

POWER SPRAYING WANTED.

There is no doubt that one half the spraying is so badly done that only failure could possibly result. The work is so dirty, so laborious and disagreeable, that the material is not properly prepared, nor is one-tenth of the leaf or fruit surface covered. Few orchardists seem to remember that only the parts covered with the mixture are safe from the tiny fungous spores which float about in the atmosphere. The time will soon come, we hope, when we shall have the professional sprayer, who will thoroughly understand his work, and who will take contracts for the season to do the spraying with a power outfit just as it ought to be done.

"It would cost me," said Mr. Fick, of Simcoe, "at least \$500 to spray my big orchard by hand in the way my neighbor Mr. Johnson has done his. I have fourteen hundred trees about twenty years planted, and to spray them as they should be sprayed, would be no small undertaking."

"With a power sprayer," said Mr. Alex. McNeill, the chief fruit inspector from Ottawa, who was with us, "it would not cost you nearly as much as that. With our gasoline engine, which we used in the orchards between Ingersoll and Woodstock, we found that one could take a contract for spraying an orchard of bearing trees at about three cents per tree, and that with such a power sprayer the work could be thoroughly done for about ten cents per tree for the whole season. At this rate," said he "this orchard of Mr. Fick's, containing 1,400 bearing trees, could be sprayed for the whole season for an outlay of say \$140."

AN IMPROVED BORDEAUX.

IN Great Britain and Europe during the past three years a mixture has been made with washing soda to neutralize the sulphate of copper instead of lime. It is claimed that this mixture adheres better

than the ordinary Bordeaux mixture. Tests were made at the Central Experimental Farm this year to learn how much soda was necessary to neutralize 4 lbs. of bluestone, and it was found that 5 lbs. were needed. The formula for the preparation of the soda mixture would thus be:

4 lbs. copper sulphate.

5 lbs. washing soda.

40 gallons water.

An experiment was tried to determine the value of this mixture as compared with the ordinary Bordeaux, but as none of the fruit was spotted no conclusions could be drawn. The soda mixture is well worthy of a trial, for although a little more expensive, it is more easy of application than that made with lime, and often good lime is had to get in the country.

IMPROVING OLD ORCHARDS.

WHILE spraying is the best means of insuring apple and pear orchards against fungus and insect enemies, it is only one of the conditions of success. Top grafting to proper kinds, pruning and manuring are too much neglected in Ontario orchards.

"Is my orchard too old to graft over to better and more profitable kinds?" asked a neighbor. The trees were not over forty years of age, and were good for another sixty years, so we replied that it would pay well, for the new scions would come into bearing within two or three years, and in a few years the trees would be entirely changed over.

"I can see the results of last year's thinning of the young wood on my Spy trees," said another. "I followed the advice given in the Canadian Horticulturist about pruning, and instead of beginning at the trunk and cutting off the large limbs I took a high step ladder and began at the outside of the trees and thinned out the young bearing wood only. I continued this method in to-