

deaux and either lead arsenate or Paris green; second, with Bordeaux half strength, and lead arsenate two pounds to the barrel. This is the most important spray of all, and will be done very thoroughly, using a tower on the wagon and a long bamboo rod, so as to get above the limbs and force the spray mixture down into the blossom end of the fruit. The third spray will probably be Bordeaux only, applied two or three weeks after the blossoms fall. Lime-sulphur, diluted to summer strength, may be used on part of the orchard, instead of Bordeaux. While the results of the spraying this year have been most convincing and satisfactory, they were not quite so good as they would have been had the work been more thoroughly performed. While our sprayers were intelligent, painstaking men, still, it is hard to impress on those who have never done spraying before what thoroughness really means.

COST OF SPRAYING.

A few particulars as to the cost of spraying may not be amiss. The total outlay for spray materials was \$24.95, and for labor of spraying, \$45.50. Deducting the material used for the first and fifth sprayings (which will probably be unnecessary next year), we have \$15 as the cost of materials (lime, bluestone, Paris green, and lead arsenate) used for the other three sprayings. The labor cost for these three applications was approximately three-quarters of the whole, or, say, \$34.00. Thus, the combined cost of labor and material for these three usual and more important sprayings was \$49.00. This figures out to \$16.33 per acre, or 33 1/3 cents a tree. Remember, this includes liberal wages. For material alone, the average cost for the three sprayings would be \$5.00 per acre, or about ten cents per tree. As to results, let the owner of the orchard speak. Here is Mr. Poole's own statement, submitted in writing:

THE OWNER'S STATEMENT.

"With your permission, I would like to state a few simple facts with regard to your experimental work in our orchard. In the first place, we noticed quite a difference in the foliage from other years, after the second and third spraying. The leaves had that dark-green, healthy appearance, which they retained all through the dry spell. They did not have that shrivelled-up appearance that we have noticed in former years. In the second place, we were soon convinced of a most decided change in the appearance and shape of the apple. Other years we had quite a number of one-sided, scruddy, scabby apples that were scarcely fit for the evaporator; fully fifty to seventy-five per cent. of the apples were not fit to ship. But now, Mr. Editor, the buyer can back me up in what I am writing; that is, we have shipped seventy-five per cent. of all the apples picked, and more we could have packed as No. 1 apples had they been gathered before the heavy winds that prevailed this fall. We have had experienced buyers and packers through the orchard this fall, and they all seemed surprised at the difference in our fruit from other years, and I firmly believe that, through lack of a little help and perseverance, I have lost many a dollar by not taking proper care of my orchard, and I feel sure that your experiments would be a benefit to others should they see fit to put them in practice."

THE BUYER'S OPINION.

Replying to your letter of inquiry, I would say the packing and grading of the fruit we received from you was all that could be desired, and reports from Manchester show that the parties retailing it were well pleased with the fruit. Samples from your orchard, also samples from my own orchard, were sent to a Western dealer, who immediately wired, offering me \$2 per barrel for all I could ship him equal to the sample, but I was not in a position to sell. He also wrote me, saying these apples are the best that ever came into Regina. That market is full of fruit of poor grade, which can be bought at almost any price. This quality of fruit sets its own price. If farmers would only wake up to the fact that they can produce the best quality of fruit in this country that can be grown in any country under the sun (and they are considered), and that the product of such an orchard is the best-paying crop a farmer can raise, it would only be a few years until the value of our apple-producing districts would, with proper attention, be doubled in value. As to my observations regarding the results from the work of

your experimental orchard, I would say, comparing the crop of this year with that of any previous year I have seen this orchard, the value of the fruit crop has been doubled by your giving it proper attention and spraying. The results in my own orchards have been the same.

LEWIS JONES.

CULTIVATION AND COVER CROPS.

The orchard was plowed two to four inches deep about the first of May, afterwards harrowed and disked several times to conserve moisture, aerate the soil, and keep down weeds. May and

for No. 1's, and \$2.25 per barrel for No. 2's, f.o.b., St. Thomas. They were graded strictly, and Mr. Jones was exceedingly well pleased with the fruit. Several local orders were filled, and Mr. Jones delivered in town. Severe wind, lack of color, and drouth, with the few worms and scab spores left, and a strict system of grading, combined to throw a considerable quantity of apples into the No. 3 grade. These are still on hand as we write, but will be marketed shortly, and are estimated to be easily worth \$75.00 net. This item is, therefore, included in the estimate. Of No. 1 winter fruit, strictly choice, 289 boxes were put up, besides a

few bags and barrels of this grade marketed locally. Of No. 2's, 206 barrels were disposed of.

Excepting the early varieties and a few winter apples, picked before packing commenced, the method was to pack on a canvas table in the orchard, as fast as the picking was done, the fruit being dumped on the table as picked, and the packages hauled to the barn each evening. Girls were employed for packing on one or two days, and are better box-packers than men, but considerations of weather and propriety prevented us employing them, except once or twice, as noted. Delay in coloring of the fruit, owing to cold, dull weather and thickness of foliage, extended the period of packing, and rendered the work more expensive, as the foreman had to be continuously employed, part of the time with only one or two men under him. He received \$2.00 a day.



Arabian Donkeys at the Royal Windsor Farms.

the greater part of June were drenching-wet, but afterwards a severe and prolonged drouth set in, continuing until late fall, relieved only by light and infrequent showers. Thickly planted as these trees were, they suffered, even though cultivated, but not nearly so much as orchards in sod. Indeed, considering the rather scanty bloom, the load of fruit carried was astonishing. The drop was light, compared to that in many other orchards, while, thanks to cultivation and spraying, the foliage retained a rich, luxuriant green, and persisted late into the autumn.

About the twentieth of July the orchard was seeded to a cover crop, to be plowed under next spring. Hairy vetches, alfalfa, red clover, mammoth clover, rye and oats, were sown for comparison, the first three over the greatest area. Severe drouth resulted in a weak and rather scattering growth, but some benefit will be derived even so. Fuller particulars about cover crops will be published next spring and summer.

A small fertilizer experiment was conducted with material supplied by the Dominion Agricul-



Bosom Friends.

tural Office of the Potash Syndicate. Owing to the rather late date of application, no particular results were expected this year, but observations will be continued next year, and in 1911.

CROP, PRICES, AND MARKETING.

The Early Yellow Harvest, Astrachan, and St. Lawrence apples were marketed readily. The first crop, in particular, was a big success, and sold at \$1.50 per barrel net, No. 1's, and \$1.25 for No. 2's. The Astrachan, which is a late variety, was also marketed well, and sold at \$1.50 per barrel net, No. 1's, and \$1.25 for No. 2's. The St. Lawrence, which is a very early variety, was also marketed well, and sold at \$1.50 per barrel net, No. 1's, and \$1.25 for No. 2's.

FINANCIAL STATEMENT.

Debit.	
Reat of orchard	\$100.00
Equipment, spray pump, ladders, scales, presses, etc.....	80.90
Spray materials	24.95
Labor, pruning	16.80
Labor, spraying	45.50
Labor, plowing and cultivating	22.75
Labor, picking, packing, and teaming	163.80
Seed for cover crop	10.55
Packages, barrels	82.40
Packages, boxes	46.50
Freight, Lambeth to St. Thomas	24.00
Miscellaneous expenses	33.98
Total outlay	\$652.43
Credit.	
Cash receipts	\$846.95
Apples on hand (estimated value)	75.00
Present value of equipment, deducting 25% to cover interest and depreciation	60.68
Total	\$982.63
Profit	\$330.50

Suppose we owned the orchard, and thus had no rent to pay. Allow the few barrels of apples used by Mr. Poole, and the various incidental revenues that might be derived, such as returns from cider fruit, etc., to cover taxes. We would then have \$830.50 return from the three-acre orchard this year. That would be over 14 per cent. interest on a valuation of \$1,000 per acre! And if the men who had looked after this orchard had had it on a farm where they lived, the showing would be still better. Something, perhaps, should be allowed for manuring and fertilizers, but where cover crops are utilized, this outlay need not be very heavy.

Of course, it has been a favorable year, both as to crop and prices. 1910 is expected to be somewhat of an off year in this orchard. On the other hand, the treatment given may be expected to greatly improve the grade and quality from year to year, so that, with fair prices, 1911 should yield better profits than 1909. However, let the future tell its own tale. Meantime, think over this. "The Farmer's Advocate" has received a three-acre orchard yield over 14 per cent. interest on a valuation of \$1,000 per acre, after making for everything handicapped in the ways mentioned above, what can you do with an orchard on your own farm?

One of our young men, seeking changes in the West, would let themselves to discover a good deal of the golden opportunities abounding in the West, and would be better for all concerned.