

AGRICULTURAL.

HAY-MAKING.

It is best to cut the heaviest grass first, and if it be so thick and luxuriant as to lodge, or the lower leaves, and bottom of the stalks begin to decay, turn yellow, and lose their nutritive qualities, though the grass be not more than two thirds grown it is well to begin to mow it. But if you are strong-handed as regards help, and can "go ahead" like a steam car, you may as well wait till the head is fully formed, and the seed obtained its growth, though not entirely ripened. The *Farmer's Assistant* asserts that the best time for cutting herds grass (timothy) where but one crop is cut in the season is when the seeds of the grass are fully formed, but before they have become fully ripe, but as Farmers cannot cut their hay in a day or two, it is necessary that they begin before this time that they may not end too long after it. The same time is also proper for cutting clover, or rather when a part of the heads turn brown. Foul meadow may be cut much later without being hurt by long standing."

It is affirmed by a writer in the *Norwich Courier*, "If grass when mown is carefully turned every day it will injure very little. The great cause of injury is its lying on the ground through a long spell of rainy weather. If it lie more than one day, it becomes mouldy and turns black. If carefully turned every day, "rain or shine," it will not lose its colour. This is the result of many years' experience.

With regard to making hay from clover, there are various opinions and practices. The *Farmer's Manual* directs, in order to preserve the most valuable parts of clover, viz. the heads and leaves, to cut it in dry weather; and when the dew is dried off from the first swaths, turn them over gently without spreading, until you come to the swaths which are free from dew, let these be untouched until noon, unless showers or a storm become threatening. In this case break off your mowers, and get your clover from the swath into small cocks. Let the cocks be made with the fork, with only once or twice rolling. But if the weather continues fair, let your mowers keep on, and your hay makers follow with their forks, and put all the swaths into small cocks. The next day let these cocks stand, and go on cutting as before; proceed thus until you have secured your clover. In two, three, or four days as the weather may be, the clover first cut will be fit to cart if the weather proves fair, if not the rains will never penetrate farther than the winds and sun can dry; the clover will be injured only on the surface. Should a long cloudy or moist turn succeed, you may give your clover air by taking off the tops of each cock and placing it for the bottom, and thus with your fork change the order of your cocks by bringing the bottoms to the tops; this mode will cause your cocks to shed rain better than the common mode of turning them over at once with the fork. When you find your clover is sufficiently cured for housing, take the first good hay day, turn over your cocks in the morning when the dew is off, and as soon as the moisture is dried from the bottom clear your fields. Thus you will secure the most valuable parts of your clover, viz. the heads and leaves in full bloom and as perfect a green as when growing. And your horses will hold their flesh and do more service on this clover without grain than on clover cured by the common method with the usual quantity of grain.

The *Albany Cultivator* in treating of making hay from clover, observes, "My practice has been to leave the clover to wilt in the swath, and when partially dried, either to turn the swaths or to make grass cocks the same day,

so as to secure the dried portions from the dew. That which is not put into cocks the first day is thus secured the second day, or as soon as it becomes partially dried. These grass cocks are permitted to stand one, two or three days, according as the weather is, and as the curing process has progressed. When they are opened at nine or ten o'clock on a fair day, the hay is turned over between eleven and three and soon after turning gathered again for the cart. Thus cured, the hay is perfectly bright and sweet, and hardly a blossom or a leaf wasted. Some care is required in making the cocks. The grass is collected with forks and placed on dry ground between the swaths, in as small a compass as convenient at the base, say two or three feet in diameter, and rising in a cone to the height of four or five feet.

"The advantages of this mode of curing clover are;

"1. The labour of spreading from the swath is saved.

"2. The labour of the hand rake is abridged, or wholly dispensed with, if the horse rake is used to glean the field when the hay is taken off, the forks sufficing to collect it tolerably clean in the cocking process.

"3. It prevents in a great measure, injury from dew and rain, for these cocks if rightly constructed, (not by rolling) will sustain a rain of some days, that is, they have done this with me, without heating, or becoming more than superficially wet.

4. "Clover hay made in this way may almost invariably be housed in good condition; and if rain falls after the grass is mown, the quality of the hay is infinitely superior to what it would be under the old process of curing."

A writer for the *N. E. Farmer*, vol. xi p. 2, with the signature W. B. who is a practical and judicious farmer, objects to attempting to cure clover in the swaths or in cocks. He says, "clover, like other hay, to be good for any thing must be dried in the sun," &c. Dr. Deane under the head clover directs, when half the heads are turned from red to brown, and in the decay, it is the right time to mow it. But if the seed is to be saved for use, it must stand until it is all dead ripe, both heads and stalks. It requires more care to make clover into hay than most other grasses. That which is mown in a morning should be spread, turned and raked up before night. The next day if the weather be fair, it must be opened, stirred once or twice, and cocked up again. Then after sweating a day or two, it may be put in the barn."

Lorain says, "Curing hay in swaths to save the juices, seems to be not only practically wrong but also opposed to reason. The confined heat and moisture in the interior of the swath promotes fermentation; and must be more or less injurious to the nutritive matters contained in the grasses, &c." Although there appears to be a point blank variance in writers on the subject of making hay from clover, they may be right on both sides, by conforming to circumstances. If the crop be large and luxuriant, and the weather fair and dry, adopt what Lorain calls "the good old way of shaking out the swaths, and spreading them carefully over the whole surface of the soil as fast as the grasses are mowed" provided the dew is off. But if the weather be lowering and variable let your grass remain as left by the mower, and be cured in the swath and the cock as heretofore directed.—*N. Eng. Farmer*.

ON THE PRESERVATION OF POTATOES OVER THE YEAR.

As the best mode of preserving potatoes until the produce of the next year's crop should be brought into use, is a matter of considerable importance, I beg to refer to vol. 22nd, p.

135, of the *Transactions of the Society for the encouragement of Arts, &c*, where is detailed the following method adopted with success by M. J. de Lancey, Guernsey.

M. De. Lancey says: "Early in March, 1803. I observed my winter's stock of potatoes, which I had dug in Oct. 1802, sprouted from the mildness of the weather in this island. It occurred to me that by putting them under ground vegetation would be retarded. I accordingly took indiscriminately from my pile about three dozen and in my court yard dug a hole two feet and a half deep, under the protection of a southwest wall, where the rays of the sun prevail for a few minutes only during the day, at any season of the year. Then, with three pan-tiles, one at bottom, laid most of my potatoes in the hole, and placed the other two tiles over them in form of the roof of a house. They not containing all, I threw them carelessly into the hole, having no great confidence in my experiment, covering the place over to its usual level. Business called me home during part of the summer, I neglected looking after my small deposit; but, on the 21st January, 1804, nearly 11 months after covering them, I had the curiosity to examine them, when to my astonishment, I found them, (two or three excepted, which were perforated by the ground worm, though firm,) all perfectly sound, without having in the least vegetated in any respect, fit for the purpose of sets and use of the table, as I have boiled a few, and found them similar in taste and flavour to new potatoes. I further pledge myself that they were perfectly firm. I have still some of them by me for the inspection of my friends, who agree that they are so."

In another letter, dated 18th of May, 1804, M. De Lancey says: "I avail myself of the opportunity of a friend going to London, to send three of the potatoes, as a confirmation of their being fit for sets, as they are actually sprouting. The potatoes I send, I pledge myself are of the growth of 1802." Then follows the certification of the Secretary to the Society of Arts: "The above potatoes were examined before a committee of the society on 30th July, 1804, and found to be in a state fit for vegetation."

From the above experiment, it is evident that vaults or deep trenches, out of the reach of atmospheric influence, would effectually retard the growth or sprouting of potatoes during the period of about twenty-one months; that is, from the time of taking up in October, till the 30th July of the second year, or say at least eighteen months, and we have here a period of time three times longer than would be sufficient to fill up the interval betwixt the old and the new crop of potatoes.

It is probable, that potatoes for deferred use, say from April to October, would be more safely deposited in January or February than at an earlier period; for it cannot be doubted that, when just taken from the field, they possess a succulence and moisture rather inimical to sound storing in large quantities, besides which the examination and removal of damaged sets would contribute much to the security of deposited heaps. If we can preserve ice from melting, we can surely keep potatoes from sprouting; and the latter is undoubtedly of much greater importance than the former. Trenches or vaults would probably require three or four feet of covering of mould, besides all the advantages that can be gained by selection of a situation not exposed to the sun; and if the potatoes deposited were formed into breaks or divisions of five, ten or fifteen bolls, according to circumstances, with intervening partitions to prevent the access of air, there is little doubt, that by well contrived, and well constructed vaults or trenches, potatoes may be kept in excellent condition, from the beginning of April till the end of October for domestic purposes, as well as for the use of horses and cattle.