

## A FEW MISTAKES.

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Many farmers do not sufficiently value the fertility of their land. Fertility in a merchantable shape, such as superphosphate, or guano, has a marketable value, and it is not till those fertilizers have to be resorted to, that many are aware of the blunder they have made. That which is not valued is very likely to be wasted. The man commencing on a new and fertile farm is very likely to act as many do when the pocket is flush of money. The danger is even greater because the waste is not so perceptible. The man who is careful of his dollars, and at the same time careless of the productive forces of his farm, makes a mistake. The one is just as important as the other. Neither, when squandered, can be restored, except by drawing on something else. If a man loses his purse, he may replace it by drawing on his land. If he wastes the fertility of his farm, he may replace it by drawing on his purse, that is, if he owns one. In buying, or valuing farm land, it should never be lost sight of, that it is the fertility that is of value, and not simply quantity measured on the surface, and yet many make the mistake of valuing surface quantity more than depth. The depth of a farm is more important than the breadth of it. There is a good deal of land in this country that would be increased in value by putting one hundred acres on top of another, with something good between. This mistake leads to bad practice with the manure pile.

This being a thing of great value, it deserves care and attention, just as well as a valuable house. Serious loss results from the mistaken idea so many entertain, that

## MANURE CAN TAKE CARE OF ITSELF.

Having personal experience with the difficulties the common farmer has to contend with, I do not recommend, as is frequently done by agricultural writers, the building of sheds in which to store the manure. The cost is too great. Not one in a thousand will give heed to such advice. But what I do recommend is improvement on the general practice. Instead of leaving the manure just where it can be easiest thrown or dumped, it should be piled as neatly as in building a stack, and much in the same shape, till it is by the first of May six feet deep, and flat on top. Around this manure pile, there should be a few places, slightly hollowed, to catch the leakage. With a long handled dipper this leakage can be daily, or every few days as it may collect, be baled back on top of the pile. The surplus urine which may not be absorbed by the bedding should also be added; and if any part of the pile should come very hot, and in danger of fire-fanging, the liquid should be applied more particularly to that part. This plan of caring for manure is easily practised, and I recommend it, not because it is the best, but because it is an improvement so easily adopted, that many, if made aware of its advantages, would be likely to adopt it. It also gives a neat and tidy appearance to stable yards.

The next mistake I will notice is the

## TREATMENT OF PASTURES.

We have all heard the expression, "I might just as well as not have had two or three more cows, my pastures are knee deep." Evidently thinking that all was wasted that was not eaten. This mistake results from ignorance of the laws of nature.

We have not yet got a grass and never will get one, nor in fact any other kind of a plant that grows for the purpose of being eaten, trod upon, or cut off. The great end of all animated nature is to produce its kind. In order to do this, the plant strikes its roots in the ground, and its leaves in the air. If those leaves are taken off, the root stops growing, till an equilibrium is again obtained. If the leaves are again and again taken off, the root becomes sickly and the plant ruined. Pasture grasses are no exception to this law; it declares that all plants have a top corresponding to the root. An old, well cropped pasture is as mellow as an ash heap two inches below the surface, while in fence corners, where stock have not had access, it is a stiff sod six inches deep. Turnip beetles, potato bugs, currant worms, caterpillars on apple trees, etc., teach us the same lesson. To be productive, pastures must have a large growth every year, and we must learn to be satisfied with simply the surplus. To take the whole thing as many strive to do is like killing the goose that lays the golden egg. Many farmers have a distaste for anything scientific in farming, not knowing that all good farming is scientific. Science in farming is simply working in harmony with the laws of nature. Anything not in harmony with these laws is a mistake.

A prevalent idea is that land becomes rich by being pastured. It is a mistake. Something cannot come from nothing. While milk, beef, wool, horse-flesh, etc., are being drawn from the soil, the land is becoming poorer.

But while mistakes of this kind are being made with the soil, similar mistakes are made with stock. The difference between the two is that one is a deposit that may be drawn from, or added to,

## THE OTHER IS A MACHINE

capable of performing various kinds of work, which to run successfully must be understood quite as much as a steam engine. The engine requires fuel, the animal food. And just as certainly as a locomotive requires a certain amount of coal to move a train a certain distance, just so certainly does a horse require a certain amount of oats, or their equivalent, to do a certain amount of ploughing. If the food is not given, then the owner is face to face with the fact that he is performing the work by the consumption of horse-flesh, besides impairing the machine, running it without grease, and so bringing it fast to destruction. But an animal is something more than a machine. Whether it be horse, cow, sheep or pig, all are capable of suffering. The horse suffers hunger, thirst, the lash, sore shoulder, lameness, cold, flies, etc. And yet how few comparatively, act as if they believed that all this suffering must be at the expense of food. What a mistake this is. Aside from the cruelty practised on this noble animal, the owner suffers in his own pocket, and what is worse in his moral nature. Don't tell me that it cannot be helped. Nine-tenths of it could, if men were humane. Much of it would if it were not for the mistake that suffering does not cost food. To understand the philosophy of sore shoulders, one has only to carry a heavy pole on his own shoulder a short time to be convinced that the point of pressure should be inside close to the neck, instead of out on the shoulder bone. In fact muscles are intended for pressure instead of bones, as we may see by the palms of the hands and the soles of the feet. If this were better understood, much suffering and money would be saved. Instead of padding the harness to save the horse, the horse should be padded with muscle to save the harness,

## THE COW A MACHINE.

I must not forget the cow. She is also a machine, but calculated or capable of doing a very different kind of work from the horse, but here lies the principal difference. Both are under the same law of nature. Both to perform their respective functions require food, or if you like fuel, something to give heat and force. Both entail loss to the owner through suffering. Both insist on giving to their owner only the surplus. If the cow is asked to give milk, while only enough of food is given to maintain the animal machine, she commences to turn beef into milk, just as the horse gives his flesh to turn the furrow. Neither will give something for nothing. Now, as it is evident that the machine must be run any way, and that it is only what is over and above that, that we can look for anything, it stands to reason that the more we give the machine to do, the more profit we would have. But many farmers don't seem to think so. They are satisfied to give little and get little.

It is a very common impression with those who don't get much milk, that they have got

## THE WRONG BREED,

and an effort is made to improve. It may be by getting a thoroughbred bull of some other breed, but more likely a grade. Nine-tenths of such efforts end in smoke instead of milk. The great mistake is not in the breed, but in thinking that there is a breed that will give milk without food. Advertisements by Holstein breeders have shown that that breed has great capacities for milk production. But I will guarantee they have also great powers of digestion. As a breed they will have the ability of turning large amounts of food into milk, but they must have the food. My advice to dairymen is, to do better with the breed they have, the grade Durhams, before they give large prices for any other. No other breed in the world will consume more food or make better use of it than the Durhams. It may be milk, or it may be beef, it matters little which, there is a good market for either.

To improve the milking qualities, breed from the best milkers, and again from the best, bearing in mind that the sire should be from a good milking mother. But we must not lose sight of the fact that while we are improving in one direction we are losing in another. We cannot get behind the laws of nature, we must work in harmony with them. In getting anything, as I said before it is at the expense of something else. If a man wants a heavy draft horse, he must be satisfied with low speed. If he wants speed he can have it but not along with great power of draft. The best table fowls are not the best layers, and the best layers are not what are called "yellow-legged chickens." The same laws hold good with cows and in breeding grade Durhams we do with them as we do with horses and hens, we combine different qualities and get what we may call a general purpose cow,—a cow not having the highest quality for either milk or beef, but combining those in a degree that no other breed will surpass.

I have already referred to the loss sustained by the sufferings of animals. I will further remark, that a certain degree of heat must be maintained by every animal organism. If it is not done one way, it must another. If it is not done by proper stables, every animal to a certain extent becomes a furnace for the burning of fuel or food. Ice cold water is an expensive drink, because the animal uses part of its food to heat it. I do not say that we can avoid loss in some of these directions. But if the laws of nature were better understood, better practice would prevail, and larger profits be obtained.