

the same time involve less risk or require less capital. To make a measurable success of such a proposition, a farmer must have a little love, or at least respect, for his trees, and perform the operations upon them in a careful manner and at the proper times. If the spraying is left until he can find nothing to do, it will never be done on time, and often will not be effective. The farmer is then quite likely to conclude that spraying is of no value. Some fruit of fair quality can be grown without spraying—in some seasons, considerable good fruit—but a good-paying crop is never assured without spraying. Should it chance to come, it is generally when fruit is abundant in the neighborhood, and consequently cheap. During the past few years there have been few instances of good crops from unsprayed orchards.

There are arguments against the care of small apple orchards by stock or general farmers, and the arguments are sufficient for those to whom the care of an orchard is distasteful, if they will purchase and keep on hand during the season such fruit as a good home orchard will furnish. This proviso well-nigh nullifies the statement, for few farmers will or can provide such a supply of apples during the entire season as a good orchard will furnish.

The chief difficulty in caring for a small orchard is the spraying. Fairly good fruit can be grown without cultivation, if some mulching or manure is applied, and a home orchard can often be utilized as a hog pasture much of the season. The pruning is not difficult, if the trees are not too badly neglected, and there is a latitude of time in which to do it—time, too, when the farm work is not pressing. But the spraying, or at least part of it, must be done at certain times, for a delay of a week will make a great difference in the results. It must be done thoroughly. That spraying must be done to grow good fruit, is a settled fact, and, in regions where the San Jose scale is present, it is another settled fact that spraying must be done to save the trees.

The outfit need consist only of a good brass pump, with barrel, 25 feet of hose, a good 8 to 10-foot extension rod, and one or more standard nozzles, the whole costing from \$20 to \$25, which is only a fraction of the equipment needed to grow other crops. If San Jose scale is present, an iron kettle is needed in which to cook lime-and-sulphur wash, unless one prefers to purchase the ready-made commercial preparations. A barrel or two for mixing the materials, and a one-horse buggy or wagon, or even an ordinary wagon, to carry the spray barrel, can be found on every farm, and generally there is a spare horse to draw the outfit. A half-day, or at most a day, two to four times a year, will suffice to spray an orchard of from 25 to 50 trees, according to size.

Why Southern Ontario Apples Do Not Keep.

Editor "The Farmer's Advocate":

I have read with considerable interest the articles appearing in your paper referring to district keeping quality of apples. On March 25th was a lengthy article, evidently written by one who does not understand what a difference has been made in the keeping quality of apples by giving good orchard care.

I hope none will write on this subject without being familiar with every district they refer to. All know that soil, location and orchard management have a great deal to do with the quality of apples. Short distances make great differences in fruit-growing. The County of Norfolk is especially situated and adapted with good orchard management, for the growing of extra quality Northern Spy, Baldwin, King and Snow.

I cannot understand why many who write on this subject place our growers who spray, prune, fertilize and cultivate their orchards in the same class as those growers who leave their orchards to care for themselves, and early in the season sell to some apple-buyer by the lump. Harvesting time is hastened by codling moth and fungous diseases, sod orchards and grain-cropped orchards. Consequently, early in the season half of the apples go to the ground. In this county, practically every "lump" buyer (most of our buyers have been "lump" buyers since 1903) has seen a heavy loss in sight, unless he could pack up the apples in a deceptive way, get them past our fruit inspectors (which seems to be easy in this county), and get them out of the Province. This is the reason why we hear so much about our poor district keeping quality of apples.

What growers who take good care of their orchards need is a fruit inspector in this county for three months in the fall, while the apples are being packed for shipment. Make this generally known early in the season, before this "lump" apple-buying is begun, and you will see that the most of the apples grown in these uncared-for orchards will go to the evaporators, where they should go. It has been a disgrace to our county, the quantity of apples of poor quality that are shipped out each fall from these uncared-for orchards.

I see by the debate in the House of Commons, March 26th, that the Hon. Mr. Fisher, Minister of Agriculture, is urged to employ more inspectors (county inspectors advised), and I believe we can soon expect the subject, "District Keeping Quality of Apples," to read, "Wonderful Keeping Quality of Apples," obtained by careful orcharding and the enforcement of the Fruit Marks Act, and then the Department of Agriculture will be congratulated on building up this valuable branch of agriculture.

If the party who wrote the article of March 25th is an apple-grower, I would advise him to come and compare our well-cared-for orchards with the uncared-for orchards. We growers in this county are anxious to give growers in other counties information on how to grow better apples. There is no overproduction of the best quality of apples. If he is a buyer, and has put his money in "lump" buying of these uncared-for orchards, he cannot get any sympathy from me, as I consider many of the "lump" buyers have done a great deal towards tearing down our reputation on Canadian apples.

Every buyer will agree that the uncared-for apple orchards are becoming more infested with insects and diseases each year, and the time has come for our apple-buyers to wake up, and buy only by the barrel No. 1 and No. 2 apples, packed according to the methods employed by leading fruit-growers' associations.

Norfolk Co., Ont.

JAS. E. JOHNSON.

Arsenic Poisons.

It is exceedingly difficult, in the case of spraying for codling moth, to find out whether arsenate of lead does better work than Paris green, or not; for instance, if two parts of the same orchard were sprayed, one with Paris green, and one with arsenate of lead, it would be very difficult to tell, knowing the life-history of the codling moth, just what each insecticide had done. I have used arsenate of lead for spraying potatoes here, and find that, although it kills the beetles, it is not so rapid in its work as Paris green, and for that reason I prefer Paris green, as it is very important to destroy the beetles as soon as possible. Arsenate of lead adheres better to the foliage than Paris green, and, where it is desirable to have an insecticide stay on the plant for a long time, it might be the better poison to use. In the case of potatoes, I believe that a mixture of Paris green and arsenate of lead would give better results than either one of these applied alone, and I hope to give this a trial at the Farm this year.

In the spraying calendar published by you, and prepared here, arsenate of lead was not recommended, the reason being that we considered it better to continue to recommend Paris green until there is more definite information on the greater effect of arsenate of lead for codling moth.

C. E. F., Ottawa.

W. T. MACOUN.

THE FARM BULLETIN.

Is Insanity Contagious?

Editor "The Farmer's Advocate":

Our clergymen, professors, scientists and experiment-station men are doing much for our country. Some may be able to climb the hill of fame with apparently perfect ease; some farmers are able to raise better corn than their neighbors; some may have a larger bank account than you—but he who can raise a crop of good, honest and bright boys and girls is doing more than all of the foregoing combined.

There are few communities in Ontario where there are not some persons of unsound mind. There are few people who have not some relative or acquaintance mentally unsound. After careful study, and after carefully tracing back the history of scores of feeble-minded, and after visiting several asylums, and other similar institutions, I think I have found the cause of it. I regret to find that there are among these so many from the country, especially many wives of prosperous farmers. The number of cases of the latter kind are increasing alarmingly. The subject is one which few like to discuss, but, had you seen what I have seen, and spent hours—yes, days and months—among these poor mortals, in endeavoring to soothe and comfort them, and at the same time find why they are in such condition, you would not hesitate to put such a subject before people who are ignorant in this matter.

It is said that the greed for money is the root of all evil. It often, very often, is. Yes, the majority of farmers do not use their wives and children the way they should. For instance, when travelling through Western Ontario, one often sees what are termed "model" or "modern" barns, or frequently farms, but how many houses do we find in the rural districts that would be called "convenient"? Have seen hundreds of farms where the husband had every labor-saving implement, and nearly every apparatus imaginable in his barn. Yet, on these very

places the wife is more a slave than an equal partner as she should be. In one place the good housewife had six children to care for, but her husband refused to buy her a wringer, and she was obliged to wring the clothes with her hands. The farmer stated that it was "unnecessary" to expend money for which there is no use. It was also considered too expensive to hire a girl; nevertheless, he had for his use such devices as a manure spreader, sheaf-carrier, hay-loader, two hay rakes, two windmills, engines, besides a hired man, and, of course, all the other necessary machinery. This man (and there are hundreds like him) made use of his children when they were able to help with the work, by giving them hoes and setting them to hoe the corn and roots, and doing other equally tedious jobs. He goes to town almost daily, and spends considerable at the tavern. When does his wife get an opportunity to drive and enjoy herself? Hardly ever. Furrows are plowed deep on her forehead, and to-day she is a physical and mental wreck. A man does not mind paying one hundred dollars for a manure spreader which is used about three days each year, yet when the good woman complains of the many steps she repeats running from garret to cellar dozens of times each day, and asks for a kitchen cabinet, the husband gets mad, and tells her she is a lazybone, and an expensive, good-for-nothing old woman.

After careful inquiring from reliable sources, I find there are no fewer than eighteen hundred feeble-minded in Ontario alone. Now, there would be many who would be enjoying life to-day had they been treated decently. A woman, with her thousands of cares and worries, and not being, because of her many household duties, in a position to enjoy life, begins to experience a languid feeling. This is taken as evidence that her nervous system is greatly disordered. Many times it is due to overwork, either physical or mental; or it may, in some cases, be due to lack of cell salts or tissue elements in the body. It may rapidly develop into nervous depression, and, I may add, nervous prostration, and finally insanity.

So, you see, if members of the family allow their mother to overwork herself and worry on their account unnecessarily, the result may be very unpleasant.

Feeble-mindedness is contagious, though many will not believe it so. In fact, it is very contagious, and, if any have in their family one afflicted, be careful that no others suffer equally in the time to come. Never in the presence of one distressed in this manner, say an unkind or harsh word. Kind words, rest, good food and plenty of it, music and amusements of the right kind, have, to my knowledge, cured advanced cases of it. Accounts of bloodshed, get-rich-quick stories and many of the fairy tales should never be read by children. You will find that in many cases the books most sought for were written by partially-insane persons.

I once heard a man from the Old Country remark, "The average Canadian farmer is no man at all. He is a regular beast." When asked why, he replied, "Not only does he make his men work long hours, but his family also. The average wife does more coaxing to get a new hat than an English woman has to do to go abroad." Now, men, your wife is an equal partner, therefore treat her as such. At least see that she gets half of the profits derived from the farm. Many men who never had a rude word with their sweetheart of long ago, put their cash in one family purse, and let her take from it when necessary, and, of course, not ask what was done with the last she took. I say once more, if you can bring up a group of pure, honest, strong (both physically and mentally) boys or girls, you will leave behind you a monument more valued than any marble or bronze one ever erected.

"SPY."

A Favor Gratefully Received.

William MacKenzie sat in the gallery, while an obedient Legislature handed over the 2,000,000 acres of land he had demanded. This one man finds it easier to get away with an area equal to four counties than all the farmers of Ontario find it to secure a fair automobile law, says our esteemed contemporary, the Weekly Sun. On another page, referring to Sir James Whitney's reported doubt as to whether Mackenzie & Mann would accept the land grant on the conditions prescribed, the Editor of the Sun scathingly remarks: "If the Premier really believes Mackenzie & Mann were about to refuse the grant, he is altogether too innocent for this wicked world."

Within a space of about four months last year, another earth produced, in the United States, a corn crop worth \$1,600,000,000. Illinois is now in the lead as a corn State.

"Next to the study of man, the greatest study is the study of the soil, upon the fertility of which we all depend."—[Prof. Klinek.]