

FARM AND FIELD.**HOW TO SAVE MANURE AND APPLY IT.**

READ BY R. E. M'LEOD BEFORE THE PROVINCIAL FARMERS' ASSOCIATION AT THE ANNUAL MEETING, UPPER HAMPSTEAD, NEW BRUNSWICK, JANUARY, 1884.

To be a successful farmer (in nearly all cases) a man must make the most of his manure heap and apply it to the soil in the most intelligent manner.

In travelling through the country we find the too prevalent practice of cutting holes through the sides of the barns, through which the droppings of the cattle are thrown and there exposed to the rain, snow and sunshine of at least one half of the year, whilst the leaching and evaporating process of each day's accumulation is so thorough that at least one third of its value is lost by being carried down the streams or rivers, or wafted on the wings of the wind and thus lost to the man who needs it for the comfort and prosperity of himself and family and the good of the country at large.

Instead of throwing the manure out doors it should be carefully housed and as much absorbents put with it as possible to catch the liquid of the stable, and in this way a much more valuable article can be had and a much larger quantity as well.

I prefer cellars under the stables to sheds behind them, and as a means of saving labour the cellar is a very important item.

A stable properly built with a cellar not less than seven or eight feet deep under it and good width behind the cattle, with proper hatches through which the manure is put into the cellar is a luxury that many farmers boys would much enjoy, after being used to the narrow old-fashioned stables which could scarcely be cleaned until the cattle were first turned out doors, and then requiring double the labour to put the manure out doors that it would to drop it down the hatches into a cellar.

I would here, say by the way that I think it is very essential that when we build our barns and stables we should have an eye to the comfort and health of the stock, and also the convenience and labour saving as well, as time is money.

IT WOULD ENCOURAGE BOYS

when taking care of stock if stables were so constructed that the labour could be done in half the time. The cattle could be kept clean and comfortable, and in taking care of them they could do so without soiling their clothes and boots, and thus dispel the idea that to be farmers boys were to be slaves or serfs or something beneath boys of strong minds or bright intellects. It would instil into their minds the love of home and the love of the farm, and they would appreciate being called farmers' sons, and in most cases would adopt the calling of their fathers knowing that a good independent and comfortable living could be made by industry, intelligence, and a proper application to business.

Now in diverting a little from the subject as I have done I hope you will pardon me.

My reason for referring to the stable and the cellar will be readily seen not only in taking care of stock, the ease and comfort there is

both for cattle and those in charge, but the advantage there must necessarily be to the manure being directly under the cattle; it would naturally receive all the liquid from the stable thus largely improving the solids, which in the other case where the manure is thrown out doors is nearly all lost.

To increase the manure heap I find that black mud or muck can be used to good account in different ways, especially in barn cellars. A foot or two of good dry muck put in the bottom before stabling time will be as good as any of the rest of the manure next spring, and far better than the manure thrown out doors subject to the leaching process.

Mud is an excellent addition to the hog yard, and the quantity can be increased three or four times its usual bulk and the quality be good, which when applied to the soil will increase the crops and improve the farm very materially.

What I have said about the hog yard can be applied to the barn-yard or henery or any other place where an absorbent is necessary.

Muck is largely composed of decayed vegetable matter, and when used as an absorbent of liquid manures it is highly valuable as a fertilizer for all ordinary crops raised on the farm, and but few really know its value.

In making compost a good article can be had in putting a load of muck for every load of barn manure, put up in a heap and left for a month or two and then applied to grass land, which will give very satisfactory results by a large increase of hay for several years after the application.

I find common gypsum an excellent absorbent when used in stables during warm weather, especially in horse stables. A little of it sown over the stable before and after cleaning out will absorb the ammonia and sweeten the place, very much to the astonishment and delight of any one who has not tried it. It is good in any stable particularly in a stable where you are raising young calves, absorbing the very essence of manure and holding it until placed in the soil where vegetation will assert its right and claim it for its own.

There are many ways to increase the manure heap and none of them should be neglected; where mud cannot be got sods, weeds and straw, slops from the house, ashes and lime put into a compost heap will be found of great advantage to a crop of grain or grass when used as a top dressing.

TO FARM INTELLIGENTLY

we must return back to the soil in the shape of manure of some kind what we take out by cropping or grazing, or the land will become exhausted and unprofitable to the man who works it, and as the farmer exports beef, butter, cheese, pork, mutton and sometimes grain and potatoes, or whatever he may chance to sell, he must know, if he be an intelligent man, that it will ultimately exhaust the land of what is required to produce the articles thus exported.

New Brunswick being better adapted to stock raising than grain, and as cattle are a very heavy drain on bone, every farmer should save all the bones that accumulate around the premises and get as many more as he can afford and apply them to his fields, to make up for the loss annually going on through the production of the various kinds of stock raised upon the farm and also the dairy,

Bone dust dissolved with sulphuric acid made into superphosphate is an excellent fertilizer for roots or grain; it also improves the grass after the grain is taken off, and I would scarcely attempt to raise turnips without it, as in the first it insures them against the ravages of the fly and gives them a rapid growth in most cases. The extra growth of the roots will pay for the superphosphate the first year and leave the land in an improved state for years after.

As some of you may not have much experience in the manufacture of superphosphates I will describe my mode of making it. In the first place I put about five hundred pounds of bone dust into a puncheon that will hold water; then I pour water on the bone dust until it is nearly covered, which is left to soak for twenty-four hours, after which I pour one hundred and twenty-five pounds, or sometimes more, acid on the bone dust stirring it up occasionally with a stick, and in forty-eight hours it will be pretty well dissolved and ready to be dried, which is usually done by spreading dry black mud on the ground near the cask containing the superphosphate; then with a shovel dip out some of the dissolved bone putting it on the mud, mixing it thoroughly with a rake, after which it is ready for use.

In conclusion I would say, let us put into practice what we know in theory to be correct, and make the most of our chances to improve our condition, and so let our influence be shed that others may be benefited thereby and that farming may be done more intelligently and with greater profit and more pleasure, thus making the standard of the farmer second to no other calling for wealth, comfort, influence or intelligence.

WORKING FOR WHEAT.

Mr. T. B. Terry discusses in *The Ohio Farmer* the question of drilling or broadcasting. The leading points of his column article of personal experience are well worth attention:

"My idea of perfection in wheat sowing would be one kernel of choice selected grain in a place, the same distance apart each way. Each plant could then make a strong, healthy growth, and stool and develop in a natural manner. When a tool that will put wheat in in this way comes along I shall buy one. The nearest approach to this, and the evenest piece of grain I ever saw, was sown broadcast with the Cahoon seed sower and simply run over once with a smoothing harrow. The land had previously been worked down very firm and the surface mellowed about one inch deep before sowing the grain. The last work done to my wheat is to pass over it with smoothing harrow both ways (packing the ground about the seed). We thus get nearly all the advantages of rolling without any of its disadvantages.

"I would risk less seed on a piece evenly broadcasted, than if it was to be drilled, as the plants stool out more in the former case. If the broadcasting could be done perfectly even, I would risk three pecks or even half a bushel on rich, fine land; but the cultivator will not put it in perfectly even; it will bunch up some, and there don't seem to be any harm done by sowing too much seed, except the loss of the seed. I have sown six, seven, eight,