Cultivation of the Thistle.

The cultivation of spring wheat and the cultivation of the Canada thistle, if not synonymous words, are (to coin an expression) "synonymous facts." It is absolutely certain that the thistle is making such headway even among our best farmers as to cause considerable alarm. Fallowing and ploughing five times during the season are really the only method of absolutely eradicating this pest. Four ploughings during the season will do a great deal, three are better than two, and that is all that can be said; but five ploughings make sure work, and if conducted in dry hot weather are certain to kill every plant that has attained maturity. There will of course still be seedlings in the ground ready to put forth as soon as a favourable opportunity occurs, and this will last so long as a seed remains which is capable of germination, but five ploughings make sure work.

It is very seldom that farmers either can or will make a good summer fallow the previous year for spring wheat, although we think it would pay them to do so. A moderate or poor crop can, however, be had without, and so long as this is the case spring wheat will be sown without a good fallow, and so long will the thistles flourish and grow.

If you wish to convince yourselves of the importance of keeping the thistle moving, (if you mean to kill it) take a lot of roots and plant them in your garden: as soon as you see the first green tip, move up the whole ground, shake the roots out of the places they had taken hold of, and plant them again. This moving will dry the ground; in a short time the green tips will appear again, when again you must move them well about, and so on a third time. Now you will find that the roots look brown and poorly, they will be limp and tough, and will seem to be losing vitality but still they will struggle up. Move them again, and the fourth time you will find nearly all gone, still there will be some so "stout-hearted" as to try it again; but the fifth time finishes the job, and all are dead and decayed, and you are free of them until their place is taken by seedlings.

Many of our best farmers now advocate the allowing the thistle to come into flower, before ploughing, then if they are too thick for the horses (as will often be the case) mow them, and at once plough the ground. The thistles and other weeds answer for nearly a green crop of manure, and these people say that if the ground is then kept moving the thistles are far easier conquered than if attacked earlier in the year.

VECTIS.

The *American Agriculturist* advises sowing a pound or two of white clover with the red clover and timothy in seeding down the land intended for pasture.

Clover Manuring.

The value of clover as a manurial agent is every day becoming better known. Our American cousins, who have cheaper land and dearer labour than we, have gone a step further with this subject than we have in Canada. We as yet have only gone to the extent of ploughing in the year's crop of clover, and generally trust to the influence of the decaying roots alone, after having taken off either one or two cuts of grass or hay. American farmers take the bull by the horns at once. They seed down wheat with clover, do not allow the young clover to be fed off on any account, then for the next season close up the field fences altogether, and neither feed nor cut the crop. The entire clover plant is allowed to grow, and is often over two feet high, a solid mass of flowers and seed, and is allowed to rot down on the ground, and lie all the winter. The next spring the clover starts again, and is allowed to grow till in full flower. The whole of the result is then ploughed under as a preparation for wheat, either with or without a fallow. If spring wheat is to be grown, the ground is fallowed during the remainder of the season, after ploughing, and regularly prepared for spring wheat. If for fall wheat, the clover is ploughed under, the land heavily rolled, and cultivated so far as to keep down thistles and weeds, and the fall wheat sown. A noble crop may be expected, to be again seeded down to clover. By these means the ground becomes filled with clover seed, and the peculiar elements produced from rotten and decayed clover, and this ensures a thorough crop of clover so often as it is used. The originators of this system claim that it is one of great economy. The outlay is very small, the cost of labour comparatively nothing, the smothering effect of the clover kills all weeds, and the double crop so ploughed in is done by one ploughing and a slight cultivation of the soil between the time of ploughing and wheat sowing. They say that you have the ground more cheaply and better manured than you can have it in any other way, and ensure a thoroughly good crop of grain. In case of growing spring wheat, the plan might be further supplemented by a crop of buckwheat ploughed under after the clover, or a crop of green mustard. Either of these would be ploughed in the last thing in the fall.

On Planting Trees.

To the Editor.

SIR,—So much has been written on this subject that it is scarcely possible to say anything new in reference to it; but things of so much importance will bear reiterating, and indeed require to be brought the more prominently under notice when we do not see the present advantages of our work, and when it does not bring the dollars into our pockets, or at least when we cannot see it if it does.

Let the planting of trees in the spring be as much the work of the farm as ploughing and sowing. Set apart two days at least every year for this important work. Let all hands go at it with a will, and do the work well, for ten trees well planted are better than a hundred ill done. Plant shade trees in each nook and corner of your fields, for the protection of your stock from the scorching rays of the sun. Plant fruit trees by the road side and prevent orchard robbing. Plant trees along the north and west sides of your farms, for wind-breaks, and you will have better crops of fall wheat. Plant trees on all hill sides and places which cannot be cultivated, for timber and fuel to the rising generation. Plant a good orchard of the best kinds of apples, pears, cherries, &c., and plant evergreens around your orchard to protect it from winds. In fact, plant trees everywhere you may think it necessary. Plant evergreens and deciduous trees, fruit-bearing and nut-bearing trees, trees for ornament and for profit, but plant as if you intended and expected that they should grow. Do not undertake to do too much in one year, but still something might be done every year, and as we gain a little experience in the matter, it can be done more easily and with better success.

The sooner tree planting becomes general, the better will it be for the country, as some years must elapse before they will be of any service as wind-breaks, &c., and by that time the remaining portion of the forest, especially in the older sections of the Province, will be cut away, so that it will be hard to get young trees to plant, unless we get them from the nurseries, which will be additional expense, or else raise them from the seed ourselves, which will take much time and care, besides throwing into still longer perspective the period of growth and maturity. Canada is one of the finest countries under the heavens, and it is our duty as Canadians to preserve it in beauty and productiveness.

CULTIVATEUR.

April, 1869.

Superphosphate of Lime.

To the Editor.

SIR,—In a recent issue you make some remarks as to the manufacture of superphosphate of lime, which might lead some of your readers to think that we manufacture our superphosphate in the way you say it is usually manufactured.

The way we manufacture is that three-fourths of the bones we use we manufacture into animal charcoal, for sugar refiners, and in the course of burning the bones for charcoal we catch all the ammonia and animal matter, and add to it the bones which we use for the manufacture of superphosphate, and then apply sulphuric acid and leave it fermenting for about six months, so that the acid has time to dissolve the bone.

You also speak of the bone dust being