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The Field.

Mr. Lawes' Wheat Crop of 1864.

SOME time ago we gave an account of experiments in wheat culture, carried on during a period of 20 years, by Mr. Lawes, a celebrated British agriculturist. It will be remembered that these experiments were made on three plots of land. One had received no manure whatever during the entire term; another had received annually fourteen tons of barn-yard dung; and a third had been manured with certain artificial mixtures each year. Mr. Lawes has published an account of his twenty-first crop (that of 1864), from which we take the following tabular view of his last two crops, and the average for twelve years:—

Bushels of Dressed Corn [Wheat] per Acre

Plots.	Harvests.		Average of 12 years, 1852-63.
	1863.	1864.	
3 Unmanured,	17½	16	15½
2 Farm-yard manure,	44	40	35½
7 Artificial manure,	53½	45½	36½
8 do. do.	55½	49½	38
9 do. do.	55½	51½	34½
16 do. do.	55½	51	34½

Weight per bushel of Dressed Corn [Wheat]—lb

Plots.	Harvests.		Average of 12 years, 1852-63.
	1863.	1864.	
3 Unmanured,	62.7	62.0	66.5
2 Farm-yard manure,	63.1	62.5	69.3
7 Artificial manure,	62.6	63.1	53.1
8 do. do.	62.3	63.5	57.8
9 do. do.	62.1	62.6	57.
16 do. do.	62.4	63.2	57.

Experiments in Top-dressing Applied to Grass Lands.

THE report of the Secretary of the Michigan State Board of Agriculture, referred to in another column, contains an interesting account of some experiments in top-dressing applied to grass lands at the State Agricultural College Farm, during the past season.

A piece of ground, 24 rods by 21, in the College Park, was selected for these experiments. This field was sown with oats, the previous year, without manure, and seeded with timothy and clover, the latter predominating in the growth of the past year. The piece of ground selected appeared to be of even fertility, and the growth of grass and clover prior to the application of any top-dressing was very uniform. The ground was divided into eight equal parts.

No. 1 had no top-dressing, serving as a basis of comparison, showing the natural productiveness of the soil.

No. 2 received a dressing of plaster at the rate of two bushels per acre.

No. 3, five bushels of wood ashes per acre.

No. 4, twenty loads of pulverized muck per acre.

No. 5, twenty loads of pulverized muck and three bushels of common salt per acre.

No. 6, three bushels of common salt per acre.

No. 7, twenty loads of horse-manure per acre.

No. 8, twenty loads of cow-manure per acre.

These dressings were applied from the 5th to the 10th of May.

The grass was cut June 20th and 21st by a "Buck-eye Junior" machine, cured in small cocks, and drawn into the barn in good condition, June 25th. Each load was carefully weighed on Fairbanks' hay-scale.

The yield per acre of each piece, the kind of top-dressing employed, and the gain per acre, are given in the following table:—

EXPERIMENTS IN GRASS.

	Yield per acre.	Gain per acre.	Gain per cent.	TOP-DRESSING APPLIED.
No. 1	2,850	None
No. 2	3,917	1,061	37	Plaster
No. 3	4,515	1,659	57	Wood ashes
No. 4	4,568	1,710	69	Pulverized muck.
No. 5	4,696	1,840	64	Pulverized muck and salt.
No. 6	3,813	957	33	Common salt.
No. 7	3,705	842	29	Horse-manure
No. 8	3,931	1,075	37½	Cow-manure.

The second crop of clover, &c., was cut by the same machine August 9th and 10th, was put up in small cocks August 10th and 11th. The cocks were turned August 12th, and drawn into the barn August 15th, each load being carefully weighed, as before.

The results are given in a tabular form, as in the first crop:—

EXPERIMENTS IN GRASS.

	Yield per acre.	Gain per acre.	Gain per cent.	TOP DRESSING APPLIED
No. 1	1,742	None
No. 2	3,054	1,314	75	Plaster.
No. 3	2,977	1,235	71	Wood ashes.
No. 4	3,306	1,564	89	Pulverized muck
No. 5	2,975	1,233	71	Pulverized muck and salt.
No. 6	2,467	725	41½	Common salt.
No. 7	2,675	936	54	Horse-manure
No. 8	2,556	1,114	64	Cow-manure

These experiments were conducted for the purpose of calling the attention of farmers to the great value of the beds of muck, which lie too often neglected and useless, a prolific source of discomfort and disease, instead of what they should be—wealth and abundance. The results obtained by the application of pulverized muck, are so decisive, and so far beyond those obtained by the application of ordinary manure, that he must be blind indeed, who does not see that a swamp on a farm is a mine of wealth if properly improved. Let every one who reads the above, resolve to get out a pile of muck for a spring top-dressing to his meadow, before winter breaks up.

The "Quid pro Quo" of Farming.

It is a dictate of common honesty in the commercial world, that a man must give those with whom he deals, an equivalent for their money. The merchant who fails to do this is justly set down as a rogue. The dealer gains his livelihood by what he receives in return for his time and trouble in handling goods for the convenience of his customers. Moreover, a merchant cannot carry on business at all unless he fills up his depleted shelves from time to time with fresh stocks of goods.

Honest and successful farming must be carried on very much in the same way. You cannot take wealth out of the earth without making a fair return for value received. The attempt to do so is downright dishonesty, and will as certainly recoil on the head of him who takes this course as will the fraud of the merchant who receives his customers' money and gives them no equivalent. The key to all unsuccessful farming is to be found in this fraudulent dealing with the soil. You can't cheat mother earth in the long run. However forbearing she may be, the time will come when she will refuse to transact business with those who systematically wrong her. The idea of being able to get good crops from land that is unmanured, or only treated occasionally to homœopathic doses of manure, is almost laughably absurd. Yet how widely it prevails. How many are surprised at their "ill-luck" as farmers, when this is the true explanation of it. The truth is we must farm better, or it will not pay to farm at all. The first flush of fertility characteristic of a new country is over. In the great majority of cases, restitution must be made to the defrauded soil to bring it up to its primitive condition. But under a right system of husbandry, the original state of the soil ought to be surpassed. Instead of this, complaints of deterioration come from all quarters of this continent. Large tracts of once productive western lands are beginning to run down. The product per acre in Ohio is less than it was forty years ago, and large numbers of farmers want to sell out and move farther west that they may find a more fertile soil. That was no exaggerated case mentioned in our columns recently of an Illinois subscriber to the *Country Gentleman* who used his manure and compost to fill up holes in the lots and streets! It is positively wicked to wear out the magnificent farms that have yielded up their wealth to robbers of the soil. Change of location will make things no better. It is change of conduct that is needed. Stay where you are, gentlemen, and be HONEST. Give the "quid pro quo." Imitate the wise old farmer who "fed his land before it was hungry, rested it before it was weary, and weeded it before it was foul," and like him you will not fail to have good crops.

"No man is born into the world whose work is not born with him; there is always work and tools to work withal, for those who will."