THE GLEANER:

AND NORTHUMBERLAND, KENT, GLOUCESTER AND RESTIGOUCHE

COMMERCIAL AND AGRICULTURAL JOURNAL.

OLD SERIES] *Nec aranearum sane textus ideo melior, quia ex se fila gignunt, nec noster vilior quia ex alienis libamus ut apes.* [COMPRISED 13 VOLUMES.

NEW SERIES, VOL. VI:] MIRAMICHI, TUESDAY EVENING, NOVEMBER 16, 1847. [NUMBER 6.

Agricultural Journal.

From the London Farmers' Magazin e

THE LONDON FARMER'S CLUB.

SUBJECT—"THE ACTION OF CHEMICAL MANURES, AND THE BEST METHOD OF MAKING FARM-YARD DUNG.

[Continued from our last.]

Mr. HUTLEY said he wished to put to Mr. Nesbit a question. That gentlemen had laid great stress on good rotten dung; and, as a practical farmer, he wished to know why such stress had been laid by Mr. Nesbit on good rotten dung, as opposed to manure laid out one day, carried on another, and laid on a third?

Mr. NESBIT said that a ton of rotted dung was more valuable than a ton of fresh. It had a greater effect, and the reason was this: In the general action of the decomposition of manure the ammonia retained, and the whole was ruduced into less bulk. They had double the amount of mineral ingredients, double the ammonia; they only lost the carbon and the hydrogen. He had never yet heard of an instance in which well rotted dung did not, on trial, prove more valuable than fresh dung. It must be clear to every gentleman present that if there were a quantity of soluble matters, and they were exposed to rains, the result would be injurious. The decomposed manure would be washed away before the plants could be acted upon.

A MEMBER wished to ask whether or not Mr. Nesbit considered charcoal a manure?

Mr. NESBIT said that under various circumstances charcoal had been found very useful, by acting on the ammonia of the air, and condensing it within its pores. By experiments, one cubic inch of charcoal had been found to condense 90 inches of ammoniacal gas.

Mr. LOVE said he denied that a ton of rotted dung was better than a ton of fresh dung. He had weighed the two, and had found that it took 30 cwt. of fresh dung to make one ton of rotten dung; and he could state that one ton of fresh dung did as much good to the land as one ton of rotten dung, simply, he believed, because the rotten dung lost those volatile ingredients which had been in it and which gave the first leaves to the plant.

Mr. NESBIT said that was because it was badly made, and asked for what crop the dung was used?

Mr LOVE replied that it was used for turnips and mangel wurzel. It was the general experience that rotten dung was the best. It was not judicious he conceived to drive off any single particle of matter, volatile or solid, which was contained in the manure of their farm-yards. As one who was born in another country, he could not but feel surprised at the conduct of landlords in this country in not doing their duty to their tenants, by not giving them better buildings and other places for keeping the soluble manure. It was through the medium of leases that his own countrymen had been able to make such great improvements, including the keeping of their manure in a condensed state. There was as much of the spirit of improvement in England as in Scotland; further, he would say there was as much of the spirit of improvement in the room in which they were assembled that evening as in any country in the world. Mr. Nesbit had said a great deal about applying lime to the soil, that is, calcined lime; and he had stated that when applied to the land in the form of dust it very soon became carbonate of lime. That he denied *in toto*. He had seen chalk applied to land without doing any good at all. He agreed with Mr. Nesbit that Mr. Warnes's system was one of the best that had yet been invented for retaining all the good properties in animal and vegetable manures; and having himself put in practice for three weeks, he could not perceive that any loss had arisen; that was the chief thing which they had to guard against. He demurred to Mr. Nesbit's remark, that soils in general required the application of lime every three or four years. Lime was a thing which continued in the soil for a long time, it always found its way downwards, and the only way to keep it up was to plough deeper and bring it back again. He would just mention that Mr. Shaw, of Northampton, having sent his soil to be analysed by a chemist, was told that the only substance which needed to be applied was lime. He accordingly applied a quantity and the consequence was that not an atom of difference was produced in the space of three years. This was one of the discrepancies of chemists, as regarded the analyzing of soils. No doubt chemistry was right when it was properly known; but he thought the chemists of the day were as much behind in their knowledge of certain conformations of plants and of the substances from which they derived their nourishment, as they (the farmers) were. I believe that as fast as they acquire knowledge we are found grasping it.

Mr. NESBIT said that as farmers could see when chemists were wrong, so chemists could see when farmers were wrong. He repeated his statement, that weight for weight, rotted dung was more valuable as a manure than unrotted dung.

Mr. TURNER: in all cases?

Mr. NESBIT said very much depended, of course, on the seasons; but he maintained that, irrespective of seasons, there was the most nourishment in rotted dung. This would appear evident if they considered how rotted dung was made; that one ton of it was formed from two tons af unrotted, that is to say, that they had twice the amount of silica of potash and of ammonia; that everything, in fact, was doubled in quantity, except a certain amount of carbon and hydrogen which escaped. The carbon and hydrogen escaped, because there was an action of the air causing them to do so. But it should be recollected, that those were not the most valuable properties. Now, with respect to long and short dung, they were aware that the ploughing-in of these upon different lands, would make a material change. If the land were very heavy, long dung would have a chance of lightening the soil; but if such dung were the best, then it might be asked what was the use of putting bone-dust and otheramineral ingredients. It was contended by Mr. Love that he was wrong with respect to the application of lime every three or four years, but he repeated the statement, that to throw on the land a large quantity of lime, and then abstain from applying any more for a number of years, was not a proper system of liming. In the case of land which required liming, the work should be done every two or three years. The more lime they put into the land at a time, the more they exposed to be washed away:

Mr. MECHI said that in Scotland it was applied in the spring.

Mr. NESBIT: With respect to the failure of chemical experiments, he begged to repeat what he had said on a former occasion—that he would not be answerable for any faults but his own. He had before had Dr. Playfair's sins and misfortunes fathered upon himself. He had, however, nothing to do with the errors of other persons, and only when he himself had been proved to be in the wrong would he give way.

Mr. LOVE said, it had been argued as if there were no other acid in the soil than carbonic acid. Now, it was well known that alumina was the common alum of the shops.

Mr. NESIT dissented from this statement.

Mr. LOVE.—Now, if that were the case, there was sulphuric acid in the soil, and as the lime had the power of robbing it wherever it came in contact with it, that was the reason why the strong lands were made friable by the application of a considerable quantity of lime.

Mr. NESBIT begged to correct Mr. Love. Alumina was an oxide of a metal. What the action of lime might be upon sulphuric acid was another question.