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NEWCASTLE FARMER.

VOL. I.—NO. II. COBOURG, SEPT. 1, 1846. TERMS.—2s. 6D. PER YEAR.

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 to 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. Mechi 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 fæces 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

will, sometimes, under these circumstances, be produced most abundantly; and the same will take place in some cases with wheat crops in a most eminent degree. By the system which we have adopted, we generally get a fair average crop of wheat without its running to any great extent of straw, which it often does under other circumstances. I think manure never does so much good to grass lands as when applied immediately after the hay has been severed and carted from the field; at no other season of the year does it appear to be anything like so beneficial in its effects. And this is not a little extraordinary, because that is generally about midsummer, when we should think that the heat of the sun would dissipate and dry up the more valuable qualities. I account for it in this way, that it gets speedily covered in and buried by the growth of the grass; and, therefore, that the greatest possible amount of the manure may be thereby retained just at the precise period. The benefit is seen to a still greater extent the next year, from the grass thus immediately receiving the manure and preparing itself for the shoot of the ensuing spring; and the result is a much larger crop of hay in the following summer. The manufacture of manure is, unquestionably a matter of the first importance in the management of a farm; and every means should be resorted to to increase the manure heap. But I scarcely go upon a farm without seeing that that is neglected, instead of any efforts being made to increase it. As far as my own practice goes, everything which can be converted into manure is brought together for that purpose; all kinds of vegetable matter, and even that which we harrow up out of the land is carted to the farm yard, rather than burnt. All are mixed up together with the dung, and help to increase the quantity of the manure. The moisture which escapes from the stable is spread over it, and the whole carted away day by day. The dung should never be allowed to accumulate at the stable door; it is better to cart it away each day than to allow it to accumulate in any particular place. Exactly the same rule should be observed with the bullock houses. We frequently see beasts kept in stalls for the sole purpose of producing manure; you may see the manure piled up all along the back of the sheds steaming away, and the ammonia passing off as fast as it can pass. Some people say it keeps the cattle warm. I have heard farmers say—"I know I am giving away my oilcake and turnips, but I must make manure." What is the consequence? Why, the most valuable qualities of the manure are lost. This is a very common practice, but it should be guarded against. It should each day be carted from the sheds and trodden into the land; and by nothing is this operation better performed than by a donkey, a cart, and a boy; in fact, nothing is more useful on a farm than donkeys in connection with horses. Throughout Suffolk the system prevails of carting out the manure into the middle of the field; I have seen masses as high as this room. From this practice the loss must be considerable. I shall be very glad to hear the opinions of any gentlemen present who may have given his attention to this important subject.

Mr. TURNER of Exeter:—It is a general rule with me to issue an order to all my men that they will make this their maxim—"Never to waste a bundle of straw, and never to want one," which in plain English means, never to suffer a single truss of straw to be used which is not absolutely necessary, and on the other hand never to spare one when it is wanted to lick up the fluid portions of the manure. And with regard to the management of manure, this is the plan I adopt:—Every fortnight I cart it all out, and put a layer of each upon the same heap; I then suffer the cart to be driven upon the heap, in order to press it down as tightly as possible. This done, I put a layer of earth over all, in order to prevent any of the gases from escaping from the heap; I also put something under it to prevent anything from going away below. So far I store my manure; and I continue this operation through the winter. I select some place with a hard bottom, where nothing can escape, and there the manure is deposited for the most part during the winter. With respect to liquid manure, I for one do not see any very great good it does by being carted out upon the land. It has been my custom to have a place under the farm yard, from which all the liquid was carried over the meadows; of course you expect the land to be benefited by this liquid. Whether it runs equally or not I do not know, but not more than an acre or two are to be found better than the rest. Therefore I think that liquid manures do not do that good which many people suppose. I think it is better not to suffer anything to escape from the farm yard. In almost all farm yards there are drains or tanks, or something to catch this liquid. In these tanks it has been my practice to keep some sort of rubbish, such as the stalks of potatoes, the stalks of turnips, or the stuff cleared away from the sides of the fences, and upon all this I pour the liquid manure. I think I cannot employ a boy and a donkey better than to fill the tank with rubbish of this description; and in following this practice I take care that nothing escapes from the farm yard; everything is carted on to the mixen. If you adopt this plan, you will, find that in the course of the year, you will collect a vast quantity of manure from this source alone. With respect to the use of manure, and the manufacture of manure, I do not say that mine is the very practice which ought to be resorted to; I only tell you what I find best calculated for my purposes. After what has fallen from Mr. Johnson this evening upon the subject of grass lands, I think there can be no doubt but that it is very desirable in carrying manure to do so at a time when the grass will grow quickest over it. If you do that, you won't want to put it under ground. If you put the manure on the land the moment you have cut your hay, it is quite astonishing what a difference you will see. I cannot reason on the matter any other way than by supposing that it makes the grass at once begin to grow more quickly and speedily gets covered over. I do not agree with our excellent chairman with regard to carting manure out in the winter; I think that when the spring showers are falling, or in fact, whenever the grass grows most quickly, that is the proper time at which to manure grass lands. The few practical observations, gentlemen, which I have ventured to offer to you are the results of my own knowledge and experience.

The Chairman: it is not my practice to cart the manure upon clover, but it is in the case of other grass-lands, and I have found it answer remarkably well, as also with the succeeding crop of wheat.

Mr. WOOD:—With respect to permanent dressing of grass-lands, I expected to have heard more upon the use of liquid manures. Some persons have tried the Dutch plan of manure, but not finding the crop of grass commensurate with the expense, have given it up. I agree with Mr. Johnson's view that the failure very probably arises from improper management of the manure, I do not, however, think we ought to allow any rain-water to be mixed with manure. If water be mixed with it, you will increase the expense of removal by increasing the bulk of the manure, and the advantage to be derived therefrom will not, in my opinion, be adequate to the increase of expense. I have tried this in various ways. I think it very doubtful whether carrying liquid manure is of sufficient benefit to pay the expense of doing so. At the same time, when we know that it answers to apply manure to the roots of grass, I think it ought to be applied in the liquid state. I cannot see how any plough can be made to convey manure to the roots of grass; but I can easily conceive that if a shower comes after manuring, it should be more beneficial than if the manure dries in the sun. My system is decidedly opposed to making the farm-yard manure depend at all on the quantity of rain-water. I have adopted Mr. Warne's system, and I decidedly think it will have the advantage over all other plans for manuring arable lands. My plan is to keep the bullocks six months in their litter without removing it, every day turning over the manure that has dropped, and covering it with straw; and that I can do without raising its level more than two feet in a box ten feet in length. There no doubt will always be gentlemen who prefer their own long experience to anything new. I have heard what Mr. Johnson and the chairman have said about dry manure. Now, I find in my boxes that the manure is never dry. If I were to

begin making it in March, and were to keep it until the following Michaelmas, it would not be in a dry state. The plan which Mr. Warnes recommends is to make it under cover, not to carry it after made. I find that the manure as I make it, answers on my clay soil much before any other. A friend of mine, in driving from one part of Sussex to another, passed my farm, and a farm about ten miles beyond it, belonging to Sir Charles Burrell; and he told me that the piece of wheat he saw on my farm, and the piece he saw on Sir Charles's, were the two best pieces he saw in a drive of thirty miles. Now, it was a singular fact, but these two pieces were both manured on the system recommended by Mr. Warnes. I think it rather goes to show that for that description of soil (a clay soil) manure made in that way is more powerful and better adapted than any other. I observed, in cleaning out, that there was no smell whatever; and manure made in that way remained without heating, while that made in boxes would heat immediately. I beg to say that I am no chemist; and that my observations relate simply to matters of fact; and from what experience I have had, I should recommend every gentleman to try the system which I have adopted myself. I know gentlemen may think it impossible an animal could thrive, living for so many months in the midst of his own excrement; but there is no offensive smell. In this respect my boxes are altogether different from the stalls which are cleared out once or twice a-day. Why, in the "bullock palaces" of the Duke of Bedford, at Woburn, I was quite surprised at the smell; the quantity of ammonia that was escaping was extraordinary. In fact, people are great losers by continually poking the manure about. I cannot go into any statement as to weight of food, weight of straw, &c.; but it has always been my impression that the higher the animals were fed, the more strong and valuable was the manure. My practice is to mix it with mould, and plough it in. There is another point of view in which these boxes may be regarded favorably: there is an astonishing advantage in putting the animals separately, each in a box by himself. In this case, a bullock may be considered his own master, and does not, under any circumstances, come off second best. The advantages of feeding, on this plan, are very great. If, for instance, there is an animal in a yard with several others, which refuses his food, and the others partake of it, the consequence is that they won't take their next meal; but you won't find it out. There is also another great advantage in this system: you can have cattle of different ages, and can put them in at all times of the year. The manure will keep in the state which I have described from its being well trodden down, and you will save all the expense of stirring about; you only have to remove it once, which is a matter of great importance.

Mr. E. Aitcheson:—I would suggest a plan, with regard to manure, which I have carried out myself. I take all the drains from the different yards to one given spot. Then I collect all sorts of refuse, couch, &c., and with a little mould dam it all up together. That I call the yard for grass lands alone; rubbish of every kind is carried there; refuse of every kind is manure for grass lands. I think it wrong to carry out anything of this kind upon land intended for the production of corn; because the seeds of weeds may germinate. I therefore suggested the remedy of making one hole for the manure for grass lands, and another for the manure of arable lands; saving the whole of the manure from cattle eating hay, straw, and turnips, as well as all the straw, for the arable land. By using these manures I have carried very large crops: my practice has not exceeded two years' duration. I would suggest, with respect to the period for manuring grass lands, that there is no time equal to the month of June, when the manure can be well worked into the roots of the grass. I have applied twenty-five loads per acre of the manure out of the refuse hole, and found that it did much more good than if the manure had been carted away upon the land from time to time. The plan I have recommended is also one way of obviating expense when the landlord will not go to the cost of making us tanks. I have had some experience with regard to liquid manure, and I must confess that I do think much good is derived from carrying it out, especially in clay soils. I have given the lands a coat of liquid manure in November, and another in the spring; but the following year the crops from manure carried out about the end of June, or beginning of July, have been double that from the second coat of liquid manure.

Mr. Hobbs:—I do not quite agree with some of the remarks which have fallen from our friends this evening, with regard to the state of dryness of manure, and also with regard to the subject of tanks. I have had considerable experience in the drainage of manure, and also in catching that drainage in tanks, and applying it to the land—more especially to grass lands. Some years ago I went to considerable expense in erecting pumps and building tanks for the purpose of applying it to the lands. First of all I troughed all my buildings. Still there are parts of the year, after wet weather and rapid falls of snow, when the yards will have a superfluity of liquid in them, which require to be taken care of and afterwards applied to the soil. I do consider that when the drainage of the farm yard has not been found advantageous, it has arisen from our want of knowing the proper application of it. I certainly did at first, particularly in the case of grass land, find it of little or no use; but I find now, by mixing it with earth, that is the most advantageous. Most of us, at present, are entirely in the dark with respect to the application of liquid manures. I believe that if we were to mix sulphuric acid or other chemical substances with it, we should find it far more beneficial than we now do. But we must look to our friend Mr. Cuthbert Johnson to enlighten us upon that point. I cannot agree with Mr. Aitcheson that we ought to allow the liquid of the farm yard to run off, and be absorbed in a collection of vegetable matter, and so on. I think that we ought not, in the first place, to allow rain water to be mixed with it, but that we ought to catch it in the strongest state we possibly can. I hope the landlords will meet the tenants by building troughs and making tanks. I beg also to say that I do not agree with the observations made by some gentlemen with regard to the propriety of keeping manure in a moist state. I think that Mr. Wood is pretty right as to manure being made in boxes. It is much better made in sheds than in the open air. Most farmers are sufficiently acquainted with the matter to know when to apply the liquid manure or water, if they find it come into a too dry state from extraordinary fermentation or other cause. Any one who has ever travelled in the country within the last three weeks must agree with me in saying that there has been a ten times greater loss from the manure being washed and soaked, and having all the goodness running away, than there could have been from its being kept too dry; but if it is well trodden down by the cattle in the boxes it will never get into a dry state. I don't quite agree with Mr. Warnes's plan of feeding in boxes; a person who bred a large quantity of stock would have to lay out an immense sum of money to build these boxes; but it is a better way of keeping cattle than the manner in which they are generally kept. One thing appears to have been forgotten in this discussion, and that is the greatest possible economy in making manure. I agree with the old saying, that it is a bad piece of roasting beef, that won't find gravy to baste it; and depend upon it, it is a bad farm that won't supply sufficient manure with which to keep it in condition. A great loss is sustained by feeding animals on straw and a few turnips; where that is the case we need not be surprised that there is a deficiency of farm-yard manure. Our chairman has alluded to a top-dressing for grass; I agree with him that the autumn is the most proper time for dressing clovers and grass; and the difference which exists between Mr. Baker and Mr. Turner I attribute to this fact, that the one lives in the east and the other in the west; the latter does not suffer from the frost. I have been in the habit of manuring pastures in the early part of the autumn with unfermented manure, and always found from eight to ten tons so applied much better than a larger quantity of rotten or fermented dung at any other time. Grass grows much more rapidly when the dung is applied in an unfermented state; or

when in the early process of fermentation than when it is decomposed. My plan is that of applying it in a state of fermentation, by first of all carting it out from the farm-yard and laying it in clumps from four to five yards wide, and four feet deep, treading it well down, and, about ten days before applying it, having it turned over. That is my mode of proceeding for root crops at this season of the year. I generally prefer, if the manure is in an unfermented state in November and December, to plough it in, and at this season of the year apply artificial manure. I have found this to have a most beneficial effect, and it is my intention to pursue the plan as much as possible. I have no doubt that manure will be more generally applied in an unfermented state, when the farmer begins to see that is not his interest to grow weeds; in fact, as farming generally improves, so also will the modes of manuring.

Mr. Aitcheson:—Are you in the habit of sowing artificial grasses, rye, and clover, on land which you don't think capable of bearing you a good crop next summer.

Mr. Hobbs:—That is not my general habit. The only difference is, you apply your manure for wheat; our system is barley after fallow, then clover, then wheat.

Mr. Wood:—With regard to what has been said about feeding cattle on straw, I beg to say that there are a great many cattle sent to Smithfield which are fed on straw, with the assistance of a few turnips or pudding made of linseed and corn.

Mr. Johnson:—The observations made by Mr. Wood about feeding cattle on straw reminds me of a story of the late Lord Leicester. He had a very capital bullock yard, and endeavoured to persuade the farmers how much better it was to introduce "Devon" than any other breed. He had invited some cool-headed jolly farmers to inspect some of his bullocks, which he said he found, upon calculation, consumed exactly 23½ turnips a day each. The farmers thought it was a very nice calculation, and one of them in looking about found a quantity of peas-meal. He immediately exclaimed, "How is this? Why here is peas-meal!" "Why," replied one of the attendants, "we find that giving them a little peas meal assists the operation of the turnips amazingly." This discovery, of course, rather spoilt the story. With regard, however, gentlemen, to the subject of this evening's discussion—a discussion which, after hearing the opinions of the able and practical men around me, has given me great satisfaction—I think we pretty much agree in our general views. For, although some gentlemen appear to have given rather discordant opinions upon some points, yet, if the question be looked upon calmly, and with the assistance of scientific evidence, these discordant statements will be easily reconcilable. First, with regard to the preparation of liquid manure; some gentlemen have stated the advantages of the uses of the liquid manure, and others have denounced it as not productive of any good results. Now the very essence of a discussion of this nature is the inquiry "What is meant by liquid manures?" Among farmers a little coloured water often dignified by the name of "liquid manure;" as some people put water, in which eggs or cabbage are boiled, into the pig trough with the idea that it will help to make the food richer. Now in those countries where liquid manure is applied to the land by practical, acute, and calculating farmers, that which they call by the name is prepared with very great care. It is not similar to that thin watery stuff which drains away from the farm yard after a fall of rain; but is mixed with the animal excrements, and, above all, is never applied to the land until it has undergone the process of putrefaction, and has come to the consistence of cream, and by this process a large quantity of fixed air and ammonia has been generated. I am not going to inflict this story upon you a second time, but as one or two gentlemen have entered the room since I read the result of M. Sprengel's experiments, allow me to repeat that portion of my opening statement which related to the experiments on the urine of animals in three different states: First, when freshly voided; secondly, after it has undergone putrefaction, but without mixing; and thirdly, after putrefaction, but mixed with a considerable bulk of rain water. (Mr. Johnson here repeated the results of the analysis, and proceeded): I read this because it appears to me to bear upon the application of manure, either in the wet or dry state. The result you will see was that 100,000 parts of fresh urine contained 205 parts of ammonia; after putrefaction the 100,000 parts of urine contained 487 parts of ammonia, or more than double; but after putrefaction, and mixing with its own bulk of rain water, 1622 parts of ammonia—the ammonia, in fact, of the second experiment being nearly quadrupled by the third experiment. Now surely we cannot help feeling that the result of this analysis illustrates and renders clear the reason why it is that the farmers of Belgium so extensively, so universally, use tanks; why they so carefully mix their manure with water, and allow it to undergo the process of putrefaction; and they all agree in this, that it is of no use until it is putrefied. I think the analysis of M. Sprengel quite clears up this point.

Mr. Turner:—In Belgium they have very little litter; consequently nearly all their manure runs liquid, and is much more valuable than it is in England.

Mr. Johnson:—The Belgium farmers do a great many things which the English farmer would do well to imitate them in. I take it that the analysis of the chemist throws considerable light on the subject; it shows us why we have so many discordant statements respecting this liquid manure; one party finding excellent results from its use, and other condemning it as producing no beneficial effects at all. There are two great causes for this: one is that the manure is too poor; and the other that it is not allowed to undergo the process of putrefaction before it is applied. In some experiments made in the neighbourhood of London with a view to the use of the town sewerage, it was thought very desirable to ascertain the strength of that sewerage, and discover whether it was water discoloured with various organic matter, or whether it contained a very large proportion of foreign substances. Now, in those experiments we found what we were not at all prepared to expect, namely, that the sewerage of London is often from two to three times the strength of sea water.—A gallon of sea water usually contains about four ounces of various salts; but it is very often found that the water from the common sewers of London contains from twelve to fourteen ounces per gallon. The salts from urine, the matters from night soil and soap suds, and all the various substances which can be supposed to mix in the waters of the common sewer, contribute to this large per centage.—Now, in point of richness, the drainage from the farm yard never approaches this. Those that I have examined never contained more than one ounce per gallon, and frequently not more than half an ounce of organic matter. If the farmer use liquid at all, he must either apply it for the purpose of irrigating the land, or apply it at the rate of about one ton per acre, in much greater strength than at present, and not until it has undergone the process of putrefaction. This, if well considered, explains many of the discordant statements we have heard upon this point, and throws some light upon the question as to the mode in which manure should be prepared. I find that one or two gentlemen who have addressed this meeting, and especially Mr. Wood, rather advocate the box system of preparing manure. I confess that, reasoning upon the matter on scientific grounds, and approaching the question with that caution with which I endeavour to approach all questions of a practical nature, for I consider the great value of science to agriculture to be in the endeavour to explain the processes of the farmer as a guide for future operations, and that if men of science have not their eyes to the practice and pocket of the farmer, their efforts will be of little value. Approaching, then, the consideration of the subject in this cautious spirit, I think the preparation of manure in the dry state is pretty well illustrated by these experiments. Because, if the product of the decomposition of manures in their wet state is a larger crop of ammonia than when prepared in a dry state, then I am at a loss to know how in a dry state it can be most advantageous? I am perfectly aware that, when, by neglect of troughs and drainage, the farm-yard is allowed to be inun-

dated by a quantity of water, to such an extent that a considerable part of the manure prepared in the yard is washed away—I can easily see that that is not the right way. But still I am rather inclined to the opinion that the manure of the farm-yard, prepared with a moderate degree of moisture, and where drainage and soakage are carefully prevented, by means well known to the farmer—under these circumstances, I think manure prepared in the moist way more enriching than that produced in covered buildings. There is one fact which has been elicited this evening by these practical observations, which I consider very interesting, and will no doubt lead to future examination, and that is the advantage of applying manure to grass lands in the autumn. I have been struck with the unvaried testimony which has been produced to the fact that it is more beneficial to apply manure to grass lands just after the hay has been cut, and perhaps even under the burning sun of July, than at any other time. Now, I confess that, as at present advised, I do not see my way clearly into the reason of this; but there is no argument against its being the fact. I remember (to give an illustration of my meaning) that when gypsum was first introduced, it was stated by persons who had examined the matter scientifically, and among them the great Sir Humphrey Davy, that it must be a manure for particular crops Well, it was tried by the late Lord Leicester, and other still more able farmers, but it was found that it did not answer. Sir Humphrey was puzzled, but was obliged to be satisfied with the fact that it did not. At last, a Kentish farmer discovered that it would do if applied in a particular way: that it must be strewed from a basket upon the land, in a dry powder, and that it answered best early in the spring on a wet morning. This came to the ears of Sir Humphrey Davy, and he was asked to explain it, but he could not, neither can any chemist now explain it. But so it is; if applied as I have stated, it is of great benefit to sainfoin and clover, but otherwise it is of no use at all.

From the Pictorial Times.

THE FARMER AS HE IS AND IS TO BE.

Agriculture is certainly one of the noblest of human employments; and yet amongst us it is scarcely so regarded.—Of all the arts it is clearly the most useful and requisite, as being the source from whence the nation derives its subsistence. The poet could not sing, nor the artist paint, nor the musician compose, if the farmer had not gleaned first the kindly products of the earth for his own and others sustenance. "The proper cultivation of the soil causes it to produce an infinite increase; it forms the surest resource and the most solid fund of riches for a nation." The farmer ministers to the laws of nature and induces a more abundant increase than would arise without his help. He adds to the real benefits of the earth by increasing its plenty; he calls forth ten grains where but one would be given without his careful tending; and by his labour the soil of the earth, the vitalising portion of the air we breathe, the heat of the sun, and the moisture of the clouds, are combined to induce a larger supply of the one requisite, without which the great human family could not exist.

Yet with these claims upon society, society does not very highly estimate the farmer. Other professions are esteemed far more honourable, far more "respectable." The classes who live by the vices, the follies, and the misfortunes of men—divinity, law, and physic—hold higher social rank amongst us than the cultivator of the soil. The real usefulness of his employment does not elevate him to an equality, in common social regard, even with the lawyer who lives upon county rates and squabbles! who fattens upon pauper settlements and buys his wife a new satin gown out of the profits for transporting a wretched poacher, or sending a crippled vagrant to the treadwheel. The fomenter of quarrels for the sake of costs; the crow that lives upon the carrion of crime and misery and discord, is awarded the rank of "gentleman," whilst the farmer, whose occupation is morally so infinitely superior, whose labours are so nationally important, and whose employment is to add to the bountiful gifts of the Creator—this man is expected to be content with an inferior social rank. Let us see how comes this contradiction.

The time has come when candour is completely necessary, and when not simply the truth, but the whole truth, must be told. It is sometimes bitter, that same truth,—very bitter; but the farmers have never been cravens, and must not now shrink from listening to it. Physically they are as fine a race as the world can show. Cobbet was right when he used to point with proud boastings to the length and strength of limb and breadth of chest of the farmers and their sons, and the rosy cheeks, and budding lips, and round comely forms of the farmers' wives and daughters. Their calling keeps them in company with God's fresh air and bright sunshine; calls them up when the dew is yet sparkling in early morning, and their bodies thrive because they are obedient to the laws which regulate human existence. But this very ease of circumstances has induced an idleness of mind. Mentally they do what all around them does—they *vegetate*. The lawyer is obliged to *think*; the doctor is obliged to *think*. They are both compelled to obtain a certain amount of liberal education. The legal limb of society must study how men have managed and still manage one another; the apothecary must study how one physical element combines with another to produce certain physical effects. The one must *think* about human laws and the other must *think* over the laws of nature. Both men may have a keen relish for the profits of this world, and the lawyer will take excellent care they do not escape him; but that is not all their mental employment. They do more than just calculate markets, chaffer over bargains, and reckon up profits and losses;—and herein rests the difference. The professional man has book-knowledge and the farmer has not. "Book-knowledge" is the proper term; for to say the farmer is *uneducated* would be unjust and untrue. He has the education of a man, if he lack that of a scholar. He knows the seasons' changes; he studies the budding of plants and the habits of animals; the aspects of the heavens and the character of earthy soils; and without, perhaps, knowing the words, he is a practical zoologist, and entomologist, and botanist, and chemist, and meteorologist. But he is only an empiric. His knowledge is limited by his experience. He knows nothing of great laws which regulate the appearances so familiar to his eye. To him a star may have its own beauty, but it is only a star. He is ignorant of the magnificent system of which it forms a part. To him the lightning is terrible in its destructiveness; but a hidden mystery in its benevolent electric influences upon the progress of agricultural chemistry. To him the soil is rich or poor, without telling any tale of elements present or wanting, but on which must depend its barrenness or fertility. In short, the farmers, taking them as a body, *want knowledge of the general principles.*

This is the unsavoury but wholesome truth which all their friends must tell them; and now comes its bitterest application. Hitherto the home grower of corn has been protected from foreign competition; the only protection he must now depend on is his near neighbourhood to the consumer and his own energy and skill. There must be no more slumbering; no more folding of the arms to sleep. Every man must be up and doing. The broad fields do not produce one half of what they might do; aye, and what they will do too. Our acres are men; our towns will produce manure, and our villages have labourers enough. It remains only for the farmers to find energy and to get knowledge, and for the landlord to second the tenant in his efforts for improvement. A law must be passed as to farm leases. The tenant must be secured in the enjoyment of the improvements he makes. He must have a good heart and firm reliance that he is labouring for himself whilst he is increasing the value of the soil, and this justice done, he must look round him and strip for the contest. With the blessing of God we shall yet live to see the day when a farmer shall blush to have a weed in his fields whilst healthy labourers are wasting their lives in gloomy idleness within the walls of an union house. The yeoman must maintain his long-honoured position. Since he wants improved information, let him

got it. The men who have won battles will not surely be beaten at the plough tail; if the bayonet has done gallantly the unholy work of war, surely the sickle and the ploughshare shall not come off ingloriously in the contest of good agriculture.

From the Scottish Farmer.

TURNIP CULTURE.

Considerable diversity of opinion still exists among Agriculturists, in reference to the kinds of manure which are best calculated for this crop. The number of portable fertilisers now, and for some time past, in the market is so great, and their efficacy (according to their venders) so striking and unfailing, that the Farmer may well feel puzzled in deciding which to apply; and, considering the shameful extent to which the adulteration of most of these is perpetrated, it is rather gratifying than otherwise to find that Farmers are so generally sceptical of any extraordinary or lasting benefit accruing from their use. But they ought, at the same time, to endeavour to render themselves as independent as possible of the manure-market, by bestowing much greater attention than heretofore to the collection and preservation of all the solid and liquid matters (particularly the latter) of the farm-yard, which are now so frequently and culpably permitted to go to waste.—It requires but little scientific knowledge to perceive the propriety of applying to this crop such manures as are capable of furnishing the largest proportion of the inorganic matters of which it is composed; and we know from the analysis of the plant, that the principal mineral constituents of turnip bulbs are potash, soda, lime, and sulphuric acid, and that the leaves contain a considerable portion of earthy phosphates, chiefly phosphate of lime. But in practically determining the sorts of manure best adapted for application to this crop, it is necessary to consider what substance, or combination of substances, is best calculated—first, to furnish immediate nourishment to the young plants, so as to push them quickly into rough leaf, in order to evade the ravages of insects; secondly, to prolong and sustain the growth of the bulbs to the latest period of the season; and thirdly, to increase the fertility of the soil—*i. e.*, to put it in the best condition for the production of succeeding crops.

As already observed, the manure of the farm-yard is that on which the cultivator should mainly depend for the production of his green crops; but in consequence, chiefly, of the very careless and slovenly manner in which the fertilisers of the homestead are generally managed thro'-out the country, and which is perhaps in some degree perpetuated by a dependence on extraneous matters, comparatively few farms, under the mixed system of Husbandry, are able to supply themselves with the requisite quantity of manure, and, in this case, some of the portable fertilisers, whose efficacy is most satisfactorily ascertained and established, must be resorted to in order to supply the deficiency. A few of this class of manures, when unadulterated, have succeeded wonderfully in raising large crops of turnips, at comparatively little expense, and therefore constitute valuable auxiliaries, when the supply of the farm-yard is inadequate. It is not advisable, however, to use any of these substances by itself—the more judicious practice, in our opinion, being to apply them in conjunction with at least one-half of the ordinary allowance of well-fermented farm-yard dung. The propriety of this will be apparent, when it is considered that, altho' an extraneous manure may contain many substances necessary to the perfect growth of the turnip, yet some of the essential inorganic constituents may be absent or deficient, which the dung would probably supply. Another reason is that, although guano and other evanescent substances are very useful in forcing the young plants beyond the most critical period of their existence, it is found that the growth of the bulbs becomes less vigorous during the autumn, while those manured with farm-yard dung are still increasing in size. Hence the utility of having a due supply of the latter substance in the soil, whatever else may be superadded, to the produce bulbs of the largest size, and to leave something behind for the benefit of the succeeding crops of the rotation.

(To be continued.)

Newcastle Farmer.

COBOURG, SEPTEMBER 1, 1846.

Positively one might as well be a railroad locomotive at once, with a speed of thirty miles an hour. We were just chuckling over the i that our labor was past for a fortnight at least, when, in comes the Printer with "we shall want the editorial," Sir, by Saturday at the latest: the what? said we in consternation, why the man must surely have mistaken us for a whole fount of type, and imagines that by some curious mechanical contrivance, similar to Babbage's calculating machine, we have only to turn a winch in our brain, give two sneezes and a shake, when, heigh presto! we tumble out into words, sentences, paragraphs, in short a finished article; complete from How d'ye do, to pretty well, I thank you. So there's no help for it we suppose, we have said A, and must now go through the alphabet; "needs must when &c.

> But how the subject theme will gang,
> Let time and chance determine,
> Perhaps it may turn out a sang,
> Perhaps, turn out a sermon.

In laying before our readers the second number of the *Newcastle Farmer*, we consider we are giving a pledge, that it shall not (with our consent at least,) be of an ephemeral character; and the terms of approval in which it has been spoken of by many intelligent farmers, as well as by the press, in various parts of the Province, cause us to indulge the hope that our endeavours will be seconded by a goodly array of contributors, and that a large subscription-list (necessary for a paper published at so low a rate), will attest the fact that the Farmers of the Newcastle District are willing to render their utmost support to perpetuate its existence.

The *Newcastle Farmer* is not got up for the purpose of supplanting or opposing any agricultural paper now in circulation, but with the sole intent of furnishing useful practical information on a more extended scale, and at a price which shall induce even those who have been used to read but little, to purchase, with half-a-dollar a year, a large amount of valuable intelligence, collected from the publications of the best writers on agricultural topics, of both the European and American Continents.

It is a fact, that from the recent alterations in the Corn Laws of England,—(our only grain market,)—the Canadian farmer must be "up and doing;" it will be of no avail to find fault with Merchant and Miller because they do not offer the same price as heretofore for our grain,—it will be useless to rail at the "powers that be" in the Imperial Parliament, and it will be worse than idle to look for relief to a British Ministry, for we cannot conceive the possibility of there existing in one century, *two* Prime Ministers of the first nation in the world, who could, or would, "turn about and jump Jim Crow." The fiat has gone forth, the law has passed, and depend on it the word of command "as you were," has become obsolete; therefore cease calling upon Jupiter, and put your shoulders to the wheel in earnest, or we shall soon go back to *the one* linsey-woolsey garment for the farmer's wife and daughters, and the leather hunting-shirt for self, and the boys, with continuations of the same, if we can get them. Remember, Manchester and Glasgow will not send their manufactures,—Yorkshire and the West of England their broadcloths,—Stafford and Wales their iron,—nor Birmingham and Sheffield their hardware, at a reduc-

tion of nearly thirty per cent., to correspond with the reduction in your staple (wheat). In plain prose, it will take two hundred bushels of wheat to pay for those commodities which you have been used to purchase with one hundred and fifty or less.

One of two things must follow,—we must either suffer the deprivation of the articles, or raise something more to pay for them. Our pride (perhaps) will not allow us to do without them, and it is certain that we have, in many instances, allowed superfluities to grow up into necessaries, and thereby rendered our situation more critical, and our extrication more difficult; but "nil desperandum" must be our motto, and if at the present moment we know not how to make our land more productive, let us determine to make use of the head as well as the shoulder, and as we are never too old to learn, let us beware that we are not too obstinate; that *there is* much to be learned, the man who knows the most, is most ready to acknowledge. Let then the farmers, and their sons, avail themselves to the utmost extent of the diffusion of agricultural information now, happily, getting so general, and it will be hard indeed if, from so small a sheet even as the *Newcastle Farmer*, the amount of the subscription be not returned fifty fold.

We hardly need to disclaim the idea of seeking any benefit or profit from the publication of the paper, *that* is quite out of the question; neither do we wish to set ourselves up as teachers and instructors above our friends the farmers; "we are but gatherers and disposers of other men's stuff," but being in possession of numerous British and American journals not available to the mass of agriculturists, we hope to make therefrom such selections as shall be found both useful and practical to our readers. We expect also to be enabled to render an account of the proceedings of the various Township Clubs, which we hope will come into effective operation now that the busiest season is gone past,—for, by the farmers' comparing notes at those meetings, light will be thrown on many subjects, and much information be elicited.

We hope also to be furnished with contributions from some of the many intelligent farmers in the District, stating the result of experiments, and modes of proceeding in various farming operations, either as premonitory of danger, or assurance of success. In fact, as we have said above, our motto is "never despair"—and, although our literary bantling is but a little one, and we, not being used to the office, are but rough wet nurses, still we believe, when the cub shall have been licked into shape, there will be found in it "*that* which passeth show." Indeed, with the support we expect from our agricultural friends, we are inclined to think that we shall have something more than a sneaking partiality for, (and shall, when it can go alone, be absolutely proud of) the brat, and should we live to see it *inexpressibled* (to coin a word,) and come out, in a coloured surtout, with engraved title-page and wood cuts, then shan't we be "mais nous verron"?

We are much gratified to find, from a Circular just received, that a Provincial Agricultural Society and Board of Agriculture for Canada West, is in course of formation, from which we augur much good.

Our friends of the Home District Agricultural Society have taken the lead in this matter, and invite the co-operation of all the District and local Agricultural Societies, as it must eventually be of paramount importance to the Agriculturists as a body, to have one common bond of union, by which, not only their particular interests, but the interest of the whole Upper Province may be advanced; for it is an incontrovertible fact, that, in such a colony as Canada West, where the chief article of export is the produce of the Agriculturist; all classes will be either benefitted by their prosperity, or suffer immensely by their depression, for, from the mechanic to the importing merchant and ship-owner, all are directly interested in agricultural prosperity, and we would call them to lend their assistance and support to a Society, whose beneficial operations in the collection and diffusion of information, and giving a stimulus to emulation and exertion, by offering Premiums for improvements of all kinds, either stock, crops, or articles of domestic manufacture, must be productive of an incalculable amount of benefit to the whole of Western Canada.

HOME DISTRICT AGRICULTURAL SOCIETY.

TORONTO, *16th July*, 1846.

SIR,—I beg to acquaint you that, pursuant to Public Notice, an Adjourned Meeting of Members of the Home District Agricultural Society, and others, was held in the Court House, Toronto, on Wednesday, the 15th instant, E. W. Thompson, Esq., President of the H. D. A. S., in the Chair, for the purpose of Forming a Provincial Agricultural Association; and that, after a lengthened discussion, the following Resolutions were adopted:—

1st.—That the Association be called the *Provincial Agricultural Association and Board of Agriculture for Canada West.*

2nd.—That the Members of the Association be composed of persons subscribing annually to the amount of Five Shillings and upwards.

3rd.—That those persons who shall subscribe to the amount of Two Pounds Ten Shillings and upwards, shall be constituted Life Members of the Association.

4th.—That the Association shall be governed by Delegates sent by the several Districts, who shall meet annually for the Election of Officers, and the transaction of the business of the Association.

5th—Each regularly organized Agricultural Society shall be entitled to send Two Delegates, of their own selection: but, should no such selection be made, then the President and Secretary of such Society shall be Ex-officio Members of the Association: to meet at such time and place, after the first meeting, as shall then be determined upon.

6th.—That the Delegates shall elect their President, Vice-president, Secretary, and Treasurer, at their first meeting, which will be holden in the Court House, at Hamilton, on Monday, the 16th day of August next, at Two o'Clock, P. M.

7th.—That the funds of the Association be raised by Subscription of the Members of the Association, Voluntary Subscriptions, and such Funds from the various Agricultural Societies as by them may be appropriated, and any Grant which may hereafter be obtained from the Government, by application through Parliament.

8th.—That Annual Fairs or Exhibitions be holden at such time and at such place as shall be determined upon by the Delegates at their Annual Meeting, and such arrangements to be made by them as will most effectually tend to the advancement of the general interests of the country, and especially the Agricultural and the Manufacturing.

It was also resolved, with a view of furthering the interest of the Association, that a copy of the above be sent to the several Agricultural Societies in Canada West, and to request their co-operation.

I am, Sir,

Yours obediently,

W. W. CREW,

Assist. Secy. H.D.A.S

The time for wheat sowing having nearly arrived, we would advise the farmers to exercise all their discretion in the choice of seed wheat; for, having inspected with the microscope a great many samples of wheat, we are quite convinced that defects exist to an alarming extent from the ravages caused by various descriptions of insects, and where such is the case, it will be necessary to sow much more seed than is usual, even to the amount of one-third; or a very thin allowance of plants may be expected.

Swede turnips which do not at this time completely cover the ground, should not be longer neglected if any description of weed remains among them,—or mildew, which will check their growth and prevent the enlargement of the ball, will certainly be the consequence.

A meeting of Delegates from the Agricultural Societies of Canada West, advertised to be holden in *Hamilton* on the 20th instant for the purpose of forming a Provincial Agricultural Association, was, we regret to say, very thinly attended,—only seven Districts out of the *twenty* of which the Province is formed, having sent members. We cannot, in this number of the *Newcastle Farmer*, make room for the proceedings of the meeting further than to publish the names of the officers appointed; but in the *Star & Gazette* will be found all the Resolutions passed, together with our remarks thereon.

To the Editor of the Newcastle Farmer.

GOOD AND BAD FARMING.

Sir,—The old adage, that "appearances are deceitful," is never more aptly verified than in farming operations, for although it is a fact, that a succession of good crops, is tolerable good evidence of the rule of a master spirit, a practical operator, still, the very reverse, occasionally, should by no means lead to the hasty conclusion, that a want of either scientific, or practical knowledge, is the cause of partial or even successive failures.

There are some extremely fortunate persons, who, from a combination of circumstances in their favor, have this season realised a crop of spring wheat, when there has been, as is very generally acknowledged on almost all sides of us even to the extremes of the Province, a decided failure in that crop. Oh, say these fortunate ones, the thing is easily accounted for, "where there is a good farmer, there is a good crop," if such be the fact, we are extremely sorry to observe, how very few good farmers there are in *this* and the adjoining townships, as there is scarcely one good field of spring wheat, to fifty with half a crop and less: and yet here have been practical farmers engaged from most of the counties of England and Scotland, and very many of them, men whose skill and industry have, by their former crops, been made very apparent; the grain in question has come in its usual rotation, according to their several views in the most approved manner, the operations have been perfectly well performed, and still, whether on a fallow, or after turnips, corn, peas, or potatoes, or on winter or spring ploughing, the result has been the same,—"a failure." The seed was, in most cases, well put into the ground, and in good season, the weather was favorable and propitious, the young blade exhibited a very healthy appearance up to a certain period, when from natural causes alone, the plant throughout the greater part of the Province, assumed simultaneously, a most unhealthy hue, and in most instances, suffered past recovery; we account the failure to have resulted, not from want of attention or skill, but from causes beyond the control of the most skilful agriculturist, quite as much as the rust itself; well may a celebrated writer observe "Agriculture, is a subject, which, viewed in all its branches and to their fullest extent, is not only the most important and the most difficult in rural economics, but in the circle of human arts and sciences," for after all that unwearied industry, and skilful management can effect, the agriculturist is still liable to suffer a total and it may be a ruinous loss by any atmospheric change which may occur.

Now although we have asserted the peculiar applicability of the old adage to farming operations in particular, still we must confess that there are appearances which indicate at once and afford certain evidence of good or bad farming, but even here again, allowance must be made for illness or poverty, or many and severe misfortunes, arising from seasons, accidents or other circumstances.

Certainly, if we saw a farmer's fields continually foul, and overrun with weeds, which need nought but perseverance to destroy, if we invariably observe the operations performed in a slovenly and careless manner, which by the commonest attention to what is passing around might be easily remedied, if we see the continual recurrence of the same crop on the same land, without any attempt to restore to the soil, those substances necessary to supply that, of which the plant is continually draining it; if we notice all the stock of the farm turned on the meadows till the end of April, which said meadows are to be mown in June; if the stock, of whatever it may consist, is without sufficient shelter and attendance during our most inclement winters, and put on short allowance into the bargain, we should not for a moment hesitate to affirm such to be bad farming, and if on the opposite extreme, we see a vast expenditure and an aim at appearance only, however good the crops may be which may follow such an outlay, still if in the long run it *does not pay*, whatever may be the amount of self gratulation or amusement which it may afford, it is still but bad farming.

We consider that it is essentially necessary to good farming, to possess some scientific knowledge, however acquired. Loudon justly remarks, "the recent discoveries in chemistry and physiology, have led to the most important improvements in the culture of plants, and the breeding and rearing of animals. Agriculture is, in consequence no longer an act of labor, merely, but of science, hence the advantage of scientific knowledge to agriculturists, and the susceptibility of the art of progressive advancement;" and with a little common sense, close observation, a willingness to receive information whether written or oral, an attention to the performance of every department of the operations, in a judicious manner, and in proper season, these combined with persevering industry can scarcely fail to result in good farming, even if it should not, sometimes from untoward circumstances, be so successful as might be desired, and it is most certain, the reverse of this practice can neither ensure, nor deserve success.

It must be allowed, that the foundation of good farming, must require a knowledge of the nature, and capabilities of the soil about to be brought under cultivation.

The soil is, so to speak, the raw material from which is to be procured an article for market, by the sale of which a remunerating profit is to be returned; it is therefore of the highest importance, to be fully aware of the suitability of the soil to furnish the various produce required, or the means whereby any soil, if deficient in any quality, may be artificially supplied with the needful ingredients for the end proposed.

It is at the same time as important to be conversant with the suitable adaptation of crops to any description of soil, in such a manner, and at such periods, as shall yield the greatest amount of profit in return for the labor bestowed. We would not however have it inferred, that the amount realised from one or two good crops, is any evidence of itself in favor of any particular mode of operation, for it may be that by extraordinary endeavours, the land may be pressed to its utmost, and sterility for some years after be the consequence, this would indeed be killing the goose which lays the golden eggs, in expectation of being suddenly enriched, and the worst results must ensue.

It is undeniable, that a succession of crops of grain, on the same soil, of whatever description it may be, must end in failure; some soils, from their very nature, and constituent parts being sooner exhausted than others, that is, they are deprived of the qualities essential for that particular plant, while, at the same time, they may and do retain, the ingredients needful for a crop of a different description; so, stiff, compact clays, however rich they may be made by animal manures, would soon, by repeated cropping, be incapable of producing wheat, by reason of the expansion of those silicious particles, absolutely necessary to form the straw of that grain, while a crop of peas might be produced, whose only danger would be their own luxuriance, tending more to haulm than pods.

It is evident, from both theory and experience, that change of crop is necessary, and *that* is the best farming, by which each successive crop is made remunerative, and at the same time is fitted, by its nature and mode of culture, to serve as a preparative to the one next ensuing.

We would not be supposed to advocate change, merely for the sake of change, without science as a rule, and experience for a guide, for then, without answering any one good purpose, we should soon be in the predicament of the man who was well, wanted to be better, took physic, and *died*.

Again, the question of a market being distant or near, will necessarily have an influence, and must be taken into consideration in reference to the nature and extent of any particular crops to be raised; produce of some kinds, in the vicinity of large towns, which could be successfully grown, such as peas, (green) in the pod, potatos, turnips, cabbages, &c., could not be thought of beyond the farmer's home consumption for house and cattle, with a market at a distance of 30 or 40 miles, for with such bulky articles, the cost of transport, would, in many instances, be equal to their value, taking into account the fact, that the season of demand would occur, either at the busiest time, or at that period of the year when the roads are at their very worst and almost impassable.

It is unquestionable, that the greatest amount raised per acre is realised by those, who supply the towns with vegetables, but it must be remembered, that a large amount of labour is required per acre, and that but comparatively few can be employed in that way, without glutting the market, as the supply would soon exceed the demand. But whatever mode is adopted; whatever system is pursued, in the department of agriculture, there can be no question, but that the thinking, diligent, and careful, must have a decided advantage over the careless, idle and thoughtless, and although "'Tis not for mortals to command success, he is most likely to succeed who endeavours to deserve it," and we lay it down as a truism, that that is the best farming which remunerates, and he is the best farmer who makes it pay.

A NORTHUMBERLAND FARMER

Hamilton, August 22nd, 1846.

To the Editor of the Newcastle Farmer.

Sir:—If the following experiment made to ascertain the proper time for cutting wheat be thought worthy of a place in your paper you are at liberty to publish it.

On the 11th of July I cut a handful of wheat, it was then beginning to turn a little yellow, and the grain was passing out of the dough state. On the 16th of July I cut another handful, the straw was then quite yellow, the heads quite erect, the grain still soft.

On the 22d of July, the time I commenced cutting the field, I took another handful, it was then fully ripe, the heads beginning to turn down, and the grain beginning to harden.

On the 1st of August, I took the three parcels and rubbed out the wheat, it was then sufficiently dry to grind, after cleaning it, I measured from each lot nearly a gill, very carefully; and then weighed them, the result was as follows:—

No. 1, weighed 1065 grains, sample inferior.
No. 2, do. 1123 do., sample very fair.
No. 3, do. 1145 do., sample about the same as No. 2.

Making a difference between the first and second cut of 6 per cent. and between the second and third of nearly 2 per cent. JOHN WADE.

Hamilton Gardens, Aug. 3d, 1846.

TOWNSHIP CLUB MEETING.

Hamilton.—1st Saturday in September, at the Town Hall, in Cobourg, at 4 o'clock, P. M.—Subject for discussion,—*Fall and Spring Ploughing.*

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