

like old land—no stumps anywhere, but when you attempted to plough there was scarcely any improvement over the ordinary difficulties of working new land; and this land to this day is not more easily worked than stumpy land, so far as roots are concerned. True, the stumps are certainly not there, but the roots are not more decayed than those attached to the stumps. In fact, from some cause, I do not think they are as much so, and this point has often been a matter of wonderment and a source of much thought.

I have a theory, that the decay of stumps is to a great extent due to a perpetual attempt of the sap to continue to perform its regular functions at its appointed season, and the natural evaporation from the drying up of that part exposed to the air furnishes a certain demand. The roots, having no such demand from grubbed stumps, do not therefore become alternately wet and dry, as others ordinarily chopped do, but remain always wet. This opinion is strongly supported by the condition of some stumps under a sheep shed, that I examined and dug out a short time since. They had been covered up with manure, and all but the very top was thus kept quite wet, and had been so during nearly ten years that had elapsed since they were chopped. The top that protruded above the manure was quite decayed, but the roots were absolutely green—yes, quite green. I showed many of the smaller fibrous roots to some intelligent people who happened to be present, who were equally surprised with myself. There was no sprout whatever, nor ever had been, from this stump, as the shed was built in 1861, one year after the land was chopped, so there was time enough for decay to have affected the roots, unless some preservative action had been going on, attributed to the moisture of the manure. The kind of timber was 13-inch basswood and beech.

We cleared out our farm-yard last year, in a part that had been uncleared for eight years, and found the stumps, so far as the roots were concerned, quite decayed, and easily jerked out by the oxen, but these had been exposed to wet and dry, sun and air, and consequently to a continual ascent and descent of sap, which probably accounts for the difference.

I had a visit the other day from a friend of more theoretical than practical knowledge, and he actually was about going on new land with the full conviction that trees can be grubbed out, and the land thus cleared, and that the advantages of this course would far overbalance the cost. Of course, I used all my experience in persuading him to think twice before doing anything of the kind, and at all events to try one acre before buying a tract of five hundred or six hundred acres with the certain conviction in his own mind that it would succeed much better than the old plan. He,

however, was so bent on his own plan of operations that he left me to look at the tract in question.

BURNING AND BRANDING.

We now came to the blackest job of all, but at the same time, one which I always took great delight in, namely, the firing log-heaps. The art consists in first having a good, well and closely piled log-heap, and next in having a good breeze of wind to assist the combustion. The end of the heap is the best part to light first, provided the wind suits, as the fire more readily gets a thorough hold. The attendance on the heaps must be continued into the night, otherwise there will be some that spread out whilst burning, and then do not consume so well.

I always found more difficulty in leaving the fallow when fully alight than the wish for rest could overcome. It seemed such a pity not to keep punching away first at one heap, then at another, as the attendance thereby given so much improved the fire—and then a succession of such jolly bonfires

and I always did love a bonfire—and these were such good ones—so it always ended in my working out in the fallow, literally enjoying it, often after ten o'clock at night; and next morning, when the sun rose, and all the heaps were partly burned, and looked almost out, I almost regretted leaving them at all. However, after branding up and again punching in the outside logs, they were soon all smoking again; but the effect of the fires is for less exhilarating by day than by night. With us, we had such a quantity on fire, that I determined not to follow this course again, but to log for about three days, and if the weather proved dry, to burn and brand up this piece before firing any more. This plan gives more time to collect ashes, which, of course, must remain ungathered as long as the heaps are burning.

We sometimes raked them as fast as the heaps consumed, but it took a great deal of time, and when we came to carry them there was usually fire remaining in them, which endangered the waggon box. So, on the whole, we found it better to deal with about five acres at a time, and by using hand-barrows to carry the ashes into heaps of sufficient size to make a waggon-load in a place.

We logged in this way all the summer of 1861, and our one yoke of oxen did the whole of it, and without accident, except to one which strained his foot, which laid him up for a few days; and the other was sick a while from being overfed with ground grain. A quart of melted lard poured down his throat soon restored him, and he continued to log steadily until the frost came. Of course, we drew aside the rail-cuts for fencing as we progressed, but in this respect we were careless and improvident. We thought twenty to twenty-five acre fields would be small enough for so large a farm, but it was a great mistake; they ought not to have ex-

ceeded ten or twelve acres each. And, when we found too late the inconvenience of such large fields, we also found that the rail timber from which to construct the fences to make the fields smaller was all burnt up, and we suffer from the neglect to this day. We certainly saved some first cost, as twenty-five acres do not require nearly so many rails as two twelve and a half acre fields, but it was a serious mistake notwithstanding.

Another was, we did not make "worm" enough to any of our fences. We thought to make the rails go as far as possible, consequently, the fine rails, being all hardwood, were during rainy weather as slippery as eels, and the least wind would level rods on rods of them. In fact, it was hardly possible to get over one of these unstaked and unridered fences in wet weather without throwing down several rails.

Another error was, we did not attend sufficiently to the entire burning up of the large swamp timber, such as elm, basswood, and hemlock. Many of these were ultimately left, and when the smaller timber was consumed, there was nothing to burn them up with, and they continued to cumber the fields until some stumps were ready to come out, when we succeeded in consuming these old stumbling-blocks.

Another evil is, to run over the swamp-holes and frog-ponds, leaving the fallen timber in them. We had better far have hauled it out while we were at it, and made all clean, than allow them to remain unburnt. In the one case we have productive pasture land, which can be cut for hay, and often produces the heaviest crops, whilst in the other, we have a pestilent mess, that remains year after year until grown up to willows and sedge, affording no food for cattle, and proving a regular breeding place for mosquitoes. C.

Silver Beet as a Manure Plant.

I noticed in a recent number of THE WEEKLY GLOBE an account of the growth of a plant called Silver Beet, and a recommendation to plough it under as manure. I at once procured some seed to test the rapidity of its growth, and, as advised, I soaked it in warm water twenty-four hours, and sowed it in drills two feet apart, scattering the seeds along the drill at about three inches from seed to seed.

As the weather was very hot and dry, and I feared the seed might not come up, the sowing was delayed until the 18th of June, which I considered very late; the ground, however, was good, and the sowing was made immediately after the heavy rains we had at that time. The depth at which the seeds were buried was about two inches—not more—as I was advised to be most particular in that respect. The seeds did not come up very regularly, but were somewhat delayed in their germination by the hot dry weather.