

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. XI.

SATURDAY EVENING, NOVEMBER 27, 1852.

No. 58.

Agricultural Journal.

WHAT EVERY FARMER MAY HAVE.

Every farmer may, if he will, have a house, a neat, tasteful structure, adorning his farm, and contributing to his comfort. There is, on every farm, if one could but find it, a fit site for a house, with grounds near it suitable for a garden and out-buildings.

What a pity such locations should not be selected, instead of the sorry places where too many farm houses are placed. We have seen a house standing on a ledge of rocks, and a recess for a garden excavated in the bank in the rear, when not forty rods distant a most inviting spot for building was neglected; and another stuck down on a low swampy piece of land, with planks running to the road as a means of access, when on the opposite side of the road, a gentle eminence crowned with noble forest trees, was occupied by cattle.

As to the houses themselves much might be said. Generally speaking, they seem to be a product of the farm; that is, a thrifty, well cultivated farm, has a snug dwelling on it, and slovenly, ill-tilled one, has an overgrown or decaying tenement.

A correct taste in building is not, nor cannot be in the possession of every one.—Architecture is a science, and taste in the result of cultivation, and none but men educated to their profession, should undertake to design and build a house.

It is true that so many sticks of timber, boards, nails, and shingles, will make a building, so too, a given quantity of iron, steel, and brass will make a steam engine, but a novice makes a failure when he undertakes to construct either. Still, a little attention, the perusal of a work on this subject, might form some taste and substitute tolerable dwellings for the ungainly structures that so often are seen.

Every farmer, may if he will, have a garden not a patch of onions here, of beets there, of cabbages somewhere else, interspersed with bean poles and potatoes, but a veritable garden, a cultivated place.

A farm that has not a plot of ground adapted to the purposes of a garden, had better be abandoned at once. There is no good reason, while the real luxuries that spring from the soil, under the culture of the practical gardener, should be confined to the lands of the gentleman of leisure.—They belong as legitimately to the sturdy, hard-working farmer, and indeed more so; for he who labors most actively, should reap the richest harvest. All that tends to make life more desirable, that tends to the improvement of the soil, the mind and the head, is not beneath the attention of man. We cannot conceive of a more fit place to commence the careful cultivation of a farm, than the garden. It would soon be evident that the greater the care bestowed on the soil, the greater its product, and so a system of culture would by degrees be adopted, till the whole farm should become a fruitful field.

In the cultivation of a garden can be noticed on a small scale, all the phenomena of growth, and from data there gathered, one can advance successfully from the tilling of narrow beds to that of broad acres. The knowledge necessary to success in gardening, is rather the result of experience, than of fixed rules. There is requisite a taste for the art, close observation, and a modicum of practical skill; give these, and common sense will supply the defect. We would not by any means profess to teach gardening "in six easy lessons," but we assert that any one so disposed can make a beginning.

From the Gardeners' and Farmers' Journal.

ON THE DISEASES OF PLANTS.

There is not a subject in farming more unaccountable, more perplexing, or more difficult to encounter, than the diseases of plants. The ailments to which animals are liable are difficult enough to manage, and often baffle the utmost efforts of science and skill; but the diseases of plants seem to be of a nature to baffle all the efforts of the scientific, and to run their race of destruction almost untouched by any ef-

fort of man. Who, for instance, can arrest one atom of the potato disease? Nay, who can, as yet, account for its cause? All attempts at cure are little better than empirical. Who knows either the cause or cure of clover sickness? of aubury? of mildew? of smut?

All we really know is this: That plants are, the more we grow them, and the greater the produce of them, more and more liable to disease. We ought to become, the longer we cultivate, better acquainted with their habits, their wants, and their security; but we seem to be, the more we cultivate, carried further and further from success in producing them.

The principle is one somewhat difficult to understand, to those who have narrow views of the operations of nature; but to those who look at things more as they are, it is a part of a great plan—a link in the chain of causation, perfectly explicable.

Look at a crowded city. It is always a conglomeration of disease and death. Sanitary measures may do much: but the rate of mortality—the liability to disease—will always be greater. The lives of individuals may be impaired by being absorbed by the mass around them. It is true of all crowds. In our prisons, our hospitals, our penitentiaries, a disease, tiding in an isolated home, may become dangerous—may run into epidemic: and so our high cultivation—our crowding of fat and luxuriant plants—renders them liable to disease.

We hardly know a plant which has not manifestly shown that it is subject to this mysterious law. The potato, however, seems to be a case in point the most striking. It is by cultivation, carried away from its natural wildness until it becomes almost another kind of plant. In its native country—Peru—it is found not more than three inches high, with large flowers, and tubers the size of a hazel nut. Now, by cultivation, the flowers become insignificant; the stem increases in size, in some instances, to the length of five or six feet; the tubers enlarged to a weight, in some cases, as much as three or four pounds; and instead of one straggling plant here and there, thousands of acres are covered with the plant, to the exclusion of almost every other. Nature revolts at this over-peopling with rank potatoes. Some weakness of the plant, some atmospheric cause, dissolves the vital power which holds the chemical particles together; and we have dissolution and decay irremediable.

Take the vine again, carried by man from its natural wildness—clustered together by fields, nay by forests—excited by manure, protected by glass, pruned by science, for centuries, so as to increase the juicy fruit for nearly six times; it shows revolt at this forcing, and a vast disease has destroyed the fruit, and threatens to be the death of the vines themselves. It is the cholera of the crowded vineyard, as much as that plague ever visited Hull, or Leeds, or London.

A more slow and tedious, but not less active disease, is eating out the red clover. It will but attack the plant as such wherever it may be found, as is the case with the potato and the vine; but it will be the death of it in the locality where its consequences has too rapidly preceded it, and the land refusing to mature it is said to be clover sick. But when the question comes to be asked what constitutes that peculiarity, all explanation ceases. We can not tell; death has been there, and there is no living for any succeeding race for several generations. We know not whether it is starvation or infection—but such is the fact.

A similar disease is now very prevalent in the turnips. On the best turnip soils—with the highest farming, and with plants absolutely the most promising—a flag in the leaves is discerned some sunny day, and by-and-by the plants wither and die; they are a mass first of thickened and carbonated roots, and then an accumulation of disgusting corruption, while weeds—seemingly to triumph over this death of the race which has displaced them—seem to run riot on the death of the turnip. Here, again we are at sea. No one has yet demonstrated whether it is an insect which causes the clubbing, or it is the decay produced by the insect which forms a favourable nidus to the insect. Now, what we have to urge is this: Let all investigations be carried on in a

large spirit, not looking merely at a particular crop attacked with a particular disease, but inquiry if all our cultivated crops are not more liable to some disease than they were, and above all in general mildew is not more prevalent in all our crops than formerly. Whether it is a cause or effect we know not, we mean that this spirit should animate those who seek for information. Large views of nature and of climate and atmosphere influences should be brought to bear on the subject.

We will not either assert or contradict the somewhat plausible theory that excited electricity by our machinery—on railroads and on telegraph—are amongst the causes of this change. It may be owing to a great accumulation of causes; but we are satisfied is one of the draw-back of high cultivation, and we are not sure that more is not due to this than to any other cause for the alarming prevalence, in our days of diseases in plants.

ON THE ERADICATION OF WEEDS.

How shall we keep down the weeds in our cultivated crops. This is an interesting question, and one which all farmers will do well to study and experiment upon. We almost invariably find bad cultivation and light crops attended by a very abundant growth of weeds; just as we observe high farming and luxuriant crops pretty free from them. The one is both a cause and effect of the other. Something will always grow. If the soil is not pre-occupied, spontaneous vegetation will spring up; and finding space and air, and root room, all contributing to rapid development, the weed will ripen sooner than the corn, and we shall have the foundation laid for a succession of choking, smothering crops of weeds.

Then, again, climate has a great deal to do with the growth and development of weeds. The north and north-western portions of the island are, from the falls of rain and the prevalence of a cold moist atmosphere, far more stimulative of weeds than other parts of the country.

Now the most simple and obvious modes of eradicating weeds are hoeing and hand-weeding. But with some these processes are completely useless. If we take a class of small weeds, such as the spurry, the wild-mustard, and several others, the hoe would not be able to sever them from the tangled corn, and there they would grow and thicken, and sadly injure the crop; for no hoeing between the drills would reach them.—You might hoe out all the weeds there, and it would only be giving fresh space for the side shoots of those weeds which grow amongst the corn.

But there are clearly such plants as the dock, the thistle, the red-shanks, and other similar large-rooted and insulated plants, to which we will subsequently allude, but at present we will just refer to a class of plants which are to be affected by general cultivation—the quitch or couch (*Triticum repens*), the spurry (*Spergularia arvensis*), the charlock (*Raphanum raphanistrum*)—a class of plants always abundant in bad cultivated land, and which is a sad pest in some classes of land when well cultivated.

We will take the couch grass—the most formidable of all weeds, the pest of light turnip land, and the bane of the four-course system of husbandry. In the loamy description of land, the better class of turnip soils, and in the chalk, it is a course of very little trouble; the one is of too consolidated a character to encourage its rapid spread by the roots or its early maturity in the seeds, and the other is far too dry to admit of its taking much headway.

But the blowing sands—especially the black praty or grey sand—are those where it is almost impossible to carry on a continuous four-course rotation and not have its net work of couch. You may clean your turnip fallow till not a fibre can be seen, you may hand-pick the land before it is sown with barley; you may eat on the seed and pick the land again before the wheat is sown, and not one particle of couch can be seen the wheat may be horse-hoed and hand-hoed, but at harvest time there will be abundance of couch; it will be a net-work, as we say of roots in the soil, and a mass of seed in the leaves. The abundant supply of oxygen so the roots, the great capillary attraction of the soil in collecting moisture, and the natu-

ral tendency to early nature the couch in such soils, give them in the wheat crop a double advantage. The soil is open, and the mass of it undisturbed during winter, so that there is abundant space and time for the roots to spread; though we believe the period from June to November is that wherein the roots attain by far the greatest growth. Now, how can a farmer prevent this growth of couch on such lands?

Claying will effect it. This is a process as necessary to attain good crops of turnips, wheat, and barley, as it is of keeping down the enemies of cultivation named above. The consolidation of the soil prevents the access of oxygen too great for the wheat, and it is thus rendered too little for the couch; so that ordinary attention to cleaning, with a dose of 180 to 200 loads (cubic yards) of clay, of almost any kind, will soon so change the character of the soil as to render the couch a very feeble enemy.

Change of rotation will attain it. This is not always convenient, and often sadly deranges the proceedings of a farm. But if the seed pastures are allowed to run the second year, and are broken up say in the second week in July the second year, and the first allowance of manure given to the small when sown, the wheat stubble the corn crop comparatively free from the sad enemy of the farmer.

Cultivation may partly remedy it.—We mean the sowing of the soil, and the production of seedling crops. Thus a very heavy turnip crop covers with its leaves the soil, and thus prevents the progress of the seeds of the turnips and the seeds, by increasing the quantity of sheep kept on the land, able to run wild; while vigorous growing crops, by over topping the couch, renders it less liable to spread both upwards and downwards.

Green cropping extensively in proportion to the corn will prevent it. And this for two reasons. The green crops not being matured, are generally on the ground for a shorter period; there is far more upturning of the soil, more working among it, and consequently, more disturbance of the roots and feeble powers exerted to master the soil, while the seeds—an unthought of, but fertile source of couch in light sands—are never matured.

To talk of "land natural to quitch," or "rye, grass, &c., turning" to them, betrays an ignorance approaching to barbarism; it is only a refuge for those who are too indolent to apply their energies to an eradication of the real enemies of the crop; for a field full of couch never produces a yielding crop of corn.

LONG AND ROTTEN MANURES.

Clayey loams readily retain the gasses which arise from decomposing manures plowed deeply under the soil, and for such soils long manure may be plowed deeply under in the fall with profit, but soils will not retain the resultant gasses from decompositions. They may, however, be rendered retentive by addition of charcoal dust, clay, or decomposed peat or muck and when practicable, should be so treated as the most economical method. Manures should either be plowed under the soil before planting to ensure their decomposition, or they should be previously decomposed in compost, but never alone. Large quantities of organic matter should always be composted with putrescent manures, so that during their decomposition, the gasses produced may be absorbed, and not lost by evaporation.

VALUE OF POULTRY MANURE.

Dr. Dana says, "The strongest of all manures is found in the poultry yard." It can be saved with very little trouble, and every barrel of it will manure half an acre of land. It is particularly valuable for gardeners, and we know of nothing which is so good for raising melons and cucumbers. There should always be a floor under the hen roost, which must be swept at least once a fortnight, and by throwing a little plaster over the manure, placed in barrels, you will save the valuable gasses from being dissipated in the atmosphere.

"POVERTY," says Jean Paul, "is the only lead which is the heavier the more loved ones there are to assist in supporting it."