THE GLEANER:

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From the Albany Cultivator.

RESULTS OF INDUSTRY.

The following furnishes a good example of what may be accomplished in farming by laborious industry and perseverance. There are probably many such in our country, and it is proper that they should be held up for the encouragement of others. The writer of this article, it should be remembered, is located in a region which many look upon as very unfavourable to agriculture.—

I commenced clearing land from a wilderness estate in 1820; the growth was heavy hard wood of beech-maple, birch, with some hemlock and spruce. I felled but little each year, at first, as I had neither ox, horse, or man, to help me, unless I hired or exchanged my own labour for them; (the latter I often did.) I practiced clearing every moveable thing from the land, sowing it with some kind of grain and grass seed. It scarcely ever failed to produce a good crop of grain, and afterwards grass in abundance, for ten, and sometimes for fifteen years. I have cleared, with the assistance of my own sons, principally, about one hundred acres of wood-land. I have about twenty eight acres well cleared of stones, which is in good state of cultivation. My stock consists of oxen, cows, and young stock to the number of twenty to twenty-five, one horse, and about forty sheep. I have plenty of hay for my stock, and sell from five to ten tons yearly. My barn, previous to 1846 was 40 by 50 feet, standing where the ground sloped to the south west, about four feet in fifty. In 1846 I built an addition on the lower side of the old part, one hundred and two feet long and thirty wide. I have dug a cellar under the old part seven feet deep—dug a trench still deeper for drain under the wall, which is substantially built under the two sides and upper end of the old part, leaving the lower end immediately connected with the space or cellar under the new one, which is from six to ten feet deep.—without a single post to interfere with carting—as the floor over it with its contents, is supported by king posts. My cattle are watered under the new barn from a well. Young stock is fed at racks under the barn. The cattle are chiefly tied over the cellar of the old barn, and are kept abundantly littered with straw, &c. The manure is thrown into the cellar through a scuttle.

JOHN MCGLAUFLIN.

Charlotte, Main, March, 1847.

ROTATION—USE OF MUCK—LIME.

I thought a little sketch of our manner of farming might interest you. We go on the five year system, beginning with corn, or buckwheat, next oats, third wheat or rye, then seeded with timothy or clover two years. Some haul out their manure in the spring, unfermented, for corn, and some let it lay until fal and put it where they wish to plant the following year, while others heap it up in June, and put it where they sow winter grain. Corn yields about thirty bushels to the acre. Oats about the same, and rye and wheat about fifteen, although a great many crops exceed those rates, as we had last year in this neighbourhood, some oats that yielded seventy bushels to the acre. In the fall of 1842 I hauled out some muck and bedded my barn-yard with it. The next June I heaped it with the manure which I made that winter, and in the fall of 1843, I put it where I sowed my wheat, and when I came to harvest it, I found a clear bright straw, well loaded. I pursued the same course in 1844, also, and with the same result.

I commenced using lime in the fall of 1844, spreading it on the ground after it was plowed the last time, just before sowing. I could not see any difference in the crop on that which was limed and that which was not. In the spring following, I put some lime on my sward about the same rate as above, say one hundred and fifty bushels the acre, I planted it to corn, without any visible effect, and the next year to oats, when the limed ground was very easily distinguished by its rankness and greeness, even until harvest. The soil on which the above experiment was tried is gravelly. My lime I burned myself. It was not the finest kind.

I think many mistake the worth of muck by hauling it out and plowing it under too soon. I have confidence in lime and muck, and especially in the latter, for my gravelly ground. Lime I think, is very slow to act.

PHILIP D. COOKINGHAM.

Pleasant Plains, Dutches Co., N. Y.

TO MEASURE HAY IN THE MOW OR STACK.

More than 20 years since, I copied the following method of measuring hay, from some publication, and having verified its general accuracy, I have both bought and sold hay by it, and believe it may be useful to many farmers, where the means of weighing are not at hand.

Multiply the length breadth, and height into each other; and if the hay is somewhat settled, ten solid yards will make a ton. Clover will take from 11 to 12 yards for a ton.

H. A. P.

DURABILITY OF MANURE.

A writer in the Farmer and Mechanic states that he has noticed the bottoms of coal-pits, between 65 and 70 years after the burning, so fertile that they invariably bore heavy crops of grass or grain. This manner it is known, consists of burnt earth, ashes, charcoal, and &c. Common barn manure becomes nearly or wholly exhausted in a comparatively short period.

CUTTING BUSHES.

I noticed several years since, a communication stating that the best time for cutting bushes, (grubs,) was when the leaves was fully expanded. It struck my attention, as I recollected, in a leisure hour, to have cut or beat down the bushes on a small spot, and they were almost all killed. I have since cut bushes when the leaves had become expanded, or as soon as they had commenced growing most vigorously, and fully agree with the writer, that one cutting at this time is worth four at any other time in the season. The sprouts, if any will be feeble and may be easily killed by close pasturing with sheep. The sap flows freely at this time from the stump, (stubs,) and exhausts the root of its vitality. Be careful to cut all the sprouts from the root.

R. WATKINS.

Napoleon Michigan.

CUTTING GRASS FOR HAY.

The stage at which it is proper to cut grass for hay, undoubtedly varies with the different species. Some kinds, as the orchard grass, (*Dactylis glomerata,*) and the common 'spire grass,' or Kentucky blue grass, (*Poa pratensis,*) make only a small weight, comparatively, in culms or seed stalks, but in favorable soils throw up an abundance of long rich leaves. Where a heavy growth of such grasses is produced, it is best to mow them twice or more in a season—the first time when they are in flower, (or sooner if the lodge down,) and at such times afterwards as the will afford a suitable burden. But if the land is not rich, there will be only a few seed-stalks and it may in many cases be better to let them die and dry up, and permit the growth of the leaves to continue till the latter part of the season, or till a good crop is accumulated. It should be remembered however, that in all cases where there is a thick growth which lodges or falls down, it should at once be cut; otherwise the grass will spoil by fermentation, and the roots, also will be more or less killed.

It is probable that timothy, the herds-grass of New England, (*Phleum pratense,*) attains its maximum amount of nutrimens at at a later stage than most of the grasses commonly cultivated here. The common opinion is that its greatest value is at the time, or after, its seed is ripe. Our experience does not support this idea. We are aware that acdording to the experiments of SINCLAIR, as given in the *Hortus Gramineus Woburnensis,* the ripe stems of this grass afforded twice the amount of nutriment given by the same quantity taken in the flowering stage. This statement has probably had great influence in the minds of farmers in regard to the subject. But further researches in chemistry, have shown that the experiments of SINCLAIR are not to be relied on for accuracy. His process was described in the work just referred to, page 2, as follows:

'The grass, in a green or dry state, is submitted to the action of hot water till all its soluble parts are taken up. The liquor is then seperated from the woody fibre by means of blotting paper; it is then evaporated to dryness. The product, or solid matter, is the nutritive matter of the grass.'

In relation to the experiments of SINCLAIR, Prof. JOHNSTON, in his lectures, remarks that they have lost much of their value since it has been satisfactorily ascertained.

'1. That the proportion of soluble matter yielded by any species of grass, when made into hay, varies not only with the age of grass when cut, but with the soil, the climate, the season, the rapidity of growth, the variety of seed sown, and with many other circumstances which are susceptible of constant variation.

'2. That the animals have the power of digesting a greater or less portion of their food which is insoluble in water. Even the woody fibre of the hay is not entirely useless as an article of nourishment—experiment having shown that the manure often contains less of this insoluble matter than was present in the food consumed.'

'3 That some of the substances which are of the greatest importance in the nutrition of animals—such as vegetable fibrin, albumen, casein, and legumin—are either wholly insoluble in water, or are more or less perfeetly coagulated and rendered insoluble by boiling water. Mr Sinclair, therefore, must have left behind, among the insoluble parts of his hay, the greater proportion of these important substances. Hence the nature and weight of the dry extracts he obtained could not fairly represent either the kind or quantity of the nutritive matters which the hay was likely to yield when introdnced into the stomach of an animal.'

It is evident that even Mr. Sinclair himself was by no means confident as to the correctness of his deductions, for in relation to the soluble matter of the grasses being taken as denoting accurately their value, he quotes from Sir HUMPHREY DAVY, as follows:—'But still these quantities (of soluble matter,) cannot be regarded as *absolutely* denoting their value; albuminous or glutinous matters have the characters of animal substances; sugar is more nourishing and less extractive less nourishing than any other principle composed of carbon, hydrogen, and oxygen, certain combinations of these substances, likewise, may be more nourishing than others.'

Upon the whole therefore, though we should be in favour of allowing timothy to come nearer to maturity than most other kinds of grass, we would cut it for hay before much of its seed is ripened.

The stems of timothy, where the growth is rank, are generally stiff and course, and the hay is freqently to hard and wiry to be greatly relished by cattle. To obviate this objection, it is well to give they hay a good *sweating* in cock. Soon after the grass is cut, or when it is fairly wilted, and the external moisture dried off, put it into cocks which will make from 50 to 60 pounds, (dry hay,) and let it remain in that situation for 24 to 48 hours. Then shake the hay out lightly, in a drying day, and it will be found much more soft and more agreeable to stock than if made in any other way. Time is also gained in the making in this way,—the hay drying much more rapidly after it has been sweated. Where it is intended to be pressed and baled, or exported, the practice of drying it in swath may do, provided, the grass is not cut till it has become quite ripe; but the hay will be harsh and not as good, especially for sheep and cattle, as that made in the mode above described.

PRESERVING EGGS.

This is the season to put up a store of eggs, against 'time and need.' There are various modes of preserving them. Lime-water has been found to answer well. Mr. H. A. Parsons, of Buffalo, informs us that he has been successful in preserving them with salt, He takes large srone jars, or tight kegs, and packs the eggs on the small end first putting in a layer of salt, and then a layer of eggs, taking care that the eggs do not touch the keg or jar. In this way the vessel is filled to near the top, when it is carefully covered over and placed in a dark cool place. Mr. P. has kept them in this way, perfectly good for three years. It is importtant that the eggs should be new, not more than ten days old, when put up, if it is intended to keep them a great while.

CURING HAMS.

The Editor of the Farmers' Cabinet says that his mode—the best he has fallen upon in a practice of 30 years—is to wrap the hams completely in newspapers, and then enclose each in a muslin bag, drawing the mouth of the bag closely abont the string which is attached to the ham and by which it is suspended. A correspondent of the Ohio Cultivator never finds and care necessary in excluding flies, when a tea-spoonful of red pepper has been rubbed upon the fleshy part of each ham before salting.

ELECTRO-CULTURE.

Much was said a year or two since, and high expectation raised, relative to accelerating the growth of vegetable by electricity. Plats of ground were encircled by wires buried beneath the surface of the soil, and connected with upright pointed conductors, for stimulating the growing plants,—the operator forgetting that the moist soil, being a free conductor of electricity dissipated in a moment every particle of the fluid that came down the rods, and not reaching the plants, and also forgetting that if the soil were not a conductor, the electricity thus brought down could never reach them;—two conflicting absurdities thus lying at the treshold. Extraordinary expectations were also raised by the occasional observance of the great luxuriance of some plants at the foot of lightning rods—resulting from growing in the deep bed of mellow soil made by digging the hole for the lower end of the rod.

Accurate scientific experiments have been lately made under the supervision of Professor Solly, of the London Horticultural Society, which set the matter finally at rest. A large and powerful cylinder electric machine was used, and the plants, in pots, within doors, were kept heavily charged, four hours each day, for four weeks, and although the experiment was varied in many different ways, not the slightest influence could in any case be perceived, either favorable or detrimental to vegetable growth. The plants operated upon, several pots of each sort being taken, were young French beans; young plants of the strawberry; seeds of wheat; and seeds of mustard and cress. Experiments were afterwards made in the open air, on a number of different plants, and the machine worked four hours each day for nearly six weeks, but not the slightest difference could be observed between those electrified and those not.

A SECRET WORTH KNOWING.

Boil three or four onions in a pint of water. Then with a gilding brush, do over your glasses and frames and the