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.

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Agricultural Journal.

From an English Periodical.

THE POTATOE DISEASE.

Remarks on the original Introduction of the Potato or Bread root into Great Britain and Ireland, submitting to the Botanist eight queries connected with the possibility that the preesnt almost universal disease in the plant proceed schieflu from its being in a degenerate state, and not being indigenous to the European soil.

This invaluable vegetable was first brought from Virginia by the memorable Sir Walter Raleigh, who, on his return homeward, in the year 1623, stopping at Ireland, distributed a number of potatoes in that kingdom. These having been planted, multiplied exceedingly, and in a few years the cultivation became general, and they have since been found of the greatest benefit to all classes, especially the poorer in times of scarcity of bread corn. This valuable root was brought into England from Ireland; and, owing to a ship loaded with potatoes being wrecked on the coast of Lancashire the cultivation of that root in the field was first generally established there.

It is well known that great improvements have been made both in the quality and productiveness of this plant; but as it is not indigenous to the soil, and is liable to degenerate, cannot we trace the remarkable disease or canker, in a great measure, that has attacked the potato almost universally, to this cause; and will it not be deemed of essential importance that the intelligent botanist and horticulturist should give their best attention and consideration to this alarming visitation?—and which unless more clearly and satisfactorily accounted for than hitherto, and arrested, will create immeasurable distress amongst the lower and labouring classes of the community.

The object thus made so urgently desirable, namely of preventing the continued failure of the potato root, suggests the following queries for the consideration of the botanist and experienced agriculturist.

1. Will it not be desirable to obtain from America, the parent soil, fresh supplies for seed into England, to supersede the old plants, and to be cultivated in fields previously grown with wheat or oats, or in any fresh tracts of land?

2. Will it not be useful to ascertain whether all the different sorts of potatoes are affected by the prevailing rot, and that when taken up to all appearance sound, are found afterwards to decay, or not to keep a month?

3. Are the potatoes in Ireland, Lancashire and Yorkshire, where they were first cultivated about two centuries ago, affected by the same disease more or less?

4. Should they have escaped the disease, will it not prove that the soil of Ireland, Lancashire, and Yorkshire is more adapted to the successful cultivation of it than other parts of Europe?

5. Cannot an inference be drawn from the above, that the introduction of the potato into other parts of Europe has occasioned them to degenerate, they not being indigenous to the soil?

6. Is it not well known that European plants and roots, when cultivated in foreign or distant lands—for instance, the East and West Indies, Portugal and Spain—degenerate, and require renewing with fresh importations or supplies of seed and roots every three or four years from the parent soil—why, therefore, should not the same effect be produced, although not so frequently, in the cultivation of the potato, the plant not being a native of the British Isles?

7. Will not, or rather has not, the introduction of chemical manures, minerals, salts, guano, and other heated dungs, altered and deteriorated the nature of the soil in large tracts, and rendered it unsuited for the growth, or destructive to exotics, roots, and esculent vegetables?

8. Although it is affirmed that the potato was first brought from Virginia into England by Sir Walter Raleigh, still it is not certain that the root was indigenous to either North or South America, but most probably was originally introduced into Virginia from Peru, the Brazils, or South America? Would it not be highly desirable to ascertain this point accurately?

The variety of contradictory opinions entertained by the principal cultivators of this most valuable and essential article of food, relative to the causes that have most materially produced the lamentable and nearly universal rot in the potato, render it difficult to arrive at any certain conclusion on the lamentable failure of so leading an article of food, which for upwards of a couple of centuries has been enjoyed by the larger proportion of the population in the United Kingdom.

It must obviously strike every agriculturist who has attentively noticed the unwholesome, indeed destructive, fluctuations of the weather throughout the different seasons to this day, and the want of a genial ripening atmosphere, attended by repeated blights, that the fruits, grain, indeed the whole vegetable world, have been more or less blasted or injured. It has been argued that the introduction of different sorts of manures before unknown, but of late become violently popular, because novelties, have proved in many instances highly injurious to the soil; and which cannot be wondered at when, chemically speaking, the mixture of opposite materials may create destructive effects, deteriorating what was intended to invigorate and multiply. Mr. James Barnes, of Sidmouth, Devon, observes.—"That the most expensive and popular manures generally produced the most abundant crops, but in some instances they were seriously diseased; and those which to all appearance were good, are not to be relied on; while others, manured with our most economical and natural manures, are equal in crop, beautiful in quantity, and none, whatever, rotten or affected."

This at once proves how essential it is to have some knowledge of the chemical properties of the soil, and the manures intended to be used.

It is greatly to be apprehended that the nutritious qualities of the potato have been, nine cases out of ten, destroyed; and that instead of being a wholesome article of food, it will be found to be almost dangerous, or a rank poison. How vitally essential is it, therefore, that our agricultural societies, and the numerous benevolent institutions for the relief of the poor, should adopt all means in their power, before the winter months set in, to provide or recommend substitutes for food, in the place of the potato. Rice is a grain that will best supply its place, with good management, and the aid of the Asiatic mode of cooking or boiling the grain without waste.

Three inferences suggest themselves from the foregoing reflections and queries—

First the want of proper management of the soil, the rage for wild experiment deviating from the steady, old, adequate mode of cultivation, and the safe and proper application and use of the newly-discovered or invented manures.

Second, That the prevailing rot in the potatoe has been partialy occasioned by the variableness in the weather, and the prevalence of blighting and cold easterly blasts.

Third, that the present crop, generally, will be found unfit for seed next season, in 1846; and that fresh supplies from the parent soil will be unavoidably necessary.

Your obedient servant,

GEORGE V. DRURY.

N. B. It is particularly recommended for a general adoption, that the potato, to all appearance sound and of useable quality, should, for preservation during the winter, be stored in dry sand, free from all damp, and if at the sowing time found perfect, to be planted in the ordinary way (the whole potato) on dry stubble or straw, in layers and ridges, instead of upon wet dung or rotten manure. The dry straw will be found to act as a drain and a protection to the undiseased root, until it vegetates and shoots forth its new sprouts and tubers. The eminent chemist, Wm. Herapath, Esq., of Bristol, states in his letter to Lord Portman, as follows:—"Any thing like sawdust or dry sand would prevent contact, would prevent propagation from one tuber to another, and one substance capable of absorbing the moisture of the air in which the potatoe is stored, would prevent the exclusion of the disease in each diseased root."

I myself have repeatedly tried the dry straw for setting the potatoes in, and found it always to answer in cold wet seasons.

Shotover Park, near Oxford, Sept. 25.

From the Farmer's Manual.

AGRICULTURE IN NEW BRUNSWICK.

In our last Number we took occasion briefly to point out the gradual but salutary and effectual improvements which have been accomplished in the science and practise of Agriculture, by the force of example in good husbandry, which, although few and imperfect, gradually extended their influence over Parishes and Counties, and finally revolutionized the system of Agriculture throughout an entire Kingdom. It is a trite but a true observation, that whatever has been done can be done again, provided the same means are employed, and the same care taken to obtain similar results; and as there is no employment, in the success of which mankind are so much interested, so is there none to which the aid of science and the benefits of experience, should be more anxiously sought after or more industriously applied.

In the Province of New Brunswick with a few honorable exceptions, the all important subject of Agriculture has been but little discussed, and we fear in too many instances very imperfectly understood. There are several causes which have tended to retard the Agricultural energies of the more intelligent portion of the inhabitants of this Colony; the principal of which clearly appears to be the almost ruinous system hitherto adopted, of attempting to manage a Farm while engaged in lumbering operations—a system which the most careless observer must have noticed, generally ends in failure. The employments are incompatable with each other, and unless under very peculiar circumstances should never be combined, for, at the time that the industrious farmer, who has stuck to his farm through the winter, is preparing his land for a crop, the lumbering farmer is compelled to be absent, drving his logs or timber and preparing them for market.

The next most obvious cause of the luke warmness of too many of our intelligent farmers to the general interests of their class, is a want of combined movement among themselves. True, we have an Agricultural Society in almost every County—but let us respectfully ask the Farming Community, what are these Societies doing? In Nova Scotia we find Committees going round examining Farms, and making out reports descriptive of the mode of management, the quantity and quality of the grain and grass, the state of the stock, and various other matters which concern every Farmer in the Province to know. They have likewise plowing matches, and award prizes to the successful competitors;—(on the 15th inst. one of those useful exhibitions took place at Dartmouth) all these movements are well calculated to raise the character, and improve the condition of the sister Colony as an Agricultural Country; but in New Brunswick there appears to be an indifference, if not a distaste for such useful aids. We observe by the *British American Cultivator*, that our brethren in Upper Canada are wide awake to their own interests—there the matter appears to create that inquiry which its vast importance demands.

From the Farmer's Gazette.

THE VALUE OF AGRICULTURAL PAPERS.

It is a curious idea to us, how any farmer can, at the present day, live and farm it, without taking and reading an agricultural paper. The great improvements which are constantly going on in farming, together with valuable experiments which are constantly being made by practical men, are almost entirely lost to the farmer who takes and read no agricultural paper. Hence the farmer who steadily and obstinately refuses to take and read a publication devoted to his every day business, will probably improve in his calling, so far as ignorant and self-conceited opinions will allow. There are many farmers of this stamp yet,—and their farms and buildings generally, tell the rest of the story. They say, that if you will go to work and use common sense, enough of "book knowledge" will come by *nature*, for any man to work by. The fact is, we believe, that such farmers "love darkness rather than light" because their deeds are evil." If any of them should find fault with this remark, we say that we took it from "Scripture."

We do not wish farmers to remain ignorant of the political movements of the day. But we do not say, that for a very small sum every year, a farmer can have the reading of an agricultural paper, which will teach him more about his own business and his duty to himself, to his fellow man, and to God, than in reading what is contained in seven-eights of the political papers of the day.

But it may be asked by some, how a small farmer can afford to take an agricultural paper? We answer by saying, that any farmer who owns ten acres of land, and keeps two cows, can well afford to pay for a paper of this kind, because it will be for his interest we think. And, also every gardener who cultivates half an acre or more of vegetables for the market, will find it for his interest to take and read one of these papers. There are no kind of periodicals of the day, which afford anything like the reading matter, nor at half so cheap a rate, as the agricultural papers of our country. The majority of the papers of this kind are published in such a form, that they are convenient for binding; and in this manner a farmer can by a little care, be constantly forming an Agricultural Library. This will always be valuable to him, for he can read it over and over again, and when he has done with it, he can leave it as a legacy to his children. And if it is rightly appreciated by them, it will be worth more to them than ten times the cost of it, left them, in dollars and cents. But after all that has been said on this subject, that very class of farmers who should read this article most, (if it is worth reading) are those farmers who take no agricultural paper. We sincerely hope that this class of farmers will put this part of farming in practice right off.

USEFUL HINTS.

Protect animals from storms. Do not let them stand shivering in the cold. Supply them with water. See if there are not some holes in the barn or stable that can be easily mended. Give your cattle enough to eat and none to waste. See that your pigs have comfortable dry houses, and a good warm bed. Give them pure earth and charcoal. Let not your strong animals impose upon the weaker. If any animals be feeble or sick, let them receive extra attention. Curry cattle and horses often. This operation is also useful to hogs, but the performance is not very pleasant unless they are accustomed to it. When they have been educated in this way they are harmless and submissive as a subject of mesmerism. While the sledding is good, provide fuel to last a year or more if you have not already done it. The winter is a good season for chopping and splitting it, for these operations are rather too warm for summer, and sufficient unto that busy season is the work thereof. —*Daniel Leland.*

Vomiting Blood.—1. Take two spoonsful of nettle juice. This also dissolves blood coagulated in the stomach.

2. Take as much salipetre as will lie on half a crown, dissolved in a glass of cold water, two or three times a day.

Cement for Broken Glass or Crockery.—Take the white of an egg and very fine quicklime.