

AN OBJECT LESSON IN SPRAYING

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THE most striking object lesson in spraying that ever came under my observation was afforded this fall by a drive of about two miles out from the town of Simcoe. The photo-engraving given below represents very faithfully the difference between apples sprayed and not sprayed. Just outside the town of Simcoe is an apple orchard of forty acres belonging to a Mr. Quin Fick. Immediately across the road is another of twelve acres now owned by Mr. R. H. Johnston. Both these orchards have been planted between 25 and 30 years, and neither of them up to this year had ever been sprayed. Of the two the 40 acre orchard had received perhaps the better care; both had been pruned occasionally and both had borne ordinary crops. One year ago Mr. R. H. Johnston, an enterprising resident of the town, and a man of considerable experience in buying and shipping apples, bought the property on which the twelve acre orchard stands. During the month of February of this year he went among the trees and pruned them out severely, at the same time scraping all the old loose bark off. In the early spring, before the leaves came out, he gave them a thorough spraying with lime and bluestone, in the proportion of about 12 lbs. of bluestone and 18 lbs. of lime to 50 gallons of water. Asked why he used so much lime, he replied that he believed it loosened the old bark and in several ways benefited the tree. At all events he said it did no harm and had a cleansing effect. After the leaves were out he gave a second spraying of lime and bluestone, with Paris green and white arsenic added. This was repeated after the blossom had fallen, and nothing more was done till the fruit was ready to pick, except plow

the ground and sow it with cow peas. Altogether Mr. Johnston used about 1,700 lbs. of lime, 430 lbs. of bluestone, 20 lbs. Paris green, and 10 lbs. of white arsenic on his twelve acre orchard. On being asked why he used both poisons in such large quantities he replied that Paris green is oftentimes impure and uncertain, and he wanted to make a sure job of it. This latter, it seems to us, would have been accomplished with the arsenic alone even in less quantities.

Now as to results. This fall, out of thirty-five barrels of Baldwins, picked from the first rows, there was about one bushel of culls. The Spys would run even a less percentage of culls than that. From his twelve acres Mr. Johnston would sell nearly eight



FIG. 2703. APPLES, UNSPRAYED AND SPRAYED. hundred barrels at about \$2.50 per barrel, while his close neighbor, Mr. Fick, was selling his whole 40 acre crop at 75 cents a barrel in the orchard. The product of one orchard went to Chicago as prime Canadian fruit, while the other went to the local canning factory.

Prof. Zavitz, of Guelph, and myself walked through both orchards and picked what we thought to be a fair sample of the fruit grown in each. These I had photographed, and are shown in the cut above. I do not believe that a single barrel of No. 1 apples could be gathered in the whole unsprayed 40-acre orchard. And I do not believe there would be ten barrels of culls