

whitewashing outfit from a local concern, and got a man out there and he started the job at 15 cents a tree, and he worked the same as we all would, wanted to see how many trees he could cover in an hour. The first spraying did not prove successful. Finally Mr. Keiffer came to our assistance and showed this man how to spray, and the remaining four sprays were put on more carefully and a little more scientifically, and the final result was, we have had a fair crop of apples. Last year, 1919, we did not have an apple to put in the cellar in the fall, from 225 to 250 trees; there may have been a few, but the trees were so badly infested that we did not feel we wanted to try to store them, but this year I am pleased to say that we sold in the neighborhood of 200 bushels and we have a goodly supply in our cellar.

We are very much enthused over this project in horticulture and we hope it can be carried out. It is surely going to prove very beneficial in Dodge county, which was evidenced by the interest taken by the farmers at the Dodge County Fair. We had had inquiries from orchardists that really we owe to the display of our apples made by the Station or at the fair. The final decision of the Spring Brook farm is that we are ready to purchase a power sprayer for our own use and try to make a real orchard of our own, out of a farmer's orchard.

YOUNG MEN IN OLD ORCHARDS

MR. ARNO MEYER, Cascade.

(From Reporter's Transcript.)

I live in a section of the state that is devoted entirely to dairying. Every one of these old homesteads at one time had a large orchard which has gradually gone down to decay, until probably there is only one-fifth of the trees left. It is these old hardy trees that withstood the hardship of all these years that have appealed to me for aid. They have never received any protection from insect pests, diseases or decay.

My home is in the western part of Sheboygan county.

First, I rented some orchards of our very promising varieties and to these I applied a very thorough spray. My work was begun in the year 1916, and in order to carry the work along, I sprayed a few farm orchards as a side line. The following year I continued the work with about twice as many trees on the list. Then for the two years I was in service this work was neglected. Now, on my return there are so many requests to resume this

work, that this past season I have taken care of over 80 orchards, totaling a number at least 2,400 trees. To a great many people it seems there is a difficulty of securing enough work to occupy the entire time. If Mr. Keiffer were present he could verify that eight out of ten of our farmers are either spraying or willing to spray if they can get someone to do the work in this manner. I am giving them service which they themselves could not perform without neglecting their own farm work, and if this work were left to the farmers, at least 75 per cent of those who were willing to have the work done would not do it, because the orchards are either too small or their other work too urgent.

I cover territory of a radius of about ten miles. I have an equipment which consists of a large power sprayer mounted on a truck. With this machine I spray my own trees. The equipment is a large 3-cylinder sprayer, with a 200 gallon tank. I can carry 200 feet of hose to allow spraying in places inaccessible to the truck. At such times the drivers aid us in handling the hose. I use the 14 foot rod exclusively, all spraying being done from the ground. I carry a spray gun, but only use that in case of emergency when I break the rod. I find that the spray rod suits my work much better than the gun, because in spraying I cannot wait for the wind to change, that would mean 8 sprayings instead of 4, consequently I have to spray against the wind, and if any one has ever tried to spray against the wind with a spray gun I think they can appreciate the situation. These old trees average all the way from 25 to 40 feet in height, and when I take a contract for spraying I do not agree that I shall cover more than 20 feet above the ground, and the following season's pruning will remove that upper portion and they will be within range.

I use the standard spray materials, lime-sulphur and arsenate of lead, a gallon and a half of lime-sulphur and a pound and a half of arsenate of lead to 50 gallons of water. This will cover approximately 40 trees, that is, the 200 gallon tank. I make a charge averaging about \$1.00 per average sized 35-year-old tree and this includes four foliage sprays.

Now, in regard to the pruning,—these are trees none of them under 35 years of age, and some of them probably 70, and from indications you would judge that these trees had never seen a pruning, the only branches ever removed being those that had

died and were easily reached, or those that were injured and removed with an axe. Some of them were nothing but a dense brush. Now, it is difficult to go up to a farmer and ask him to spend money for pruning, for dormant spray and foliage spray, because if he has 40, 50, 60, 70, or even a hundred trees, that would be quite an expenditure for him, without being absolutely certain of any returns, so the first season I only urge him to make the foliage spray. After he has once seen the results of these foliage sprayings, it is an easy matter to get him to request pruning and dormant spray.

Up there they take great pride in their farms and everything that goes with it, and they want their families to have the same fruit that they had in their boyhood days when we knew nothing of the worms and scab, when these trees produced fine, large, red apples free from all blemishes. It is quite different now; if they have any apples at all, they are nothing but small, green, knotty, wormy things, hardly fit to be called an apple.

Now, as far as the results go, they are clearly indicated by the enthusiasm of the farmer after three years' work. I have no definite data on the result of spraying farm orchards, but in my own orchards, which number four in all, my results this year were 25 per cent culls, and about 50 per cent of these culls were culls only because they were under size, only 25 per cent of them being blemished, so that would bring it around $12\frac{1}{2}$ to 15 per cent. These orchards were sprayed as I came to them, the same as I did the farm orchards. One orchard I know was sprayed first, the other two some time during the intervening period, and another one was sprayed the last. Of course that is contrary to all spraying advice, but I venture to say that no one could say which one of these orchards had been sprayed first.

Besides taking care of these farm orchards I have 500 trees of my own, these trees are given the same care as any commercial orchard, excepting in culture. The results of spraying were certainly as good as many large growers have, and much better than the farmers can accomplish by their own methods of spraying with small hand outfits, the power sprayer being superior.

These 500 trees the past season have produced in the neighborhood of 1,400 bushels of apples. These apples were sorted into two grades, Fancy and A grades, and culls. The culls were immediately disposed of to department stores or dealers, sold in

large lots, second grade went either direct to the consumer or fruit stands. This year I got \$2.50 a bushel for all my fall apples and early winter apples at the orchard, and \$3.50 for the fancy apples. We have the market; all we need to do is to produce the fruit. Twenty-five per cent of the apples were sold right at home and people went right to the orchard and got them.

Besides doing this orchard work for the farmers there is great opportunity in developing landscape gardening.

After I get my spraying business operating right, I will drift over into that also because these farmers all have fine farm homes, all they lack is good orchards and ornamental planting. After you get farmers interested in these matters there would be no difficulty in securing their support. I have over 50 per cent of jobs booked that I had last year for spraying, and every one of these has asked that the orchards be pruned, and there are hundreds of these orchards all over the state that have promising possibilities. If a man will go into it with proper spraying equipment and spraying methods and good management, he cannot help but make a success.