

tible, upon a more thorough and penetrating inquiry is found worthy of recognition and honour.

The great, according to its weight and ruling influence, always remains great, but that which strikes our eye in the great and appears of weight,—that would not exist, if there were not around, below, and above it, another world of things which our eyes see not.

AGRICULTURE.

(From the *Lower Canada Farmer's Journal*.)

On the Vitality of Grass Seed.

The question is often asked, and many times by those who are esteemed the wisest and best of farmers—"Is grass seed and clover seed, which is more than one, two, or three years old, just as good as seed only one year old?"

By many it is believed that there is really no difference in seed, whether it is one or four years old; and it would seem that when proper care is exercised in securing such seed, not suffering it to be injured by storms, nor to heat in the mow before it is cleaned from the chaff, it would be good seed, and vegetate well even when it is a few years old. We have always thought, until recently, that old seed was as good as new, and have many times sown clover and timothy seed which was more than a year old, but have noticed almost invariably, that such seed did not seem to "take" well; and, not thinking that the seed was not good, we have attributed such failure to the unfavorable condition of the soil—that it was covered too deep, or not covered at all with earth. But I have always had good success in seeding land, in both fall and winter, when I have used fresh seed. I have observed many times that those farmers who contend that old seed is just as good as new, and who are in the habit of sowing old seed, frequently complain that their grass seed does not seem to take well.

As every farmer should, if possible, raise his own grass seed, we have been accustomed every year to select some of the best portions of our meadow and let it ripen for seed. In 1849 we saved about two acres of timothy grass; and as it yielded several bushels more than we wanted to sow in one season, it was kept in barrels in the barn. The seed sown in 1850 took well. In 1851 we sowed about one bushel of the same kind of seed, and were much surprised to find that but a small portion of the seed ever came up. Not having occasion to use the remainder of the seed, it was kept until the spring of 1855, when we sowed about two bushels of it, and none of it grew. The cause of failure was thought to be the universal dryness of the soil.

In the spring of 1856 from one to two bushels more were sown, but none of it vegetated; and in September last about two bushels more were sown after wheat on summer fallow, where the soil was very mellow and moist, and as favorable as a soil could be for seed of any kind, and not one single spire can be found which has sprung from the seed sown at that time.

In a few instances, in years gone by, we have sown turnip seed which was from two to three years old; and from such seed we never obtained many turnips; while from new seed they were almost always apt to stand too thick.

In the spring of 1853, we used carrot seed which was three years old, and not one seed in one hundred vegetated. In the spring of 1855, we used carrot seed two years old; and in some rows of one hundred feet long, there would be but six, eight or ten carrots; and not one-tenth part of the seed in all the rows, ever came up. In the spring of 1853 I sowed a paper of carrot seed, which we have good reason to believe was old seed; and the result was, we did not raise one single carrot.

What the experience of others may be on this subject, I am not able to say; but what I have penned I know to be veritable truth; and, furthermore, I know that the cause of failure was in the seed, and not in the unfavorableness of the soil. And if such should be the result with old seed on my farm, may we not safely conclude that when a failure has been attributed to a poor and barren soil in many instances, the fault was in the seed? We know that grass seed is kept on hand many times by proprietors of agricultural seed stores, until it is several years old; and it is no uncommon thing for country merchants to keep clover and timothy seed from year to year, and sell such for fresh seed; and if my seed should lose its vitality in so short a period of time, it would seem to be the dictate of sound wisdom for every farmer to raise his own seed from year to year; or sow none except that which is known to be the product of the previous season.

A Curious Question.

It is a singular illustration of the inexactness of agricultural knowledge, that the question how many seeds there are in the pound of our commonly cultivated field plants, should still remain to be answered. It is plain that the answer will not necessarily affect farm practice—for the quantity of seed which it is proper to sow per acre, is a matter to be determined by experience, not by argument apart from trial; and yet surely it is most desirable to compare the number of the seeds we ordinarily sow with that of the plants we raise. If in ordinary practice, 1,200,000 seeds of wheat are sown on every 40,000 superficial feet, or what is more extraordinary, fifteen to eighteen million seeds of flax are scattered on the same extent, about three to every inch of land, it is surely well to let the farmer know it. He knows very well he does not raise so many plants as this—and struck, as he must be, by the enormous disproportion between the means he uses and the result he gets, he will inquire into its causes.

The turnip seed employed per acre, numbers from 600,000 to 1,000,000, according to the kind and quantity adopted; this, if the rows are two feet apart, is two or three dozen seeds per foot of row, where a single plant alone is to be grown. No doubt nothing like so many generally come up, but then there is a great destruction by the hoe, which will explain much of the discrepancy in this case. What, however, becomes of the 18,000,000 seeds of flax which are commonly—of the 6,000,000 seeds of oats which are sometimes sown per acre? There is no destruction by the hoe in either instance here. A single ear of oats may contain 100 grains—a single plant will generally include half a dozen ears, but if 6,000,000 plants should yield as much as this implies, they would produce 100 loads of grain. Instead of 600 seeds a piece, they yield but half a dozen each to produce an ordinary crop of oats. It is plain that five-sixths of the seed, or of the plants that they produce, are killed in the cultivation of the crop; and the proportion is vastly greater than this in the case of other plants. What is the ordinary seeding of the clover crop? Eight pounds of red clover, four of white clover, and four of trefoil may be sown—that is at least 6,000,000 seeds per acre—a seed on every inch of land—but instead of 144 are there generally half a dozen plants on every square foot of the clover field?

There are about 25,000 seeds of sainfoin in a pound of "rough" seed, as it is called, and it weighs some 20 lb. per bushel; four bushels in an ordinary seeding, and they contain 2,000,000 seeds, or 50 per square foot of land. This is the number, too, of seeds in an ordinary seeding of vetches. It is manifest that in both these cases there is an enormous destruction either of young plants or seed; and these are the two great divisions under which the causes of this anomaly must be classed: faults of seed and sowing, and faults of cultivation. We are enabled, by the assistance of Messrs. Rendle, of Plymouth, to lay before them the following answers to the question—how many seeds to the pound?

Name.	No. of Seeds. per lb.	No. of lbs. per bush.
Wheat,	10,500	58 to 64
Barley,	15,400	48 to 56
Oats,	20,000	38 to 42
Rye,	23,000	56 to 60
Canary grass,	54,000	
Buckwheat,	25,000	48 to 56
Turnip (Rendle's Swede),	155,000	50 to 56
" (Cornish Holdfast),	239,000	"
" (Orange Jelly),	233,000	"
Cabbage (Scotch Drumhead),	128,000	56
" (Drumhead Savoy),	117,000	50 to 56
Clover (Red),	249,600	60
" (White),	686,400	59 to 62
Rye grass (Perennial),	314,000	20 to 28
" " (Italian),	272,000	13 to 18
Sweet Vernal Grass,	23,200	8

—Idem.

Rural Architecture.

In a progressive and enlightened age like this, it is somewhat astonishing that so little effort has been made to improve and beautify the homes of the rural population.

The associations connected with childhood have an important bearing on the conduct of the man, and the recollections of youth from the most agreeable pictures that are impressed on the tables of memory.

The scenes of our childhood, the hopes of our youth, and the aspirations of our manhood come crowding to the mere mention of home. In infancy, consciousness first dawns upon the beauty of