

The first year we raised potatoes between the rows. The second year we staked the yard according to Collins' patent horizontal system, and kept the ground clean from weeds with horse and hand hoes. Picking commenced the second week in September, with the result of 824 bushels green hops, weighing, when dried, 1656 pounds, which we sold for 60 cents per pound.

The following statement of the expense of starting the yard, speaks for itself on the subject of profitable farming:

1878.	THE HOP YARD.	Dr.
To 5 bushel sets, at \$2 per bushel.....		\$10.00
1100 stakes, at one cent. each.....		11.00
26 pounds twine, at 20 cents per pound..	5.20	
Sharpening and setting stakes.....	2.80	
Putting twine on stakes.....	0.50	
Tending, cultivating and hoeing.....	5.50	
Picking 824 bushels, at 6 cents per bushel	41.20	
Cost of drying and baling.....	15.80	
40 yards baling cloth, at 20 cents per yd.	8.00	
Delivering hops.....	2.00	
Total.....		\$102.00
1868.	THE HOP YARD.	Cr.
By 1656 pounds hops, at 60 cts. per pound		\$993.60
30 bushels hop roots, at \$3 per bushel..		90.00
Total.....		\$1083.60
Deduct expenses.....		102.00
Profits.....		981.60

The hops were ripe for picking two weeks before it was possible to procure kiln room for drying, and this delay in picking (it is estimated) lost for us about the sum of \$100, which we might otherwise have received for the hops, in addition to the sum (993.60) received for the same.

COLLINS, LANDON & MOONEY.

HAYMAKING.

Grass and clover, when ready to be cut down, contain a considerable quantity of sugar, gum, mucilage, albuminous and other soluble compounds, which are all liable to be washed away by heavy showers of rain. As long as grass is still quite fresh, rain falling upon it has little or no injurious effect, for fortunately a coating of waxy or fatty matter covers the epidermis, and wraps, so to speak, the whole vegetable matter in a waterproof mantle. Rain for this reason may fall for days on newly cut grass without doing any injury to it; but the case is very different if, by repeated turnings, the crop has become more or less bruised and rain then descends upon the half-made hay; not only are sugar, gum and other soluble matters then liable to be washed out, but the bruised state of the plants, admitting at least a partial diffusion of the various constituents through the lacerated cell-walls, induces fermentation, which, if not checked at once, causes further loss. During the fermentation soluble albumen and sugar are destroyed—two of the most valuable elements of nutrition. In showery weather, grass, recently cut, should,

for this reason, not be turned over more than is absolutely necessary, and under all circumstances it is desirable to handle the crop as lightly as possible, in order that it may not get much bruised.

I have seen farmers spending labor in turning hay on overcast days, on which a dew-point hygrometer showed the air to be nearly saturated with moisture, proving that evaporation could not possibly take place at the time, and rain might be expected at any moment

As long as grass and clover are still quite fresh the proportions of water to sugar in the green plant are too large to encourage fermentation; the nitrogenous constituents in newly-cut grass, moreover, only become ferments after the vitality of the plant has been destroyed, and the vegetable cells and vessels have become ruptured by partial drying, and their contents have been mingled together. With the evaporation of water, and the more or less complete destruction of the living organization of the plant, the conditions become more favourable for active fermentation. Should the weather unfortunately turn showery at that stage of the haymaking process, and the air becomes saturated for many days and weeks together, the half-made hay often begins to ferment already in the field. When this takes place, the hay loses in quality and becomes much more liable to heat afterwards in the stack. If, on the contrary, fine and warm weather sets in, and evaporation proceeds with rapidity, the percentage of moisture soon sinks sufficiently low to prevent altogether, or greatly to retard, fermentation. The hay remains sweet and shows far less tendency to heat in the stack, even if it actually contains more moisture than hay made in unfavorable weather. The more quickly the hay can be made in the field, and the less it gets bruised, or loses color there, the less likely it is to heat in the stack. Much hay is injured, however, when it is quickly made and in a fine season; it looks to be ready before it is so.

If dried ever so much and ever so carefully in the field, hay nevertheless heats to some extent in the stack. A slight fermentation, so far from being injurious, may be useful, for, as is well known, peculiar aromatic principles are thus generated, which certainly renders hay more palatable, and, it may be, more nutritious. As long as the green color is retained, there is no danger of the hay losing in quality, but if the heat in the stack becomes so intense and continuous as to turn the hay decidedly brown, I have no hesitation in saying that considerable loss in feeding matter is incurred.—*Dr. Voelcker in Journal of Agl. Soc'y of England.*

[Our friend Prof. Voelcker is of course unacquainted with the common method

of making Hay in Nova Scotia, by taking it into the barn as soon as it is fit to be taken out of the sun, by which means we save all loss from fermentation and the chemical changes that necessarily occur where Hay is made and stored in the open field. The above remarks of Dr. Voelcker are very instructive, and we hope our readers will ponder them.—Ed.]

SORRY HE SOLD HIS FARM.

The doctor says he "never new a man to sell his farm who did not regret it." This is perhaps stating it a little too strong. But being one of the oldest pastors in Western New York, he has had good opportunities for observation. I think men engaged in other pursuits, who buy farms expecting to find nothing but pleasure and profit in agriculture, are generally very glad of an opportunity to dispose of them. Such men seldom regret selling. But with a farmer the case is very different. He either sells because he thinks he can buy a better or cheaper farm, or because he is tired of farming, and proposes to live in the city. In the latter case he is almost certain to wish himself back again on the farm. I heard of such a case the other day. A farmer was offered last spring what he thought a high price for his farm, and accepted the offer, thinking he could live comfortably in the city on the interest of the money. After trying it six or eight months, he offered the purchaser one thousand dollars to let him have the farm back, giving him the summer crops and the wheat into the bargain. A farmer who sells expecting to buy another farm, finds it not so easy to suit himself as he expected. If you must sell, the better plan is to know beforehand where you are going.—*J. Harris in American Agriculturist.*

TREES.

In England trees have been defined as excrescences of the soil that enable spendthrift landlords to pay their debts. In Scotland, Dr. Johnson found the country so bare of trees that the wind had it all its own. In Nova Scotia, our lumbermen look upon trees as things like wild beasts to be hunted down wherever found, and even in Halifax we occasionally see fine old trees, under which the weary traveller has been accustomed to rest, ruthlessly hewn down to make way for city improvements. Now we have no wish to defend trees that are out of place. If a useless tree stands in the middle of the Queen's Highway, or the middle of a farmer's hayfield, we think it ought to be cut down, rooted out and burnt up with all possible despatch. There are many other places