"A Satisfied Sewage Farmer."

Under the above heading we find in one of our English exchanges a letter from M.. A. Aird, the well-known engineer who has sewaged the town of Dantzic, an extract from which is of sufficient interest to transfer to these columns. The Government made a grant to the Messrs. Aird of Berlin, of 1000 acres of waste lands near Dantzic, on which to receive and experiment with the sewage of the place. Mr. A. Aird thus writes concerning the success achieved so far :—

"Since I wrote you last we have been doing very well indeed, having now over 450 acres under irrigation Our sugar beet crops of last year proved very satisfactory, although we only commenced irrigating the newly planted land (pure sand) in April. The yield was enormous, and the per-centage of sugar quite equalled the average obtained on the best soils in Germany. The beneficial effects of the sanitary works in Dantzic are so evident (the number of deaths having decreased 700 in the last year as compared with the calculated average) that the Public Health Association of Germany (established last year at Frankfort-on-the-Maine) has decided to hold its annual meeting there (Dantzic) in September, 9th to 12th, to enable the members to view the works and the result of sewage farming. The gathering will be attended by all the great authorities, and you may assure any friend interested in the great question of "sewage farming *versus* manure squandering," that on the part of the municipal authorities of Dantzic, the Public Health Association of Germany, and myself, any visitor to the works will be made most heartily welcome."

Mowing the Road Side---Killing Weeds.

It being a dull day, unfit for haying, and having but little else we could do, I set the men to mow the roadsides adjoining the farm. It has been our practice to do this once or twice each season, during the fifteen years we have occupied the farm A great change has been wrought along our borders Where formerly grew a thicket of wild rose-bushes, briars, thistles, and almost every other kind of weed known about here, we have now a comparatively clean sod. Were it not for the miserable practice of some who let their stock run upon the highways, we could cut more than a ton of good hay to the acre. A hill upon the road whose wash comes upon our land, was formerly covered with white-weed, making the surface during the [illegible] nearly as white as snow. We have been careful to mow before the seed matured, and this year there was not one bloom where formerly there was a hundred, and we have not been troubled with the seed coming up in our fields.

It requires a little care and labor to attend to it each year, yet it has been found to well repay for what we have done. Some people will carefully cut and dig up all the weeds and bushes on the field-side of the fence, and let those on the roadside alone, which furnish roots and seed for the next year. If both sides of the fence had been cleaned it would have made an end of them. Some people have so little public spirit that they permit many things to exist to their own disadvantage, fearing that they may do the public some good which they will not get paid for. It would be well if the surveyors of highways were compelled to keep the roadsides clean from noxious growths. It would be of great value to the agricultural community. Within a mile of here nearly every weed and bush common to this climate is found growing and ripening its seeds without let or hindrance. The burdock, yellow dock, Canada thistle, and a host of others are introduced into our fields on the wings of the wind and other agencies. They may all be killed by repeated mowings during the last of July and in August Some persons are particular to cut during certain signs of the zodiac I have never regarded this, but cut when the scythe was sharp, and when we had leisure to attend to it. Sometimes a single cutting will completely kill out a foul growth. One thing is certain—they do not thrive under a thorough annual cutting.

Our reclaimed tile-drained meadows came up quickly with thistles, to our serious annoyance. Last year, after cutting the crop, a second crop came up, which was also cut; it being a wet season, most of them forgot to come up this year. Dry seasons are favorable to the growth and spread of thistles.

The yellow dock is troublesome in grass-fields; it may be got rid of by pulling, but this is a tedious process. Some recommend cutting the long, tap-rooted weeds at the surface, and applying a few drops of kerosene. Have recently seen the application of oil of vitriol recommended for this purpose. A stick which has been dipped in a bottle containing the oil, and then applied to the crown of the plant, I have no doubt would prove effectual. Care should be exercised in handling, as it is destructive to most substances with which it comes in contact.

A fixed determination to be rid of weeds will generally succeed, if attended with the labor and means usually at hand on every farm. It is needless to expect much success where weeds are allowed to thrive. An unceasing warfare is the only means of getting rid of them.—*Cor. Germ. Telegraph.*

Cultivation.

By the term cultivate, we generally mean that tillage of the soil around and among plants which we perform after the plant is up. The work done in ploughing, harrowing, &c., before the seed is sown or the plants transplanted, we call "preparation of the soil." It may be well to inquire, Why do we cultivate plants? We reply, for several reasons and with a number of objects in view.

1. We cultivate plants to destroy weeds. Somehow, after we have ploughed, harrowed, planted or sown land, in a few days, and generally before the seed we have planted, weeds will come up These weeds may be useful plants in their appropriate place —the best species of grass, for instance—yet, coming up where they are not wanted, they are essentially weeds, and are treated as such by every good tiller of the soil One of the first objects of cultivation is to destroy these. They are robbers of the desired plants, and cannot be tolerated among them. Every practical cultivator knows that the sooner they are attacked after they make their appearance, the easier are they exterminated. At first they have but a slight hold upon the soil. Their small, feeble roots, if brought to the surface, and exposed to the hot sun for a few hours, are withered. In a garden, the steel rake is a good implement to attack them with, because it takes a broad sweep, and while the dirt passes between the teeth, the weeds are drawn to the surface. You cannot get over the ground so fast with the hoe, besides, more or less of the weeds are left covered by it

If cultivation is neglected too long for the rake to be available, the hoe must be used, and the labor is increased. It will render the work much more thorough if, after the weeds are cut up with the hoe, you go over the ground with the rake and rake them out upon the surface. These precepts apply of course to the small garden patches. Where you are cultivating on a larger scale, you use the horse and cultivator, and the sooner you begin. the easier your work. For young, small plants, you undoubtedly use a cultivator, the outside teeth of which are so constructed as to throw the dirt away from the plants. Great care should be exercised in hoeing around young plants, not to dig so deep as to cut off any of their roots, or to catch the hoe into them and pull them up. To this end it is better to pull the weeds near the plant with your hands, and then draw a little fresh soil around the plant.

2. We cultivate plants to aerate the roots, facilitating the entrance of the gases, and the condensation of vapor into water, thereby actually *manuring* the plant. As the soil becomes compacted over the roots, the free entrance of the air is impeded and the growth checked. Loosening the soil over the roots permits the air, freighted with fertilizing gases and vapor, to penetrate below the heated stratum of the surface to the cooler soil around the roots, where the vapor is condensed into water, which, with the ammonia and other gases in solution, is absorbed by the spongioles of the roots, and enter into the structure of the plants.

The best time to cultivate is when the ground is dry and warm, and the sun shines. This is the best time to destroy weeds, one of the objects of cultivation, and the time when plants most need aerating. When rains are frequent, the ground is in no condition to cultivate, and the rain itself answers some of the objects of cultivation; but when the surface becomes dry again, the soil is compacted, excluding the air, but conducting the heat downwards to the roots, drying out the moisture, and raising the temperature too high for healthy growth. Then the operation of the cultivator is necessary to afford relief.

Mulching answers very many if not all the ends of cultivation; and where the plants are large and few, as fruit-trees, may sometimes be substituted for it with economy Mulching smothers the weeds, prevents the rains from beating down and packing the surface, and the sun from penetrating, over heating and drying out the soil around the roots. Where mulching material is plenty, young trees can be kept growing finely without tilling, by covering the ground as far as the roots extend with six or eight inches in thickness of straw and other litter.—*Rural Home.*

Flanking Weeds in Potatoes and Corn.

I have about two acres of early potatoes. A part of them are on as weedy a piece of land as can well be imagined; but I propose to flank the weeds and not to fight them direct. The great mistake in fighting the rebellion was in the tardy manner in which it was done. When Sherman decided to go through it with a dash in a flanking way, it was soon subdued. It true that an army may spring up behind, but only to be easily crushed; and so it is with the weeds. If we go through them at the start, and not let them become strong, we are master of the situation.

In the first place, a dressing of manure was applied and the land ploughed, then rolled and planted, using a two-horse cultivator to do the covering. After some days the whole was harrowed, killing a whole regiment of young weeds. Then came a heavy rain, and the surface was crusted over, and another edition of weeds presented themselves, when the harrow put an end to them and mellowed the surface, —not fully, for there was an immense number of small lumps, from the size of a pea to an inch or more. These the iron roller reduced in part, and the next week's storm-wave gave a third series of weeds, and yesterday the harrow and the roller put an end to them, and now the surface is as smooth and finely comminuted as though it had been raked by hand with a garden-rake.

The two-horse cultivator will be ready for the next series of weeds, and will cover the tops of the young plants, and let them push up through this fine covering of earth, and thus cheat the potato-beetle out of his first feast of the young plants.

In the corn field, we have first the plough, next the roller, and then follows the planting. After the planting, things will remain quiet until the corn is about ready to break ground, when the harrow will do its duty. The more I use the Freidman Harrow, the better I like it. It covers a strip 9 feet wide, and a team can harrow 15 to 20 acres a day; but I prefer to lap the harrow one-half, and get over about 10 acres a day The roller follows the harrow, and, after the corn is up, the two-horse cultivator is the implement to make further battle with the weeds

I am well aware that, under this system of management, a man and team cannot get as many acres planted; for this stopping to harrow and roll the potatoes weekly, and stopping ploughing in order to roll and harrow the planted corn, take up time; but in the end, if it is bushels of corn and potatoes instead of a given number of acres planted and dignified with the appellation of farming, the farmer will be satisfied when russet autumn presents him with golden ears and bines of large round tubers.

But there is another reason why I like to roll the land before planting, and that is so that it may be planted at a shallow, corn depth. Early in the season, when the ground is cold, we hear a great deal about poor seed-corn, just as though we did not know that corn deeply planted in that condition would not rot rather than grow. Peas will bear deep planting, for they will germinate at a low temperature; but not so corn, which only needs a thin covering, moisture and warmth. Many of the planters run too deep, and, if the soil is loose, so much the worse; but with a smooth, low surface, and a shoe on the planter runners that regulates the depth, we can plant at the desired depth.

I use a Keystone planter, and set it so that the hills are 20 inches apart, putting two grains in a hill In this way one hand is dispensed with in doing the work, as the machine is automatic. With this plan of culture, check-row planting is of no particular advantage.—*Rural, in Chicago Tribune.*

Too Many Fences.

I notice many farms of from fifty to two hundred acres, upon which the matter of fences must be about as much an encumbrance as would be a heavy mortgage. Indeed I have sometimes thought that the removal of at least one-half the fences upon these farms, would be one good step towards removing the debts under which some of our most industrious and hard-working farmers are laboring. Not only this, but it would also lighten the demand that is constantly being made upon their time and patience to repair fences. Dividing a farm all up into fields of from one to five acres, seems to me to be useless. Good line fences are generally a necessity But after that fences to inclose pasture-land ought to about end the fence matter.

Of course, circumstances may require a few extra fences, as about garden, orchard, &c., yet I think many of the inside fences might be dispensed with to great advantage.—*Cor. Germ. Telegraph.*