

The Board of Health is able to do much towards introducing this system as far as practicable. From its connection with the public institutions of this city much may be expected. It can cause the necessary experiments to be made before bringing the dry earth system prominently before the public, and by doing so, the real difficulties that lie in the way of its adoption may be ascertained and overcome. It would perhaps be advisable to try the method in one or other of the public institutions before alluded to. A very small expenditure will be sufficient to apply it to any existing cess-pit or closet, and if successful, then private individuals will be induced to use it. Perhaps the less legislative influence employed to introduce the earth closet system the better. The wiser course will be first to prove its value by actual experiment, and then leave to private enterprise and ingenuity the carrying out of the practical working and all the various details. It may be added that no country is so much in want of some such system as this. The waste of manure is very great, and it is my purpose to call the attention of the Board of Agriculture to the importance of this subject.

J. B. YOUNG, C. E.

Dalhousie College, Feb. 18, 1867.

At Mr. Young's request I have read his letter addressed to the Board of Health, together with various documents and publications bearing upon the earth closet system; and after carefully considering the whole subject, have formed a favorable opinion of the system. Its chief merits are,—the saving of large quantities of water required for a water system of sewage; the preservation of the fertilizing material which, by the water system, is thrown away; the convenience with which the system can be applied to the dwellings of the poorer classes in town or country; and lastly, the simplification of the drainage of a city by lessening the amount of fluids to be carried away. There is one point upon which the whole system rests, and that is the only one to which I need advert at present: Has dry earth the powers that have been attributed to it to effectually deodorize putrescent organic matter, or rather to prevent or delay putrefaction, and still preserve intact the fertilizing ingredients? When the system was first brought forward this was answered in the affirmative by one or two eminent chemists, but further consideration and experiment have shewn most conclusively that earth, if dry, is a most effectual deodorizer. The experiments and practical operations that have been carried out by a large number of persons in England and India, private gentlemen and public officials, leave no room to doubt that odours emanating from organic

matter may be completely removed or absorbed by enveloping such matter in dry earth. Within the last few years many new and important facts have been ascertained by Baron Liebig, Prof. Voelcker and other chemists, as to the remarkable power possessed by soils of taking up gaseous and soluble matters and fixing them in an insoluble form, so as to store them up for the food of plants. In my opinion Mr. Young is doing an important service to the community in calling attention to the subject. A dry earth closet system would afford the means of most effectually preserving our streets and dwellings from bad odours. The water of the harbour would be kept pure, there would be no putrid slime left on the shore by the receding tide, and lastly Halifax would cease to resemble Edinburgh in having a "Foul Burn" running through its suburbs.

GEORGE LAWSON.

Professor of Chemistry.

[Any enquiries or communications on the subject of the earth closet system will be answered in the *Journal*.]

ON THE CAUSE OF DEGENERACY OF STOCK, AND THE BEST MEANS OF IMPROVEMENT.

SIR,—From the large importations of stock into our Province, I have been induced, as a Farmer, to say a word, which you will please insert in the *Agricultural Journal*. The stock in our Province is not such as it was sixty years ago, especially in the middling counties; they are much inferior. The cows are not such milkers, and the oxen not so lofty; the horses are not so clever in all kinds of work, and the sheep no better now than they should be; and the question strikes our mind, what is the cause? It must be in us farmers, for we have as good grazing lands as any country, and as to hay raising we cannot be beat in the known world; with many of us the marshes or dykes have been cutting this 100 years, and are just beginning to give the farmer from one to three tons per acre, without any manure. But, Sir, it is the stock that I mean more to allude to. I admit that in some places stock has improved a little from what it was a few years ago, but at the same time it goes back, and, I ask, what is the reason? It may be that our farmers have been breeding in-and-in too much, or is it not rather that too many of them decline to give for a well-bred animal a fair price, but will take up with any, saying, it does not matter, I am going to sell the offspring, &c. Now, I believe that to be totally against good breeding; for the dam, no difference what she is, being ever so pure and well bred, producing stock from a very inferior animal is tainted, (as

it may be called) from that animal, and will always remain so. And this is one of the greatest curses of the stock of our province, not being such as it formerly was in past years. And in none does this practice tell more upon than the sheep. Therefore to keep stock improving we should have the pure breeds. To keep them pure by crossing with pure blood, would much enhance the value of our stock, and never allow ourselves by any means to have or get an inferior animal, but by all means get better, and better, not even allow ourselves to be taken in by a gift from a friend, which is sometimes the case, for it would or might be more damage to the stock, far even than if the price for a good animal would have been double what the price for the Canada stock was last autumn at Richmond. And, Sir, until the farmers of Nova Scotia are alive to this most important fact in stock raising, we will be much as we are. Look to England, America or Canada, and what do we find among stock breeders? Try and get better from time to time. This is the rule with all such, as among the Millers, the Christys, the Stones and the Snells of Canada, and so it is all the world over where it is understood. Therefore, with what improvement we have begun, let us attend to this. And next is feed, but feed without the breed that we design the animals use for, may be much thrown away.

The farmer must not expect his animal to have as much feed as will make it just live through the winter; it should have enough to make it thrive and grow fat until it comes to maturity. I once heard a young farmer enquiring how he should feed his young stock; the reply was, from an old farmer, "Just as your lady brings up her babies, that is, give them all they will take or their mothers have, and a little pap into the bargain." All right, he says, I will do that with calves, colts, lambs, &c. Not a bad old farmer that,—and if much of our stock was brought up that way we would not see such lean and small cows, oxen, and sheep. The fact is, that the neat cattle are killed while calves, with the churn and poor pasture, which they never forget or get over.—This may do for the present.

I remain, &c.,

Colchester, Jan'y, 1867. A FARMER.

TO PREVENT A HORSE FROM PULING AT THE HALTER.—Tie a rope around his neck, put it through a hole in the edge of the manger, and run it around the fore leg below the knee, and when the horse pulls, the rope will slip through the hole and pull up the fore leg; he will soon give it up.—*Country Gentleman.*

POLISH FOR SADDLES.—Apply albumen or white of egg, and give plenty of elbow grease.