

less remainder: we drive through the country in our scorching months of June, July and August, and we see on all sides fields covered sparsely over with little heaps of (so called) manure, which have in many cases been out for two or three weeks, and upon examination prove to be mere wisps of dirty, half-rotten straw, and as dry as a chip—the farmer is manuring his summer fallow! is he? Let him not blame his land or the season if he only get fifteen bushels of wheat to the acre at harvest.

Now, sir, as the majority of our farmers are not capitalists, and as agriculture, as a science, though progressing, is still young in this country, we cannot expect to have high farming in Canada just yet; we cannot spurt liquid manure over our fields from hydrants after the manner of Tiptree Hall, nor can we (labor being so dear) adopt any other than the most simple plans possible in improving our system of management; nevertheless, I hope to be able to show that in the particulars of which I am writing, much *may* be done. The first step in the manufacture of good manure in large quantities is the proper management of stock, we must have as large a stock to keep up our farms with, as we can make our farms keep up *well*, and it *must be of such breeds and quality as shall best pay for its care and keep*. The system of having two or three cows stabled in one place, and two or three heifers or calves in another place, and two or three horses somewhere else, I would (where practicable) do away with, and to avail myself somewhat of animal heat, and facilitate as much as possible the feeder's work, I would have the whole stock; (except pigs and sheep) in one snug building, somewhat after the plan I send you with this, and which could of course be made larger or smaller to accommodate any stock, it should be placed as near as possible to the barn, and the loft might be filled with straw for bedding,—the food hay, wheaten and oaten straw, should be cut up in the barn with a straw cutter worked by the horses. The system of feeding I do not speak of here. Under this building I would construct a rough cellar, into which the *whole* of the manure liquid and solid could, with the greatest care, be thrown by means of the trap-door shown in the ground plan: the fine double lines represent open drains or gutters, through which the liquid manure would run from time to time on to the heap and become thoroughly incorporated. I am aware that these drains would freeze up more or less in the very cold weather (though not so much as might at first sight appear probable, as the animal heat would keep the temperature up considerably) but this would be of little consequence, as, while frozen the liquid could not of course escape, and if the floor was properly graded towards the drains it must all find its way in the right direction whenever a thaw came. All the labor of piling the dung in the spring and summer would be avoided, it would merely require levelling down occasionally as it got too high under the trap door, and a little gypsum or common plaster, sown now and then over the heap, would tend to fix the ammonia and volatile products of fermentation, and further it would be out of all harm's way from sun or rain. An eave-trough round the building could be made to supply water to the heap occasionally, if it became too dry, but I think this would not be wanted, for I am induced to believe that the great superiority of Peruvian guano over other known manures, mainly consists in the fact that as it drops from the sea fowl, it is the even admixture of the solid and liquid excrement