Grasses and Forage Crops.

Sowed Corn for Winter Forage.

A writer in *The Ohio Farmer* says —*My* experiments with it have resulted in the following conclusions: First, that one acre of corn sown in drills three feet apart is worth more than two acres planted to winter cattle on. The first I sowed in June, four years ago, from the 10th to 20th; stock did well on it fed in the bundle. I have raised some every year since, but sowed late, and cattle would not fatten fast enough to suit me. Last year I sowed in May, about the 20th, three pecks per acre; cultivated twice, and cut and stooked, then cut with the Empire Feed-Cutter, and fed from one to two bushels per head, and am receiving gratifying results from it now

In sowing early the corn cared well, in fact a good part would have done to crib, therefore, having more heart or substance, and by cutting it from one to one and a-half inches long, cattle eat every part clean. It is not as much work to cut the fodder as it would be to husk corn; the stalks are sweeter and softer than when handled as they are when it is husked. The corn should, when cured, be piled as close as possible, and heated, to keep it from drying too much

One acre fed the first of this winter twenty-five head three weeks. Since then I have had but enough to feed once a day, one bushel per head, then straw in the yard at noon, and hay at night My cattle are doing well, in fact are growing.

Fall Treatment of Meadows.

The grass crop is the most important interest of agriculture. As represented by figures in census reports and estimates of crops, its real value is far from being properly appreciated. While the value of the hay cut and carried into barns each year in the United States amounts to over $100,000,000, taking a price of $15 a ton only as the basis, a larger amount of grass than this is consumed as pasturage Thus the value of our grass products would exceed that of the corn crop or any other single product of agriculture. Grass, therefore, is "King" Nevertheless there is no crop so carelessly managed A certain amount of care is taken to gather and protect the hay each year, but as soon as that is saved the meadows are neglected, as if their condition was an element not to be considered in the calculations for a future supply Thus, when a more than usually hard winter or a very dry spring occurs, the grass crop falls short, and inconvenience and loss, if not distress, are the consequences. It is the boast of the enthusiastic farmer that he may be independent of the seasons However near to, or distant from, the truth he may be as to grain crops, he is near the truth as to grass This may be made as nearly a certain crop as we may call any sublunary thing certain Just now is a critical time with meadows, and where do we see any especial pains taken to carry them over it safety? Certainly in but few instances; but in them, constant success shows that the careful farmer may in fact, so far as this crop is concerned, feel little anxiety as to what weather he may experience. The hay having been harvested, the plant, whether clover or grass, is checked very seriously by the cutting No time can be better chosen to kill a plant than to cut it when in full flower. Just at this time, too, the fervid heats of of our summer's sun bear with injurious effect upon the wounded plants, and a large portion of them die out and disappear. We have no sod A true sod, in which the plants grow so thickly that no intervening space or soil is to be seen, is a thing unknown to us Even beneath the clouded, weeping skies of Britain, the production of such a sod is a matter of time and the greatest care. An English proverb has it that it takes 300 years to make a sod Yet we talk of our sod. It is a thing not indigenous here The course we take is destructive to all our hopes of one. We cut the grass, and when, in spite of drouth and heat, a weak growth once more appears, we turn in our stock and pasture it to the roots again Then the frosts of Winter come, by which it is torn out by the roots, and perishes for want of protection The soil uncovered to fierce winds is denuded of every particle of dead matter that would rot and fertilize a new growth, and when spring comes again, the sickly growth is pastured until the last moment, when it is allowed to grow to be mown once more. It is simply marvellous that on half our farms a hay crop can be gathered That our average hay crop is at least one ton per acre, is a standing proof that our soil is not impoverished, as we are made to believe. It may be that our poverty is such that this state of things must continue. But if "the destruction of the poor is their poverty," it would seem that this condition should be remedied as soon as possible. The evil is radical It consists in making the wrong crop our standard one, our "pivoted" crop. This should be grass, and not corn And to bring this about, we must first learn how greatly we depend on our grass; that without it, it is in vain we try to increase our flocks and herds, and preserve our fields in fruitfulness. Then we may take the simplest means to preserve our meadows from deterioration When the crop is removed, we must protect them from the sun's heat and the drouth by a dressing of manure, or we must stimulate them into active growth by dressings of active fertilizers, so that they will soon be self protecting Then, if pastured at all, it must be with judgment and moderation, and the winter's snows must fall upon a thick coat of faded grass which will shelter the roots, and dying down, furnish food for a new growth If we consider that the growth of roots bears a proportion to the size of the plant, we shall aim to keep a vigorous growth above ground by which the root may draw what it needs from the abundant sources of the atmosphere. In short, we must give much more consideration to the condition of our meadows if we would keep up, not to speak of increasing, the fertility of our farms.—*N. Y. Times*

Materials for Top-Dressing.

Before the fall rains come on, every farmer should have a large compost heap ready for top-dressing his mowing lots. We are satisfied, from many years' experience, that a top-dressing in the early Autumn is worth twice as much as one in the Spring, and that this dressing need not be of the richest materials. The meadows, especially if the aftermath has been cut or grazed, need something to keep them in good heart, give vigor to the roots of the grasses, and protect them from the rigors of winter. Almost any covering that will answer the purpose of a mulch—that is, will keep the soil from being bake-bound, and enable it to absorb the rich gases that descend in the fall rains and the winter snows—will be good material for top-dressing All strawberry culturists know the good effects which result from covering their vines with straw, leaves, or even hemlock boughs. When uncovered in the spring the vines look fresh and vigorous, start off with a luxuriant growth, and the deep green color of the leaves continues through the season No observing cultivator supposes that these effects are due solely to the protection from cold which the covering has furnished The straw, or boughs, or whatever the covering has been, has kept the soil porous and enabled it to absorb fertility from that great reservoir of fertilizing material—the atmosphere.

In like manner, if we spread a light covering of straw, or leaves, or fine branches from trees, or woolen waste, or any porous material—we care not much what—over a meadow, the grass will grow luxuriantly under it, showing that fertility comes from the air in part, at least We have often kicked over a lump of muck as we have crossed a top-dressed field, and have been surprised to find how large and vigorous were the young stalks of grass which were growing under it. The raw muck could not furnish much food for plants, but it kept the ground moist and porous, and was itself a good absorbent of the gases of the air Of course we should prefer some richer material for top-dressing than straw or muck, but we are confident that the mulching effects of covering land with some porous material have been undervalued

In forming a compost, therefore, for top-dressing meadows, we dilute the manure greatly with sods, muck, leaf mold, or even good loam—anything, in fact, which is a good absorbent and will make the surface of the meadow more porous, and it is surprising how little heaven of pure manure will set a large pile of compost in fermentation, and reduce the whole to that putrescent state in which it best subserves the purpose of top dressing. Animal manure, having, in its passage through the viscera, received from the effete matter with which it has come in contact a tendency to rapid decay, imparts this tendency to the muck, or sods in the compost heap, just as one rotten apple in a barrel taints the whole. Whether this effect is due to the seeds of decay which the manure contains, and which propagate themselves as do the seeds of yeast, or whether it is the result of what chemists call catalysis or contact, we will not stop to enquire, but that such is the consequence, all observing compost-makers must have noticed. Hence the great benefit of the compost heap, as it enables us to make a little manure go a great way in furnishing top-dressing A load of night soil can be composted with half a dozen loads of dry muck, or leaf mold, and the whole spread on forty rods of meadow will do as much execution as the night-soil alone would on ten rods

In forming the compost heap it is not absolutely essential that we should have any manure to start the pile in fermentation. A dead horse or other animal, or some refuse pieces of skin from a tannery, or sizing from a paper mill, or the refuse of a glue factory, or the sweepings of a woolen-mill, will have the same effect on the compost as the manure. All animal matter, with the exception of wool, hair, and bones, decays rapidly during the summer, and imparts the same tendency to every organized substance with which it may come in contact. Even woolen waste, which alone would decompose slowly, is generally so saturated with oil, a highly carbonaceous and consequently inflammable substance, that it heats up the compost heap admirably. A spontaneous combustion goes on in the pile, which speedily reduces the whole into a good condition for top-dressing. If a few bushels of wood-ashes, say five or six, can be added to a cord of compost, made of muck and wool waste, or sizing, or some such matter full of ammonia, we desire no better top-dressing.

If neither animal manure, nor dead animal matter of any kind, fish and flesh included, can be obtained to set the compost heap in fermentation and furnish it with ammonia, then use the soap-suds from the laundry and the slops from the kitchen and the chamber There are few things that will put a compost heap on the road to putrefaction better than the refuse water of the laundry. This contains, besides soap, the filth of clothes, which have received the exhalations from the pores of the skin, and is really rich in effete animal matter. Poured around the house, as it too often is, it produces one of the worst smells imaginable; put upon cucumber or grape-vines it gives a most luxuriant growth, but the best place for this water, and, indeed, all the slops of the house, is the compost heap, where all the rich gases generated by its fermentation will be retained, and will aid in decomposing much other organic matter. We sometimes hear persons living in villages or the suburbs of cities, and keeping no stock, complain that they have no resource for fertilizers. They have a garden spot, but no means to enrich it. We always pity the ignorance of such complainers. Having an abundance of fertilizing material, they know it not Every family of half a dozen persons must furnish from the chambers, the kitchen, and laundry, to say nothing of the water-closet, sufficient material, if it is only rightly managed, to dress richly an acre of land If the night-soil is included, two acres can be kept in good heart by every such family, even if there is not a cow or chicken on the premises.

Chip dirt, well rotted muck and sods, and in some cases good loam, without any peppering of barn-yard manure or special fertilizer of any sort, will make a good top-dressing for an old meadow. These serve to lighten the soil, and are good absorbents of fertilizing material from the air, though they may not contain much in themselves We have been surprised to notice the results of spreading alluvial soil, taken from the bank of a river, upon a clay loam. The alluvial seemed mostly composed of sand, but it gave the clay loam new life. There were doubtless salts of various kinds in the alluvial, which gave the sand additional virtue, but the compact clay was as much improved by the sand as bread is improved by butter.

We have also seen most beneficial results from top-dressing mucky land—that is, land abounding in vegetable matter—with pure sand taken directly from the pit to the meadow. The quantity and quality of the herbage were greatly improved by this cheapest and most simple of all top dressings.

The resources of fertility are abundant, if we only have an eye to discover them; and we often overlook them at home, and search at a distance for the more costly and less efficient.—*Alexander Hyde in N. Y. Times.*