

tion in a regular and systematic manner; let it be seen in the condition of his house, barn, his fences, his crops, and his cattle. How soon will it provoke the jealousy of the others around him, (such is the natural impulse of the human mind,) and how much will his example effect towards reclaiming the entire neighbourhood and making them men like himself?"

(From the Boston Cultivator)

POTATOE ROT—1817.

Messrs. Editors.—The papers inform us it has already been ascertained, by the examination of crops raised artificially for the purpose, that the rot in the potatoe may be expected again to visit us the present season. It therefore behoves every one at all concerned in the culture of that almost indispensable crop, to cast about for a substitute in time, and use his utmost endeavour to arrest the impending evil, for his own sake, as well as that of millions who will be made to suffer the affliction of that dreadful scourge. Some one has proposed a large growth of rutabaga, as the best substitute for the potatoe, but with deference, I would prefer the parsnip to that: and much before the parsnip, the white bean, which may be grown on any soil, even the poorest, and under any circumstances yielding a return, far above almost any other crop that can be raised; it may also be cultivated as a second or successive crop to any of the earlier varieties of vegetables. And to this, there is nothing so nutritious as the bean and pea; nor can any crop be made to supply so conveniently the place of the potatoe on our table, many persons from choice, dispensing with its use, if they have the bean. Here follows a table, which shows, by chemical analysis, the nutriment contained in 100 pounds of various vegetable productions, as also of animal food, which determine the superiority, in this respect, of the bean and pea above all other—a consideration of the highest importance at the present time.

100 lbs Wheat contain	85 lbs nutritious matter
" Rice	90 "
" Rye	80 "
" Barley	83 "
" Beans	80 to 92 "
" Peas	93 "
" Meat, average	35 "
" Potatoes	25 "
" Beets	14 "
" Carrots	14 "
" Greens, Turnips	8 "
" Bread	80 "

From the above table, it appears that a pound of bread contains more than twice as much nutriment as a pound of meat; and that a pound of beans or peas, contains more than two and a half times as much as a pound of meat.

C. MALONE.

Saratoga, March 25th, 1817.

POTATOES—NEW VARIETIES.

In a former number we stated our opinion, made up from such facts as had come to our knowledge, that the cultivation of the newest and earliest varieties of the potatoe, would be the most certain way of escaping the effects of disease. To this opinion we still adhere, but we are anxious to get hold of facts, for without these a mere opinion is nothing. The following from so respectable a source as the Mark Lane Express, is worthy of consideration. We do not regard the results of the experiment as conclusive of the question by any means, but we are led to examine it the more closely:—

"To the Editor of the Mark Lane Express, Sir:—The following fact, about the potato plant may not be unimportant at this time of the year. I last year obtained, direct from the Brazils, two barrels of genuine wild potatoes, small but very healthy, having been grown in a district where no potato blight had been known. They were planted about the end of February, on land that had remained in pasture more than twenty years. The situation and soil were favorable; the latter a little stiffish. No

fungus was used in setting them, but a few decayed leaves and a little sand. Under the same circumstances, then, it might be well expected that if potatoes can escape diseases these would have a fair chance,—wild Brazilian potatoes, planted in England for the first time, in a favorable situation and in a virgin soil. Yet in the Autumn the disease failed not to appear, and even carried off a third of the finest and most vigorous looking crop ever seen.

The above must then contradict many of the theories which have been advanced as to the causes or origin of the disease. It cannot be owing to any degeneration in the plant itself, or to any corruption or exhaustion of the land, or from over decaying (as some would imagine).

If you think this letter worthy of insertion, as throwing any light (if it be only of a negative character) upon the question of the potatoe disease, either by setting disputed theories, or by preventing farmers from taking useless precautions and making vain experiments. It is at your service for insertion.

Yours, &c.

R. P. O.

TO CORRESPONDENTS.

J. J. B. Yours of the 3rd received, with its enclosures. The Postmaster at St. Catharines must have neglected his duty. We are very much annoyed that we are obliged to complain in every number of the delay and miscarriage of papers. There is a severe loss in the Post Office Department, which we shall lend our aid to tighten.

"A subscriber" wishes answers to one or two legal queries. We are happy to give them, and shall be willing to answer all such, to "subscribers," as are put to us in an intelligible manner, postage paid. The Executors cannot by any process get rid of their responsibility. The action against the tenant must be brought in their name. The object you desire may be attained in this way. They can let the land to you until the brother comes of age. You will then have a term which you can deal with as you please. You may submit to others. &c. &c. If you drain your own lease you must not forget to reserve at least one day of the term, otherwise you would lose the relation of landlord to the sub-tenants, and could not proceed against them as such.

CANADA FARMER.

May 8, 1847.

CHANGE OF PUBLICATION DAY!

Having no office of our own, we are obliged to put up with all the inconveniences attending the printing of our Journal at the office of a weekly newspaper. We have found it impossible to get out regularly on Friday, in consequence of the business of the other paper being in our way, we therefore apprise our readers of the fact, and that we shall hereafter issue on Saturday instead of Friday. The news, state of the markets, &c., will of course be brought down to that day, so that our subscribers can suffer no inconvenience in this respect by the change. Our friends, north, would probably be better pleased if their papers were mailed before 9 o'clock on Friday morning, but as this is impossible at present, they must be content with less promptitude and give us credit for the wish, though we lack the ability to please them.

Some of our Agents we have never heard from; are they doing any thing for us?

¶ We may remark, as some new arrangements are in contemplation, that Mr. R. BREWER, is only the nominal publisher of this paper, and has no pecuniary interest therein.

THE LATENESS OF THE SPRING, AND OTHER MATTERS.

It is now the 8th day of May, and when you say the fields look green, you at once feel that you have used an expression requiring some qualification. The weather has been so cool during the whole spring, that vegetation appears to be in a state of great doubt as to whether it will be prudent to "advance" or continue "in position." The only bump we have yet seen developed, is that of "caution." We went into the bush the other day to dig up some small trees, and found the frost, in shaded spots, from 4 to 5 inches deep. We were not displeased at this, so far as we were then concerned, for by digging or rather chopping around the tree at a few inches from it, we were enabled to remove dirt, roots, and all without much disturbance, and by cutting off some of the branches and the ends of others to compensate for the loss of a few roots, we shall with much greater

confidence expect it to live and flourish than if the frost, as it ought to have done, had taken its departure. The late two or three heavy rains have done much good to the wheat fields, which now appear not to have been injured by the winter, to the extent that was feared. The rains however have done immense damage to mill-dams, and with the cold weather, have hindered the operations of the plough for a much longer period than usual. The great bulk of the spring work is consequently crowded into a short space of time and makes it necessary that every moment should be improved. Should the weather now turn and be favorable, the season will be a late one, and our harvests extended into the bad weather of fall. It is somewhat remarkable that the weather in England has been of the same character, and the prospect of late, and therefore bad harvests, is already being taken into account by the speculators.

If we are gifted with any portion of the spirit of prophecy, and if the weather should change and become very dry, (which condition we must insert to make our prophecy "more sure") we predict that there will be short pastures and small hay crops this summer. We therefore recommend the adoption of every means to overcome this evil. One which has been made use of to a limited extent, in Canada is soiling stock, i. e. feeding them with green food, cut daily, and given to them in yards or stables. This plan has been found highly advantageous under some circumstances. There is much less waste of food and a great increase in the quantity and improvement in the quality of the manure. The labour of course is greater, than where cattle are allowed to run at large and gather food for themselves. But the practice may be partially adopted by all who are likely to be pinched for pasture, with undoubted benefit. Vetches or tares are found to answer for this purpose admirably. Several farmers in the township of Scarborough have tried them for two or three years, and would not be without them on any account. They may be cut twice and three times during the summer. The seed is sold at \$2 per bushel, and should be mixed with a few oats, and sowed, about two bushels we are told to the acre, on pretty rich and well prepared soil.

The practice of harvesting oats before they are fully ripened, is one which we are surprised is not more generally adopted. The grain will be of a better quality, will not waste by shelling in the field, and the straw answer as an excellent substitute for hay. When allowed to stand until all the juices are dried up, chemical analysis as well as experience shows that the straw is almost worthless as food.

To the Editors of the Canada Farmer.

Messrs. Editors.—I desire to ask, through the columns of your highly useful and excellent journal, of yourselves or any of your experienced agricultural readers some information relative to the destruction of the Canada Thistle. I respectfully request, an answer, founded if practicable on personal experience, to the following question:—

Which is the cheapest, quickest and surest way of destroying the Canada Thistle, or can it be destroyed by cutting with a scythe or any other sharp instrument, at some particular time, season, period or day of the year.

Perhaps, however, Messrs. Editors, as there are now-a-days, many new and improved modes of grafting, much skill and science shown in budding, somebody may have the goodness to inform me, how I might graft or bud clover on the thistle with success and profit, to produce the same quantity of clover as of thistle, which in some places produces 3 to 4 tons per acre. If this could be done I would not seek for any information to destroy them, but turn my attention to the study and practice of the new science.

A THISTLE FARMER.

We hope some of our readers will furnish the information our correspondent seeks. In the mean time we may remark that in all our reading, and we have looked into quite a number of agricultural books and publications for information on the subject, we have seen no plan that has apparently proved more successful than that of digging them up with a hoe two or three times a month for a couple of seasons, which as those who have tried it assert, will effect their destruction. The Canada Thistle (*carduus arvensis*) is a perennial plant, exceedingly prolific and very tenacious of life. It springs up from the filaments of the roots, as well as from the seed, and is one of the vilest pests that can torment the farmer. The life of trees and plants, when not in the torpid state (as in winter) depends upon a function performed by their leaves. The leaves bear the same relation to the tree, as the lungs to the animal; deprived of which during the period of their growth, trees and plants must die. The leaves are as necessary for the support of the plant as the roots, and neither can long subsist without the other. From these admitted facts, it is very evident that a persevering and systematic defoliation of any plant however

tenacious of life, must cause it to decay and perish. But it must be complete, merely cutting off the tops will not do. If any leaves are left, they are stimulated to increased action, and make up for the loss of their fellows. "The green shoot" says Johnson, "performs in some degree the functions of the leaf." And it is well known that the evolution of oxygen and the absorption of carbonic acid, which appears to be the chief function of the leaf, is in vascular plants, and those with green tender stalks, carried on through the bark or rind independently of the leaf. This demonstrates the necessity of removing every thing above the ground, if we intend to destroy the Canada Thistle by the process mentioned.

A writer in the 2nd vol. of the Albany Cultivator states, that he destroyed a patch of these Thistles, "root and branch, by mowing them just before the blossoms began to open." Also, that others who mowed them at that "particular time" had obtained the same result. Another writer in that journal directs, "cut them off near the ground when they are full in the blow or a little past." He had tried this mode, he said, three years, and entirely eradicated them by once mowing. Mr. Buel, at that time Editor of the Cultivator, adds an experiment of his own in confirmation. A correspondent of the Genesee Farmer, vol. 4, gives a long account, of his success by carefully digging up, or cutting off the plants close to the ground every two weeks and giving them no "breathing spell." Several correspondents in subsequent numbers of the same paper corroborate his statements as to the certainty of their being thus destroyed. Salting them, covering with pomace, or refuse of cider mills, &c., does not appear to have been effectual.

PRICES AND MEASURES.

A writer in the Agriculturist, makes the remarks given below, on the subject of different measures. We may add for the information of our young readers who have not yet learned these things, that the imperial standard bushel contains 8 gallons; the size of the gallon to be ascertained by us being made to hold 10 lbs avoirdupois of distilled water weighed in air at 62° with the barometer at 30 inches. The weight per bushel of the different kinds of grain is as follows: wheat, 60 lbs; rye, 53 lbs; barley 47 lbs; oats, 38 lbs; peas, 64 lbs; beans, 63 lbs; clover seed, 63 lbs.; rape seed, 48 lbs. To ascertain the value of wheat, &c., in our currency, when quoted from the English market prices in sterling, (as is usually done) it will be near enough the truth, to add a 9th. Thus, if wheat be quoted at 56 shillings, adding a 9th would make it 62s 2 1/2d, and this divided by 8, the number of bushels in a quarter, gives 7s 9 1/2d per bushel.

A READY RULE FOR FARMERS, MADE READY.—A "quarter of wheat" is an English measure of eight standard bushels—so if you see wheat quoted at 56 shillings it is 7 shillings a bushel. A shilling is 24 cents, multiply by 7 and you have \$1.57 1/2 per bushel.

In Kentucky, corn is measured by the barrel, which is five bushels of shelled corn. At New Orleans, a barrel of corn is a flour-barrel full of ears. At Chicago, lime is sold by the barrel, and measured in the smallest sized cask of that name that will pass muster. A barrel of flour is seven quarters of a gross hundred (112 lbs) which is the reason of its being of the odd measure of 196 lbs. A barrel of tar is 20 gallons, while a barrel of gunpowder is only a small keg holding 25 lbs., and that reminds me of cotton, a bale of which is 400 lbs., no matter in what sized bundles it may be sent to market.

TO DESTROY WEEDS IN GRAVE-YARDS.—Of all the excellent recipes for keeping pavements and garden-walks free from grass and weeds, none is so effectual as to hire the cook to pour upon them every morning the water in which the eggs for breakfast have been boiled; but the virtue is entirely lost if it be not done the instant the skillet is taken from the fire—that is, the water must be boiling-hot.

FOREIGN AGRICULTURAL NEWS.

Under this head, in the Agriculturist, we find the following items, which possess some interest. The Gardener's Chronicle and London Farmers Magazine, have not been received, although we sent our first number with a request to exchange, and have also sent the subsequent numbers; we certainly cannot imagine why they should be unwilling to receive agricultural information from a British Colony, or to enable their countrymen here to receive useful intelligence from home, through the legitimate channels. We shall wait the arrival of the next mail, and if these liberal journals are not forthcoming as exchanges, we shall say a little more upon this subject, and shall adopt another mode to procure; for our readers, the benefit of their contents, without taking much trouble to let them know it:—

Step for Seed Potatoes.—Mr. Webster, of the Ipswich Philosophical Society, recommended that