

## Grasses and Forage Plants.

### Hay-Making.

That an immense quantity of hay is spoiled annually by many farmers plodding on in the ancestral ruts and clinging to the old hazy tradition of the custom of the district in which they live, heedless of the appearances and circumstances which guide their more enlightened brethren as to the proper time for mowing this important crop, is abundantly evident to every well-informed agriculturist.

Because Mr. Jones, whose land is well sheltered, loamy, friable, and dry, has begun hay-making, Mr. Brown must follow suit, although his land is cold and exposed, clayey, mossy, and wet, and notwithstanding too that he has applied different dressings and manures to the soil. It is surely worse than absurd thus to do out of season what others do in season simply to be up in the race, and to make hay on dry soils and wet, clayey soils and mossy, sandy soils and loamy, at the same time, regardless of the condition of the grass plants.

The right time to mow grass greatly depends, of course, on the system of farming pursued, on the character of the pasture which produces it, and on the nature of the soil and climate, but especially on the condition of the plants as regards maturity. Hay is just as much injured by being allowed to get over-ripe as it is by being cut too soon. Moreover, the farmer ought to be guided in a great measure by the use to be made of the article—whether to feed horses, cows, young stock, or sheep. If for horses at work, the grass should be mowed after it has passed out of blossom, when the seed is in the milk, because at this stage it contains the largest quantity of nutritious substances, such as sugar, starch, gum, &c., which are of the highest value, contributing much towards rendering hay such a choice article of food. If for cows it should be cut earlier, so as to leave the grass as nearly in the green state as possible—soft and succulent—because in this condition it contains a larger quantity of juices which assimilate well in the animal, and produces a greater flow of milk. If for young stock and sheep, the grass should be mowed when in full flower, because after flowering, and as the seed forms and ripens, it is exposed to loss in its nutritive matter by the seeds being shaken out and the brittle foliage breaking off during cutting and making, and the grass itself, especially the rye grass, becoming almost a woolly fibre, losing nearly all its sap and sweet aroma. In short, hay made from over-matured grass is no better than ordinary straw, if indeed so good.

Clover, again, which is such excellent food for milch cows and sheep, should be mown immediately after blossoming, before the seed is formed. It should be cured by gently turning over the swathes in such a manner as to lose as little of the foliage as possible, and the tedding-machine ought never to be used under any circumstances. Moreover, clover ought not to be exposed long to the sun, but, being wilted and partially dried, should be put up into small cocks and left to cure for four or five days, when it will be fit to cart away. A very good method to prevent fust in a wet season is to carry the green clover and lay it in alternate layers with dry straw, sprinkling a little salt on each stratum. Fermentation will speedily set in, giving a sweet clovery flavor to the straw, such as cattle like very much and eat with avidity. Besides, straw is a good corrector of the heating qualities of clover ricks. The most profitable use of clover, however, I have found to be to cut it green for the farm stock, or to feed it off with sheep.—*Cor. London Times.*

### Sowing or Drilling Corn for Fodder.

We wish to impress upon our readers, especially those who keep cattle, the great value, convenience and economy of sowing corn to be used for fodder. Last year we planted it in hills about 18 inches apart, and aimed to get 8 or 10 grains in a hill; rows three feet apart. The object of planting in hills was for convenience in cutting. It was the most profitable crop on the place. The corn was cut up before frost, and shocked in the ordinary way. The stocks being small, there was no difficulty in cutting all up in the straw-cutter, though we fed most of it in the ordinary way. One of our neighbors, however, who had a cutter driven by horse power, fed his cattle all winter on drilled corn chop, with a little bran and shorts, and we think his cattle were never wintered so well nor so cheaply.

A Mr. Simmons wrote to the *Germantown Telegraph* that, as late as June 3rd, he drilled 12 quarts of corn in rows 2 feet apart, on a third of an acre of land, and applied 1½ cords of manure and cultivated twice, a man following with a hand-hoe. The corn grew 10 feet high. Cut up just as tassels began to blossom, it made 300 bundles, averaging 20 lbs. green and 8 lbs. dry, being at the rate of 7,200 lbs. dry fodder per acre; which he judged to be worth more per ton than hay for feeding cows.

Another farmer, in Peekskill, N. Y., drilled two bushels of corn on 2½ acres of meadow land after he cut the hay, covered the drills with fresh cow manure, cultivated four times up to August 10th, and cut with sickle September 10th, laying corn cross-wise of rows to dry for five days, then tied it up and shocked on adjoining grass land. He then re-ploughed the corn ground, and seeded again to timothy. The stocks were tall and slender, and eaten clean without cutting. There were 8 tons of corn fodder.

These are instances that cannot be equalled by large farmers in the West, perhaps, as they will not be likely to apply their manure to such a purpose, but on rich land, without this it is probable that nearly as much per acre could be grown.

At all events we are satisfied that where hay is likely to be short, as we fear will be the case in many localities this year, there is no substitute that will answer the purpose so well as the drilled corn. Indeed, we are firmly convinced that in all cases this fodder can be used to some extent as a feed for cattle of all ages, with greater economy and profit than any other crop the farmer can produce.

Where the corn is not cut until September, and is planted as early as the middle of June, there will be a good many small ears of corn; and this has been the condition in which we have fed it.

As to the result of cutting when in blossom, as in one of the instances above cited, we have no experience; but have no doubt the fodder, when cut at that stage, would be exceedingly nutritious, and very readily eaten, not only by cattle but by horses and sheep.

The only objection to the practice is, that it involves more labor in harvesting, as a good deal of care is required in curing the fodder before it is shocked, and it should, we suppose, be tied up in bundles; all which a small farmer would regard as objectionable, while the larger landholder of the West would think it impracticable. Another advantage of cutting in the green state is, that we may plant as late as July, and obtain a good crop if the weather be favorable. But we would not advise this late planting. Dry weather, which we frequently have at that season of the year, would on ordinary soil seriously affect the crop; while, if we plant the latter part of May or before middle of June, we may be assured of a full and satisfactory return for our labor, equal, we repeat, to any crop we can grow.—*T. C. J. in Chicago Live Stock Journal.*

### Yucca or Bear Grass and its Uses.

If there is anything we like, it is to meet a man with a horticultural hobby. We ought to be doubly gratified in the case of Col. Jas. T. Worthington, of Chillicothe, O., who has two hobbies which he has ridden very successfully for some years. One of these is to show that figs can be grown in Ohio in the open ground, and the other is to utilize the Yucca or Bear Grass. We some years ago called attention to Col. W.'s estimate of the value of this material, and now having another letter from him, we renew the subject. The common *Yucca filamentosa*, the Bear Grass or Adam's Needle, is a very common plant in our gardens, where it is cultivated for its subtropical foliage and its enormous clusters of white hily-like flowers. The kind grown by Col. Worthington has been by some botanists considered as a distinct species and called *Yucca staccida*, but our best botanists regard it as a form of *Y. filamentosa*, with longer, more abundant, and less rigid leaves. The leaves of this, when properly cultivated, are three to four feet long and one to two inches wide; the plants grow so vigorously that in three or four years they form stools covering a space about four feet square, and furnishing a great abundance of leaves. The flowers are very similar to the form so common in our gardens. In regard to the uses of this plant, Col. W. writes: "For supplying cheap, strong strings and bands, it has no equal; is excellent for tying up bacon, hams, corn shocks, vines, bundles of vegetables, mending baskets and other purposes when string or band is needed, and requires only to be known to be generally cultivated. The leaves of this plant will, I think, be eventually used for cordage, matting and coarse cloths, instead of jute and other fibrous materials which we now import."—*American Agriculturist.*

### A Pleasant Chat about Hay.

A contributor to the *Hartford Courant* says: "In expending our little bay of hay—a twelve-foot cube, or thereabouts—I find each horse-load reminds me by its peculiar herbage of the part of the meadow it came from, and the circumstances of its gathering in the regular inverted sequence of the hay harvest. The loads that were perfectly cured gave an account of themselves in a more aromatic sweetness. Those that were stored with a risky excess of moisture tell the tale in volumes of fine musty dust, especially in the middle of the mow. The heat there was undoubtedly near the scalding point, the hay shows a dull, brownish green tint, and has become very dry and brittle. The sugary gums and dried juices belonging to hay in its best condition, and tending to preserve the weight and strength of its fibre, seems to have been quite consumed in the interior parts of some of the loads. So that the young ones in one stormy day, with a jumping frolic, may reduce a whole foddering to the lightest chaff. The outside is in better condition, showing that, if I had taken the precaution to provide one or several small air-holes from the bottom upward, as by pulling up small pieces of joist while the hay was being filled in, this waste of the richer and more appetizing portions of the fodder might have been prevented.

A partial remedy in the use of such hay is to sprinkle each foddering with water several hours before it is wanted—a pail of water, say, for ten or twelve animals. If the hay is fine, whatever provender is fed may be mingled with the hay, layer by layer—adding more water from the nose of the water-pot. Thus without a slop upon a clean barn floor, or making the mixture heavier than wilted grass. The water alone will settle the dust, and develop anew whatever of fragrance the hay may be capable of yielding. The improvement is as obvious as that produced in stale bread by steaming, or heating in the oven with a moist cloth. It is a similar dampening by the weather that makes rough and musty fodder, thrown from the stack, more acceptable to cattle sometimes than the best dry hay would be."

### Sowed Corn.

Having grown this for the last ten years, I wish to urge it upon my brother farmers, especially dairymen, if there are any not already in the habit of sowing it.

My crops of it usually embrace four acres every season, and there are no four acres on the farm which I could not easier spare. The nearest estimate I can make of it, is an average crop of 20 tons green fodder per acre. I drill it at the rate of two bushels per acre, making three sowings, the first about the 10th of May, and in drills 2½ feet apart. On the ground intended for sowed corn, I haul manure during the winter from the sheds and cow stables, giving it a pretty heavy coat. The cultivator is kept going between the rows, so as to make it a cleansing crop, and as it only makes small ears and by no means matures a crop of grain, I do not consider it an exhausting crop by any means.

I have 30 cows, who from the first cutting to the very last, thrive on it and increase in their milk and butter. During the last of July and all of August and September, this sown corn is nearly my main dependence. The large yellow corn turns off for me more weight to the acre than the small varieties. Some small ears mature before the hard frosts and these are highly relished by the cows and help to put them in condition for their winter quarters. I have no scales on my place, and therefore can only estimate the weight of *dry fodder* per acre which I put at 5½ tons. This is fully equal to the best hay. I cure it by laying on the ground for two or three days after cutting, or when convenient stand it up against a fence. When sufficiently dry it is tied in small sheaves and these are put in large stooks, convenient to the barn, and on suitable dry and clear days are singly hauled on to the barn floor or into one of the mows, cut up by a cutter, and moistened with hot water before feeding to the cows, when meal and bran are mixed through it, and there is no refuse left worth speaking of.—*Cor. Practical Farmer.*

UNCLE SAM has under cultivation, at Mare Island, 270 acres of wheat, 30 acres of barley, 65 acres of alfalfa, and 47 acres wild oats.

THE Sussex county granges talk of buying clover and timothy seed this spring through a Missouri grange at a saving. In which case, the Missouri grange occupies the position of "Middleman." Does it not?