



The Field.

Improving a Sandy Farm.

The *Massachusetts Ploughman* gives a description of a farm owned and worked by Mr. Wm. Mattoon, near Springfield, Mass. When it came into the possession of the present owner it was almost a sandy desert, not producing more than three bushels of rye to the acre. It now yields nearly two tons to the acre, and other crops in proportion.

Mr. Mattoon's first step toward improvement was to give the land a liberal dressing of clay. This was of course the right thing to do. He thus at once improved the texture of the soil, and added to its productiveness. Next, he began to think of providing manure, and instead of sending to a distance for horse manure or artificial fertilizers, he set about utilizing the waste products near home. There is a large slaughter-house near his farm, and he contracted for all the refuse, blood, bones, &c. These he hauled to his place, composted, and then applied to the land. He has managed to accumulate about eighty tons a year of this rich stuff, and has found that its effect on the soil has been wonderful. He thinks it far more valuable than "straw horse manure." He also contracted for all the dead horses from the adjacent city, and received \$3 a piece from the city council for hauling the nuisances away. These he composted in a large pile, allowing them to lie a season at least and rot down before working them over. He makes a specialty of keeping hogs on account of the value of their manure, and at the time referred to by our contemporary, had upwards of 200 fat ones on his place. He makes large use of ashes, and is an assiduous collector of all manner of odds and ends that can be converted into fertilizing material. Of late he has turned his attention to leather waste, which, in rainy weather, is cut up by his men into fine bits, and so fitted for application to the land. The *Ploughman* thinks mincing up leather will hardly pay, as it will scarcely rot sufficiently to produce any fertilizing result in a life time. But it is refreshing, amid the prevalent neglect of manure manufacture, to meet with at least one farmer who is suspected of going to an extreme in that direction. It appears plainly enough that Mr. Mattoon has demonstrated that a barren sandy farm can be brought up to a high point of productiveness by the utilization of waste products. Of course, not only have science, thought and skill been brought to bear, but capital has been expended: It has, however, been wisely used, and so invested as to bring a remunerative return.

Our contemporary does not state whether any use was made of clover in the improvement of this farm in question, but we have no doubt that such an intelligent and enterprising farmer as Mr. Mattoon was not slow to avail himself of a crop so valuable,

and so especially suited to the improvement of the land on which he was operating.

There are many stretches of sandy waste, here and there, which are only waiting for a Mr. Mattoon to come along and take them in hand, to give the most satisfactory returns for the labor and capital expended on them. They are the pleasantest of lands to work when brought up to a fair state of productiveness, and while not so well adapted to wheat as soils of stiffer texture, they have their own special adaptations, and only require judicious management to be farmed as profitably as any.

Ashes in Reclaiming a Farm.

We have often spoken of the value of ashes, both leached and unleached, as a fertilizer—have given many instances of the good results that have followed their use as a top-dressing, and repeatedly urged farmers to make larger use of them than they do. And yet they are carried out of the state by the ship-load, and the truck farmers of Long Island think themselves lucky to get them, even at the outlay of time and money to which they are subjected. Not long ago we were riding with a most intelligent and well-informed gentleman in one of the sea-shore towns in Maine—a town which contains a considerable portion of light, flat, sandy land—as do most of our coast towns. The land had for some miles past been of this character, being rather hard looking, and supporting but a scanty burden of grass and weeds. But we came to a farm in the midst of this barren sand, that was "as green as a leek." The fields were nicely swarded, the growth of grass was rank, stout, and of a deep healthy green, and the cultivated land looked as though it was capable of producing good yields of almost any farm crop. It was a relief to the eye to glance over the boundaries of this farm, so closely defined was it, and in such marked contrast to the barren sand about it. "Here," said our travelling companion, "is a farm that has been brought up by the use of leached ashes—Kennebec ashes, I suppose, from some of the soap works on your river." We were at the time riding to take the cars and had no spare moments otherwise we should have stopped and inquired of the owner about his method of using the ashes. We learned, however, that none had been applied in recent years, so the good condition of his farm must have been due to the lasting qualities of the ashes. The appearance of the grass fields and pastures on this farm were enough, however, to convince any one of the value of leached ashes as a fertilizer, and it was certainly a pretty sight to see at these green fields in contrast to the general poverty of the surrounding soil. And we made up our mind then and there to again warn our river farmers against letting "Kennebec ashes" be sent out of our river to distant parts of the state and even to other states by the vessel-load. You who are within a day's drive of a soap factory set your teams hauling leached ashes for your grass lands if you have nothing else to do, and great will be your reward. —*Mass. Farmer.*

Drilling Wheat.

The U. S. Department of Agriculture has been collecting information as to the extent to which the drill is used in wheat-sowing, and also as to the advantages of the method, as they present themselves to the minds of intelligent agriculturists. A brief summary of the results obtained by these departmental investigations is as follows:—

1. Fifty-two per cent. of the winter wheat, and thirty per cent. of the spring wheat, or about forty per cent. of the aggregate of both kinds, represent the proportion seeded with a drill.
2. Nine-tenths of the testimony given asserts the superiority of the drill for winter wheat.
3. An average increase of one-tenth in the yield is assured by the use of the drill.
4. A large majority of observers declare that in most soils in which injury resulting from frost is liable to occur, drilling prevents or reduces the loss.
5. The majority assert that in certain clay soils with rolling surfaces, some advantage accrues in surface-drainage by use of the drill; while in some heavy soils with flat surfaces, the water freezing in the drill-furrow does positive injury.
6. The broadcast seeder predominates in spring wheat regions, because better adapted than the drill to seeding in unploughed corn fields, on rough surfaces, and in weedy fields.
7. About one sixth of the seed wheat (or 5,000,000 bushels for the crop) might be saved by the exclusive use of the drill.
8. The drill is useful for seeding in connection with thorough culture, especially in winter wheat growing; the broadcast seeder for imperfect culture and rough surfaces, and sowing by hand is the method adopted for small patches and first efforts of impecunious pioneers.

Harvesting the Grain Crop.

More loss has attended the harvesting of grain from allowing it to become over ripe, than from cutting it in too early a stage of growth. A greater part of the wheat crop is harvested when ripe and not taken in until it will shell badly, and hence a loss of grain, and a lessened value in straw. As rule we have always been governed by has been to cut the wheat as soon as the berry is out of the milk, but before the kernel has become so hardened that it cannot be washed between the thumb and finger, and in cutting oats, to lay them as soon as two-thirds of the field had become turned or changed in color. They should not be allowed to lie in the swath any longer than is absolutely necessary to cure the straw sufficiently to prevent it from moulding in the stack or mow. Both wheat and oats should be garnered immediately after they reach a condition to make it safe to do so, as great risk attends leaving these crops in the field. We have known acres after acres of heavy wheat to be ruined by growing in the bundle, all from neglecting to garner it at the time when it was fully fitted and weather fair. Where there is barn room it is always best to put grain crops under roof, but where they have to be stacked out from necessity, the work should