

example is made to follow precept. It is the concurrent testimony of travelers, that no substance of whatever description, capable of serving as food for plants, is allowed to be wasted. Fæces, made inodorous by mixture with dried clay or charcoal, are daily sold in their markets; and to such an extent is their economy carried that the hair clipped and shaved from their polls is carefully collected by the barbers for the same purpose. But few animals are kept, and the means which we possess of adding to the fertility of our fields, are to them unavailable.

But some may say, this is but theory; show us the facts. To oblige such we quote the account of a correspondent of the *London Agricultural Gazette*:

"It may appear to some that there is too much sameness in this annual report of my experiments, but that sameness is the test of truth; for if year after year the results are the same, a valuable truth has been more and more established beyond dispute. On the other hand, if they vary, it is interesting and instructive to investigate the causes of that variety; for that too tends to the establishment of truth, even though it may sometimes be a doubtful approximation. In the first class I may reckon the full effect of ammoniacal manures upon grass. In seventeen experiments of this description, a profit appeared, after deducting the cost of the manure, more or less, in each case, but altogether amounting to £13 (\$65), and the only solitary set-off against this was one solitary experiment with guano, where the value of the increased produce of hay fell short by 8s. 2d. (\$1.98) of the value of the two cwt. bestowed upon the land.

"There is a certain limit in all soils beyond which nature refuses to answer your demands upon her, and so far from any profit being derived by an increase of manures applied to the soil, there is an inverse proportion observable, viz: the more manure the less the profit."

(The point which we wish our readers particularly to notice is the use of peat charcoal mixed with night-soil.)

"Not so, however, in the case of the Irish peat charcoal mixed with night-soil; for of the latter ingredient so small a quantity is present, compared with the bulk, that a large dose is required to produce any effect; and that sort which professes to contain none has been found utterly useless as a top-dressing; and in one instance two cwt. did not repay the expense, though that only amounted to 5s.; but the addition of one-half cwt. made a difference of 12s. profit. In another instance three cwt. was a loss, but four cwt. gave a profit of 7s. 6d. But when applied to the growth of corn (wheat), even a single cwt. of the simple peat charcoal proved beneficial by adding one and one-fourth bushels to the corn, and 224 lbs. to the hay."

Were further evidence required, many more facts might be given, but the above is sufficient. Therefore is it economy to pay out millions of dollars for fertilizers before we have economized all our resources at

home, to say nothing of the vast amount which might be rendered available by proper municipal regulations in all our large cities? We cannot forbear in further illustration of this subject, quoting from a prize report, before a Scotch Agricultural Society, respecting the quantity of fertilizing material now lost or wasted, which can be saved by care and economy:

Cows and bulls	21		
Fattening bullocks	18		
	39 at 3 gallons each		Gallons. 117
Queys	10 at 2½		25
One year old cattle	20 at 1½		30
Horses, old and young	16 at ½		8
Swine	15 at ¼		6

Which for the whole year would be	185
But, as the horses will be employed in the fields at an average of eight hours daily, one-third of the urine they make must of course be deducted, which is	67,525
And the cows and young stock, exclusive of the bullocks, may also be more or less in the fields, at an average of say four hours daily, one-sixth of what the produce must also be deducted, which is	973
	7,178
	8,151

This shows a produce, available for the whole year, of 59,374 gallons from the stock kept on such a farm as the reporter has assumed. But as it is proved that, in its original state, it is much too caustic and strong to be applied to grass lands with advantage and economy, it should be well diluted with water, and applied frequently in a weaker state; these 59,374 gallons should, therefore, at least be doubled, by adding water, making—

	Gallons. 118,748
And to which must be added slops from the dwelling house being dish-washings, soap-suds, and contents from the water-closet, &c., at the low estimate of 10 gallons daily for 365 days,	3,650

Here then is, in whole, 122,398 gallons, which will irrigate thirty acres three several times, allowing 1,200 gallons per acre each time, and that after allowing waste by absorption, evaporation, or otherwise, and a considerable quantity for throwing daily over the dung, as pointed out. If, however, the cows and young stock should be kept a longer time in the house than the reporter has stated, then, of course, a greater quantity of urine will be made for the purpose of irrigation, and for saturating the dung.

THE TRUE VALUE OF MANURE.

[Translated from the German of Professor BURKET for the FARMER; with a Note by the Editor.]

"The true value of manure is known by very few farmers; most of them have only obscure and confused notions on the subject, and so neglect the requisite production and gathering of the same. Nothing, therefore, would more raise to a proper footing the cultivation of fodder and the rearing of cattle, and by this means induce the profitable cultivation of grain and plants for trade, than the ascertaining the proportional value of manure to the