THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Time and Cost of Spraying.

The subject of spraying fruit trees, especially oples, is well discussed in this issue by wellinformed correspondents, as well as editorially, but little has been said regarding the time it takes to do the work or the cost of an outfit and spraying materials. One of our editors has sprayed his orchard of 350 trees for five years, and it is from his experience we speak. With a large machine, that costs about \$16.00, the 350 fairly large trees took the time of two men three days at each spraying. A smaller outfit would have taken more time, but we believe sprayers have been so perfected since then that a \$10.00 machine would now accomplish just as much work and do it much better; in fact, an \$8.00 sprayer with all attachments will do for an orchard of 500 trees very well.

Regarding the expense of materials, the orchard in question took 40 gallons of Bordeaux mixture with Paris green for 20 trees at each spraying. At this rate the 350 trees required 721 barrels of the mixture for the season, and as each barrel contained 4 pounds of copper sulphate, 4 pounds of lime, and 4 ounces of Paris green, the totals for chemicals were 288 pounds of copper sulphate, 5 bushels of lime and 18 pounds of Paris green. The wholesale price of copper sulphate is 7 cents per pound; lime, 25 cents per bushel, and Paris green, 20 cents per pound, which for the quantity used on the 350 trees in the four sprayings cost \$20.16 for copper sulphate, \$3.60 for Paris green, and \$1.25 for lime, making a total of \$25.01. In the majority of seasons, three sprayings may be found sufficient, which will reduce the cost for material to \$18.75. This sum added to, say, \$10.00 for a spraying outfit, is a very small outlay from which to secure the increased and improved crops referred to by several of our correspondents, to say nothing of the improved vigor of the trees as a result of the ication, and which will tell abundantly in the es to come.

Uniformity of Type, "Canada's Ideal."

The study of beef type, which will be exemplified in our great premium picture of notable Canadian Shorthorn cattle (now in the hands of our artist, and which will be ready for mailing about the middle of the present month), is one which will interest all lovers of good stock, and is really of national importance to the Dominion, since the welfare of the farming community depends very largely upon our markets and our revenues from our exports of live stock and its products, in the form of meat, cheese and butter. Practically all farmers are stock-raisers to some extent, and are becoming more so as the years go by. That there is more satisfaction in raising good stock than inferior, and more profit, too, is being more generally realized year by year, and it is beyond dispute that the better the quality and the more uniform the character of the products we send to market, whether of live stock or of any other of the fruits of the farm, the better prices we are likely to receive, and hence the better returns for our labor and for the feed consumed by our stock. An inspection of our premium picture will reveal the interesting fact that though the animals represented in it have been selected from the prizewinners at the principal shows in nearly all the Provinces, there is a very striking uniformity of type in the collection, all being short-legged, deep-bodied, thick-fleshed, smoothly-turned animals of the early-maturing sort, and showing strong indications of robustness and constitutional vigor. Those of our readers who

HON, JOHN A. DAVIDSON. Minister of Agriculture and Treasurer for the Province of Manitoba.

have given attention to the pedigrees of Shorthorn cattle, and who have studied, or will study, the breeding of the animals included in the engraving, will discover, if they do not already know it, that while there is considerable variety and divergence in the foundations of the pedigrees of the animals, yet the top crosses in every case show a great deal of similarity of breeding, being, without an exception, deeply bred in the blood lines of Scotch-bred families which were represented in such prominent herds as those of Messrs. Cruickshank, Campbell, Marr, and other Aberdeenshire breeders of a generation that has passed away, but whose work is being well carried on by able men of the present day. This class of cattle has won its way to favor both in Great Britain and America by its suitability and adaptation to the markets of the present time, and has succeeded by sheer force of merit from this practical standpoint in breaking down strong walls of prejudice even in old England, the home of the breed, where North Country blood is now being freely used with gratifying results. Our premium picture is therefore an excellent representation of the ideal type of beef cattle for Canadian farmers to produce, whether their fancy be for Shorthorns or for any other of the beef breeds, as the best specimens of any of these are built on a similar pattern. It is not a question of breeds or color, of horns or no horns, or any other fancy points, but of the production of the greatest weight of the highestpriced meat in the least compass and at the least

cost. We trust our readers everywhere will take an appreciative interest in securing this picture, and especially in securing it as a premium for sending in new subscribers, which will prove a threefold benefit, being helpful to themselves, to the new reader, and to the FARMER'S ADVOCATE. The Dicture will be sent to anyone sending us two new subscribers with two dollars.

STOCK.

The Wintering of Idle Farm Horses. FEED FOUR TIMES A DAY.

This is a question with regard to which there is a great diversity of opinion, and I don't know that can do better than to outline the plan which I follow on my own farm, and I know a great many successful horsemen who winter their horses much in the same fashion.

The first consideration is to see that the feed is somewhat reduced when the horse is taken off heavy work. The food should also be of a more loosening nature, that is, more bran and boiled grain should be fed; roots would also be beneficial, hough I do not feed any myself.

I invariably feed four times a day both summer and winter, always watering before feeding in summer, but I find this will not work in winter, as the horses do not need so much water, and will not drink so often. I therefore give them their grain first thing in the morning, followed by hay; they are then watered about nine o'clock a. m.; they remain in the stable till noon, when they get another small feed of grain, and are turned out in the pasture immediately after noon, where they should have a large straw pile to run around till about four o'clock, when they are again put in the stable, watered, and given a sheaf of green oats each, followed by a feed of boiled barley or small wheat and bran, mixed with a little salt, at seven or eight o'clock

I think a great many farmers make the mistake of feeding far too much hay to idle horses. There are some horses that will not eat enough to do them any harm, but the great majority will eat far more than is good for them if they can get it. It will be seen that my horses only get hay once a day, and that is nearly always cleaned up within two hours after it is fed. I would give another feed of hay in the evening if I was not feeding sheaf oats.

My driver, and the team I keep for hauling wood and other heavy work, do not get any sheaf oats, but get hay and oats instead. I consider green sheaf oats too soft for working horses.

Weanlings and colts are fed much the same a above, except that their grain should be crushed; indeed I think it pays to crush oats for nearly all horses; barley should never be fed to horses except it is well boiled; some object to feed it even then, but I have never found any evil results, and my horses get it six times a week, except when they are on the grass.

There are many farmers with a number of horses who seem to be afraid to let them out in the winter for fear they might get hurt running through snow banks or wire fences, but I think if they are turned out the first day they are idle after coming off the plow, and kept out every day that is fit for them to be out afterwards, the danger of their getting hurt would not be half so great as the danger of leaving them in the stable, and they will be in far better condition to go to work in the spring than they could possibly be if tied in the stable all winter.

As to hardening horses for spring work, I don't do anything at it till the actual work begins. Just as soon as the land will work I try to get all the horses started, and work them very light for three or four days. By this time the land will be in pretty good shape to work, and the horses will be in pretty good condition to work it if they have been well handled. It is necessary at this time to increase their feed somewhat, and here is where a great many err. They seem to think when the horse goes to work he needs more feed, and give it to him accordingly. The horse eats the first few feeds all right, but about the third day he comes in tired, takes a few bites of oats, then backs up in his stall and stands there till it is time to hitch up again. He will, perhaps, keep this up for three or four days, and by this time he is beginning to loose flesh, and will likely keep on failing till seeding is finished and he gets a rest. A much better plan, I think, is to feed the horse rather light the first three or four days, and then gradually increase his rations and his work, until at the end of a week you have him feeding well, feeling well, and fit to go through the remainder of the season in good shape.

I like to clip horses that have been idle all winter if they are very long in the hair, before starting to work in the spring; they seem to work much cooler and nicer than if the long hair is left on till it is scraped off with the currycomb. It also saves a vast amount of scraping and cleaning, which is quite a consideration where a man is working four horses, and I don't think there is any danger if they are blanketed for a time after clipping. There is no necessity for clipping horses that have been working all winter, nor do I like clipping in the fall; I would much prefer singeing.

J. W.

Portage la Prairie.