all unfavorable. He had tried an orchard first of Abundance, and then of Burbank, but had finally rooted them out entirely.

In growing Reine Claude he had found it apt to die of severe cold when root grafted or budded in the nursery, and thus having its own trunk. He much preferred this plum top worked on the Lombard, which gives it a good healthy body.

#### PLUM ROT.

*How do you destroy plum rot?*

In reply to this question Mr. Woodward stated that he began by gathering all the mummy plums found remaining on the tree in early spring, and burned them up. Then he sprayed his trees with weak Bordeaux, say 2 oz. to 50 gallons of water.

*Would it answer to plow them under?*

No; not nearly so well. They should be burned up, and thus the spores will be totally destroyed. Some varieties are much more subject to rot than others, and he had given up growing certain varieties, particularly the Washington, on this account.

#### LIME AND SULPHUR.

MR. WOODWARD would make this without boiling, by using caustic potash; and so far as tested it was just as effective as the boiled mixture. The same proportions of lime and sulphur were used; the lime was put to slake with hot water, and the sulphur added while slaking. After this was done, one-half pound of potash or one pound of caustic soda was added to every pound of sulphur. We were all much interested in hearing of any simpler method of making this valuable lime and sulphur wash than by the troublesome method of boiling, even if a threshing engine be convenient.

#### SMALL HOSE BEST.

ORDINARILY the spray pump makers provide a hose altogether too large. The smallest usually furnished is  $\frac{1}{2}$  inch, and when one has high trees to reach the weight of hose is unnecessarily heavy. Mr. Woodward never uses a hose larger than  $\frac{3}{8}$  of an inch in diameter. He elevates it by means of a bamboo pole, to the top of which he wires the hose, and continues it down for four or five feet. This he finds much more convenient than using the extension rods furnished by the pump makers.

#### SHALLOW CULTIVATION IN SUMMER.

CONSTANT cultivation was advocated by Mr. Woodward to open up soil to influence of sun and air, and to conserve its moisture by a shallow dust mulch all summer.

*How deep would you cultivate in summer?*

"I would not stir the soil more than two inches below the surface," said Mr. Woodward. "Just deep enough to keep down the weeds. I would not use a plow at all in an orchard if I could avoid it, but when necessary I would use a four-furrow gang plough early in the season." Deep ploughing, especially when the trees are in full leaf, cuts off millions of those little feeding roots which take up soil nourishment, and which should not be disturbed at that season. These are of annual growth, and so small that they escape the notice of the ploughman, but it is these tiny root hairs that are essential to tree and plant growth, and not those great branching underground stems which serve merely to anchor the tree and enable it to stand against wind and storm.

#### WORK OF THESE ROOT HAIRS.

TO discuss these minute organisms the aid of a pocket magnifier is needed. They form in the growing season in great numbers, developing just behind the root