



From the Farmers' Journal.

THE LONDON FARMERS' CLUB.
THE ECONOMY OF MANURES—THEIR MANUFACTURE AND APPLICATION.

(Continued from our last.)

After a short pause, the CHAIRMAN said,—Mr. Johnson has given us an able and scientific account of the matter before us, but there is one other view in which farmers must regard the subject, namely, the practical manner of carrying it out; and perhaps when these two views are brought into contact and considered together, something more beneficial may be devised than by considering either separately. I have long been in favour of the principle of using raw manure; indeed, I was the first to start it in my own neighbourhood, where it is of 25 years' standing. It had always been my custom to compost the manure, turn it over and over again, and then clamp it with perfect neatness, so that all the valuable qualities were retained. By putting a sufficient quantity upon the land I got very good crops, but, at the same time, at a vast expense of material. This was obvious to me upon experiment. In the first year I put equal quantities of good composted manure, reduced 50 per cent. by composting, and which ought to have contained double the fertilizing properties of that which was not so composted; but, upon applying 20 loads of manure, merely thrown up to get into better mixing order, I found that an equal quantity of this manure taken from the yard produce a better crop of turnips than that which had been composted. In one case I was manuring with half the quantity that I was applying in the other. We all know very well that any new modes of application in farming are always received with doubt. Now I mentioned this matter at our parish meeting, and at our little convivial meetings, and I found that it was generally disbelieved. I invited a number of gentlemen to come to my house and judge for themselves, some of them saying it might be beneficial to turnips. Well, a party came, and the result was, that they were quite satisfied that the succeeding crop was better with long manure than with composted. At my farm I have not to remove a load of manure. I still retain it in the yard, and shall do so until I require it for the turnips. I am now feeding on green food, and the manure is making in a tenfold degree as compared with winter, when we fed with turnips; all the droppings

are retained upon it, and it is highly benefited thereby. The main object is, just to keep it moist enough to prevent its getting into that dry state which Mr. Meech advocates, as alluded to by Mr. Johnson. I do not mention it to that gentleman's prejudice, for he has manifested talents and energies which would be exhibited by very few emerging as he has from the shop. I have great respect for him; he has certainly directed his energies very beneficially; but, at the same time, upon the point of keeping manures in a dry state, I must beg to differ from him. When so kept, all the most beneficial parts pass off in gas. I always found that to be the case with the lumps if carted out in a dry state; there is, in fact, very little good in it as compared with manure in a moist state. As far as I can form an opinion, with my little scientific knowledge, I attribute it to this—that the ammonia is not so likely to be volatilized when fastened down as when it gets into a state of fermentation. Immediately upon manure getting into a state of fermentation decomposition goes on rapidly, and the ammonia fast passes off. But if you can keep it in a consistent state, you will lose none of those parts which would otherwise fly off in fermentation or in a volatile form. Before using manure for turnips, I throw it up in heaps in the farm yard, and these heaps soon enter into an active state of fermentation; and my main object is to cover it over as quickly as possible after removing it. In that way I do practically what Mr. Johnson has pointed out to you scientifically. The covering it over is of very great importance, for the eyes and the nose tell you that the gas is passing off very rapidly, and the sooner you fix it the better. You all know practically that it is very inconvenient for manure to remain in the farm yard in a solid state. The question then is, what is the best mode of applying it to the crops? My opinion is, that it is better to cart it out, not in too dry nor too wet, but in a medium state, and to cover it closely over with earth; immediately upon being deposited it should be turned over and covered completely with the soil. Another method is to turn it out upon the land, drive the cart over it, in order to consolidate it with the soil; and then stir it over, in order to get it into an active state of fermentation. This is a simple process of applying manure to the land: and it was the best we could adopt under the circumstances. For my own part I am quite satisfied that the system

of making manure under cover will never answer. I happen to be intimate with the person who manages the farm alluded to by Mr. Johnson, where a spacious yard is all covered in, and I know that in spring and summer there is too much dryness; the manure does not get into a state of fermentation, nor remain in that consistent state which is necessary to preserve the gases. I think it is quite unnecessary to have any buildings in which to make manure; it can be made in the best possible condition without them. I had an opportunity of inspecting Mr. Cline's farm yard, and I could see the liquid manure coming down and running off very copiously. I joked him upon it; and his reply was, "We have got so much we cannot help it." I do not approve of manure tanks; if you convey the water from the buildings by troughs, or by under ground draining, there will be no necessity for manure tanks, although I have one or two myself: we have carted out the liquid manure upon the grass and arable land, but never found in the results that it was worth carting out. I think, however, that the fact is to be attributed to this, that we do not sufficiently prepare it previously to carting it out. It appears that in the Belgian system of farming they use a good deal of liquid manure; but the animal feces are collected, and put into the tank in the corner of the field, covered up, and kept for many months until in an active state of fermentation and the ammonia is perfectly formed; a large quantity of rape cake is also broken up, and put in as a mixture with it. Now, it appears evident to me, that we do not keep the liquid manure long enough to get into a state of fermentation, or, if I may use the term, long enough for the ammonia to become formed; if we did this, it might possess very superior fertilizing qualities. This is a subject upon which Mr. Johnson has given us some information. The application to the land of the drainings from the farm yard does very little good as at present applied; but as the Belgian farmers apply this liquid, it appears to be very beneficial. Mr. Johnson is of opinion that manure is wasted by being put to grass lands in the present mode; but there is something in the practice of applying manure to grass lands and clover which I know, although I cannot explain the reason, operates very beneficially; and at times when we suppose it would be of least benefit to the crops, it will, in the result, give the greatest. Clover