

muster immediately after haying, and in a few weeks the difference in the growth of the grass where the straw had been spread, and that of the adjoining part of the meadow, was so manifest that no one could doubt the utility of the practice,—in the one case the grass started quick and grew rank and thick, and in the other the growth at the end of two or three weeks was hardly perceptible, and I am told by a Long Island friend, that the crop will be more enhanced at the second mowing after the application than the first. What is the rationale of the thing I pretend not to know; I merely state the facts of the case. And yet, Mr. Editor, how common it is to see great heaps of straw about the barn or in the fields, left there to rot and become a nuisance, instead of adding, if properly applied, from 50 to 100 per cent. to the crop,—and this species of manure is so much more easily and cheaply applied, two loads being sufficient for an acre, whereas from twenty to twenty five of barnyard manure would be required. —*Correspondent of Cultivator.*

[The straw in the experiment detailed above must have served to make the ground warmer and lighter,—it has been used to cover ground sowed in the fall with orris or parsnips, leaving it so thin over the drills, that the plants could find their way through it. Orris vegetates very early, generally, when not more than three inches of the surface is thawed, but it frequently stands for a month after it appears above ground without any apparent increase of growth, in a cold backward spring; yet in such a season the plants that are upon ground covered with straw will have leaves two inches broad when the second leaves have not appeared upon those which stand on naked land. The parsnips will be brought forward in the same way by covering. Grass is often much injured by frost in a broken winter, when there are frequent rains and thaws after the ground is frozen. The ground which is thawed to the depth of two or three inches fills with water which cannot pass the frozen soil beneath it, and which, when it freezes again, crushes the bark of the roots by mechanical force, as it bursts casks, its bulk at the moment of freezing being suddenly increased by the great quantity of air that is formed at that instant. A covering of straw would prevent the ground from thawing so frequently, and in this way prove serviceable. When the aftergrass is not fed off, but permitted to decay upon the ground, we do not see the grass injured by the winter. As the leaves decay, the juice retires to the root, rendering that and the covering of the buds more solid, till little being left but the woody part of the leaves they bend to the ground forming a covering for the roots through which the heat of the earth will not readily escape, and through which the warm wind of a winter rain storm will not easily penetrate to thaw the ground when it were better it should remain frozen. The covering with a material that is a bad conductor of heat must be of use to the grass crop, even if it should not furnish much manure as it decays. This is the reason that a small portion of the manure that is given to land for potatoes or other root crops, is sufficient to produce a large crop of hay when applied as a top dressing. It not only furnishes food to the roots, but serves also to keep them warm, and to keep the soil loose and mellow. All naked ground is always found to become hard and compact in summer, but a covering of stones, leaves, straw or dead grass, always keeps it loose and light, like the soil of the forest covered with dead leaves and moss. Nature itself points out to us, that land which, like grass land, is not kept mellow by stirring it, should have the surface covered with half decayed vegetable matter to preserve its lightness, heat, and moisture; for the land in woods, which invariably has a covering of this kind, never grows less fertile; but a thin gravelly soil has been so much impoverished by fallowing for a summer that manure at the rate of $\frac{1}{2}$ loads to the acre, hardly made it as good as it was before it was covered. Both heat and moisture readily pass from a naked soil, but they do not

go off without bearing with them such part of the fertile principle in the land as is in a volatile or aerial state. Top-dressing for grass on dry ground should therefore be prepared by mixing the manure with a large quantity of dead vegetable matter. The best materials are, generally, weeds, straw, rotten leaves, and grass sward from the bottom of ditches. The dead turf from a burnt barren is also a good material; and when nothing better can be procured, peat earth should be used, as it will do service by retaining the fertile part of the soil from evaporating, and preventing the grass from being injured in winter, although it may furnish but little nutriment to the crop. For grass on a swampy soil, which is generally too moist, the manure should be mixed with earth; the best is that which is washed from roads to the bottoms of hills, some of which needs no addition of other manure, but even the gravelly soil taken four feet below the surface is useful on a drained swamp soil; by its frequent and great changes of temperature, sometimes very hot, then cold, it helps to decompose the swamp soil and change it to a fine fertile mould.—*Ed. Col. Far.*]

From the Central New-York Farmer.

ON THE APPLICATION OF MANURE.

For the fore part of my life I was not a farmer but a mechanic. I quit my trade and commenced farming about twelve years since. After farming the first year I had remaining about my barn a quantity of manure. In the latter part of the season I made some inquiry about using manure upon meadows after mowing, but got very little or no encouragement about using manure in that way. Being resolved to apply the manure to my meadows, and having no other place that needed it so much. My farm, the principal part of which was rough and quite new, was unsuitable for mowing, and my meadow ground had been very much injured by ploughing, so much so that my crop of grass was very light, scarcely worth mowing. In the month of August, before I had done mowing, in rainy or wet weather, I employed my hand in drawing out manure on the meadow, in parts where the grass had been cut, about twenty loads to the acre, and spread all over the ground; in a few days I began to see the benefit by the dark green appearance which it presented. The part so manured was very soon excellent feed during the rest of the season, and the next year my grass for mowing was very good, about as stout as it could stand, averaging full two and a half tons of good hay to the acre, and remained much the same for about three years, and was passable many years. I have practised ever since putting my manure on the sward ground (in preference to ploughing it under) either spring or fall. The benefit I receive by applying manure in the fall, consists principally in the increased quantity of fall feed.

After this experiment I soon began to see my neighbors drawing their manure on in the same way, and in my neighborhood it is scarcely used in any other way. For my part, I consider it the best way entirely to use the manure on the sward for pasture or meadow. During my experience, which has been twelve or thirteen years, I have never failed of a good crop from manure, drawn on any time after mowing, till the last of April the next spring; and by this mode I get my land enriched by the manure upon the sod, the use of which cannot be lost, as some say it is, by ploughing under deep, about which there is some reason to contend. But to settle that, we will propose when you wish a good crop, plough a piece of ground already enriched by manuring upon the surface, and you will raise any crop that is common for the soil of your land. I would add that the loamy soil of our hill land, is generally adapted to grazing, whatever grade of soil it may be.

I would not wish to be understood that this is the only method of manuring land. Manuring in the hill and manuring before ploughing does good, but not so much in proportion to the quantity of manure. Applying it to the hill you will readily see is a slow and more expensive way with only the same benefit, and requires more of the manure. But ploughing under to the depth of from seven to nine inches, will not answer in this hilly country, for we might as well plant corn on clay from the bottom of the well, as raise a crop from the ploughing of nine inches, and then put the manure down to that depth and you will see at once that the cold soil, so turned up, will not give the crop a start, and your manure