

AGRICULTURAL.

While on a recent excursion into a neighbouring country, we were not a little surprised to see, in a distance of some miles, immense quantities of dung around each Farmer's barn; and altho' the whole crop had then been committed to the earth, except the turnips, it did not appear that a single load had been withdrawn from these valuable repositories during the season; and it was no less evident, that a large proportion of it had been accumulating there for years.

As might be expected, the soil, though originally very fertile, producing the finest wheat, had become exceedingly exhausted; it naturally occurred to us to ask the Farmers what use they made of their manure?—and we were told in more instances than one, that they knew no other use of it but to spread it out upon their Hay fields, which they generally did after mowing the Hay, others said that of late the seasons had become exceedingly unpropitious—the soil no longer yielded its certain and abundant returns, and they were seriously thinking of emigrating to Canada, as many others had already done.

Some others with whom we conversed about a better application of their manure, by making it into compost, and ploughing it in with their wheat, barley, and potato crops, for the purpose of restoring the fertility of their farms;—we found they did not even comprehend the meaning of the term *compost Manures*; in this state of things, it occurred to us that as far as this section of the country is concerned, at least, the very rudiments of Agricultural science require to be taught, with this view, we shall as frequently as possible, make our selections under this head of the most practical nature—and accordingly we present our readers with the following extract from “Young's Letters of Agricola,”—a work which we are sorry to say has been too much neglected by our Farmers. This ingenious writer in his 25th Letter, introduces to the reader's notice, Lord Meadowbank's theory of *peat moss compost*, a substance which is wholly vegetable, and is widely disseminated over this country.

The process consists in mixing peat moss with barn yard dung, in the proportion of three of the former to one of the latter,—the moss being previously spread out to dry, the heap should be raised to the height of about four feet, the upper coat of which should be moss—fermentation ensues sooner or later, according to the season of the year, and when in this state it approaches to blood heat, it should be turned over and get a little more moss added—a second heat, though less in degree, generally takes place, but soon subsides when it is fit for use; it may be used without weight with barn yard dung, and it will be found in course of cropping to be equally powerful. We would strongly advise the reader to peruse the work itself, and we assure him if he does so with care, it will amply repay him for the time so employed.

One word more to our agricultural friends before we present them with the quotation. We think it will be generally admitted, that to whatever extent a farmer is enabled to increase, and skillfully apply his manure, his success will increase in proportion; if this principle be correct, we would notice a wide and general deviation from the path that leads to such a result. The cattle of all kinds, that are turned out to pasture in this country during the summer, are, in most instances, allowed to lie out all night in the field, or what is worse, on the high ways, where all that falls from them is not only lost to the Farmer, but is actually a nuisance. This is a most wasteful practice, as every ton of manure so lost, is actually the loss of eight or ten tons, which might with very little trouble be made, by putting the cattle into a pen or inclosure every night, into which straw, peat moss, weeds, grass, thistles, foliage of trees and all other useless vegetables about a farm should be plentifully thrown—few people can imagine what a quantity of manure may be made in this way, with a small stock of cat-

tle, during the summer months, as both the dung and urine are preserved for manure. The instinct too, of all cattle is in favour of this practice; almost every person is aware of how small a trifle will entice Cows, Oxen, Horses, Sheep, &c. to repair to their houses as regular as night comes.—ED. BEE.

EXTRACT.

“Hitherto I have treated the subject, as if excrementitious matter alone possessed the power of effecting and accelerating the putrefaction of moss; and it was this view, which Lord Meadowbank chiefly impressed at first on the public attention; but many other substances, he afterwards discovered, are endowed with this same capacity.—Here my general theory of putrescent manures receives a collateral and happy confirmation; for it is now found, from a thousand repeated trials, that all animal and vegetable substances, which are capable of being converted by decomposition into the food of plants, are also capable of operating on peat earth, of dissolving the charm of its incorruptibility, of expelling its poisonous and antiseptic qualities, and of transmuting it into a most efficient manure. Hence, putrid water, the juices of the dunghill, the expressions of the cheese-press, the washings of milk-vessels, soap-suds, the oils and juices of green flax, urine of all descriptions, succulent vegetables and weeds, dead animal bodies, refuse of fish, night soil, sea-weed, are all invested with the property of generating heat, and assisting the fermentation of peat: and composts may be formed with all these different ingredients. The carcase of a dead horse, which is often suffered to pollute the air by its noxious effluvia, has been happily employed in decomposing 20 tons of peat earth, and transforming it into the most enriching manure. This wonderful discovery has exalted the swamps and fens into some degree of agricultural importance; and promises a new era in the multiplication and production of white crops. The fertilizing virtue of dung is increased quadruple by blending it with this inert matter, and Lord Meadowbank, after a long and watchful experience, declares, that the powers and duration of this species of compost, in every diversity of soil, have given returns nowise inferior to the best barn yard dung applied in the same quantity; and states expressly, that it is equal, if not preferable, in its effects for the first three years; and decidedly superior afterwards.

There are several other views of this subject highly interesting to the farming class, upon which I dare not at present enter, as my letters on putrescent manures have already swollen much beyond my original limits: and I must leave the additional matter to some future day, when I may retrace this path of enquiry. I shall deduce one or two practical observations.

I. In a country like this, where there are no large towns, except the capital, whence the farmer can draw manure, our swamps and bogs offer an inexhaustible supply of this useful and indispensable article. Compost middens form an object of prime importance; and wherever they have been adopted as part of farm management, they have been followed by results of a most flattering and profitable nature. They have tended to multiply the productions of the earth, to elevate the hopes of the husbandman, and to give a new impulse to his useful labours. Here they would not only be productive of all these effects: but they would arrest the progress of our morasses, by subjecting them to a waste gradual and constant; and they would introduce our farmers to an acquaintance with more successful modes of augmenting manure, so essential to the extended cultivation of white crops.

II. According to the practices which have

obtained in this Province, we have not above one ton of manure applied to our fields for ten which, from the same stock of cattle, are produced in England: and of course, we are not able to cultivate here, with the same means, above one acre in ten, which are there under the plough. To such as have given due attention to the previous details, this conclusion which looks so violent and extravagant, can be established by the most ample evidence: and is quite irrefragable, without denying the premises which have been built both on facts and philosophy. First of all, the one half of our putrescible matter is lost entirely by the waste of urine; and the other half—the dung—is grossly mismanaged either by the escape of the rich nutritive juices from the dunghill, or by suffering the putrefactive process to be carried to an extreme length. This is not all, that dung, if composited with peat, would in most cases be augmented fourfold; and the quality and duration of the mixture are superior, at all events equal to the principal original compound. Four tons of manure, then, may be produced from one of dung, and four tons also may be formed from the urine discharged by the cattle in the same given time. In a course of experiments by James Arbuthnot, Peterhead, he found that 300 cart-loads of moss could be decomposed by drenching it with 410 gallons of cattle urine. The foundation of the dunghill was laid one foot deep with moss, and 150 gallons of the liquor thrown upon it. The fermentation came on instantaneously, attended with a hissing noise; the other two layers were then put on, the one after the other, sprinkled each with the urine, and the same effect was produced. Eight days after, the midden was turned, and to all appearance super-alkalized.” It would seem then, that both urine and dung, discharged in any given time, are of equivalent value; that each of them, if separately applied to peat, or moss as it is expressed by Scotch writers, would prepare a quadruple amount of rich and valuable manure; and consequently, as the one here is lost from the construction of our barns, a load of dung is all we have for eight of compost which could be produced from the combined efficacy of urine and excrementitious matter.

If we take, further, into account the putrefactive qualities of sea-weed, of dead bodies, either horses, cows, or sheep, of common weeds, and of many other substances; I say, if we take into account the power of decomposing peat-earth, my general statement will not appear exaggerated, that in this Province we have not above one load in ten, which might be procured to replenish the exhausted energies of vegetation. But taking it for granted, that, with a view to strengthen my argument, I have magnified the amount of our loss: and that we could only increase our manure six times above the present quantity, this concession calls loudly for reform, and explains, to the satisfaction of every common understanding, the mystery of our agricultural poverty. We fling away contemptuously the blessings of Nature and of Providence, and instead of blaming our own ignorance and neglect, we curse the climate and the soil, sit down contented with our present dependent situation, and despair of elevating that country on which we tread, and which imparts to us the pleasures of existence, to its proper rank in the scale of national importance.”

THE FARMER.—A Farmer should never be ashamed of his calling; we know that no man can be entirely independent, yet the farmer should remember, that if any one can be said to possess that enviable distinction, he is the man.