

or 'weevil' has been felt, and in the 'Wicks' wheat the farmer has such a variety. This wheat was discovered some years since in the old red Mediterranean variety by a gentleman of this place. It is a choice white wheat, making the very best of flour: millers in Ithaca and Auburn pay from two to four shillings more for it per bushel than any other kind; they say they get more flour and of a better quality than from any other kind. It is from eight to twelve days earlier than any other kind which farmers have here, thus escaping the weevil or midge. It has a good stiff straw, and thereby escapes the Hessian fly. It is very productive,—twenty-five bushels not being a high average per acre, and I have known it to yield as high as forty-five bushels per acre. It is no humbug, as scores of the best farmers here will testify, and I actually believe that if this variety alone was sown in the United States, the crop would be doubled on the area over the present crop. It need not be sown before the 15th or 20th of September to do its best."

How to Kill the Daisies.

THE following directions, supplied by a correspondent in the *Boston Cultivator*, bearing upon a difficulty respecting which we have more than once received enquiries, may be useful to some of our readers. The instructions in regard to quantity are somewhat indefinite, nevertheless they may serve as a basis for experiments:—

The ox-eye daisy is a great pest on many farms. Instead of being destroyed as fast as they appear, they are allowed to multiply until they overspread the whole land, and become a source of not merely annoyance, but of positive injury to the premises. Indeed, next to the Canada thistle, they are to be deprecated and provided against. In an address delivered some time ago by Solon Robinson, who owns a farm in West Chester County, N. Y., he alluded to the ox-eye daisy and how to get rid of it:—

When I bought the land it was as thickly set with daisies as any field I ever saw. I did not believe in them, for hay nor pasture. I did not know that salt would kill them, but found the first dressing greatly diminished this slovenly farmer's crop. The second dose did the work. I found next mowing time where they had predominated over all the grasses for years, scarcely a single bull's eye to be seen upon an acre. In their place came white and red clover, timothy, red-top and June grass. Do the farmers esteem these better than daisies? I do. If you do not, why all I have got to say is, this is a free country, and you may grow them. I shall salt and kill them. I had rather grow clover and grass. But killing daisies is not all the benefit that I derived from salt. It killed the worms; and the moles not finding their accustomed food, discontinued burrowing under and killing the sod, and it grew and flourished.

But that is not all. Manure is good for nothing until it is met with a solvent. Some vegetable substances are not soluble in rain water, and although capable of making good manure, are good for nothing in their inert condition. The action of salt, lime, plaster, potash, etc., upon dead, inert vegetable fibre in the soil, is to cause it to decay and become food for the growing grass. Dig up a sod in any old hide-bound meadow or poor "run-out" pasture, and you will find it full of black dead roots. If you dig again, after the action of the salt or other mineral manures, you will find a different and more favourable appearance, and certainly you will find a very great difference in the product. In short, you have made two blades of grass grow where only one grew before. What if over all this country the same result could be produced? Who can calculate the increase of wealth? It alone would forever pay the interest upon the national debt, and that, at least, would prove a national blessing.

I have seen some hay fields the present season where three-fourths the weight of the crop was daisy. At a little distance it appeared to be all daisy. This was the case in a field at Auburn. The flea-bane overgrew the clover. Such a field as that I think I can clear of this pest of all good farmers at a cost not exceeding \$3 an acre, even here, where transportation is most expensive. I did it upon my own place in West Chester Co. at less than \$1 an acre. Again you ask, how? I answer: with salt. Nothing else. That is sure death to daisies. At first, I used three bushels, not being quite sure of the effect. I think I got a ton of hay from three bushels of salt, which was applied in the spring, about the time the grass began to look green. Upon the stubble I put seven bushels more, and since that I have applied ten more bushels. The cost in New York was six cents a bushel at the packing-houses, where it is brushed off dry-salted work

Advantages of Pulverizing the Soil.

The effects of pulverization, or stirring the soil, are numerous.

1. It gives free scope to the roots of vegetables, and they become more fibrous in a loose than in a hard soil, by which the mouths or pores become more numerous, and such food as is in the soil has a better chance of being sought after and taken up by them.

2. It admits the atmospheric air to the sponginess of the roots—without which no plant can make a healthy growth.

3. It increases the capillary attraction or spongelike property of soils, by which their humidity is rendered more uniform; and in a hot season it increases the deposits of dew and admits it to the roots.

4. It increases the temperature of the soil in the spring, by admitting the warm air and tepid rain.

5. It increases the supply of organic food. The atmosphere contains carbonic acid, ammonia, and nitric acid,—all most powerful fertilizers and solvents. A loose soil attracts and condenses them. Rain and dew, also, contain them. And when these fertilizing gases are carried into the soil by rain water, they are absorbed and retained by the soil for the use of plants. On the other hand, if the soil is hard, the water runs off the surface, and instead of leaving these gases in the soil, carries off some of the best portions of the soil with it. Thus, what might be a benefit becomes an injury.

6. By means of pulverization, a portion of the atmospheric air is buried in the soil, and it is supposed that ammonia and nitric acid are formed by the mutual decomposition of this air and the moisture of the soil—heat also being evolved by the changes.

7. Pulverization of the surface of soils serves to retain the moisture in the subsoil, and to prevent it from being penetrated by heat from a warmer, as well as from radiating its heat to a colder atmosphere than itself. These effects are produced by the porosity of the pulverized stratum, which acts as a mulch, especially on heavy soils.

8. Pulverization, also, has the combined effect of several of the preceding causes, accelerates the decomposition of the organic matter in the soil, and the disintegration of the mineral matter, and thus prepares the inert matter of the soil for assimilation by the plants.—*Farm and Fireside.*

Sowing Grain.

A MR. DAVID WHYBORN, of Mexico, N. Y., at a late meeting of the Farmers' Club of New York city, made the following remarks on sowing grain:

I object to throwing the seed all one way in a strong wind, from the fact that the wind takes the seed as soon as delivered from the hand, and carries it too much in a straight, narrow line, thereby leaving a space between each handful without any, or with very little seed. I admit it would not be so visible to a person walking on the margin of the lot, as if there were long strips of land left without seed in the direction that the sower travelled; but I question whether there would not be more land left unsowed. I object to choosing a strong wind to sow in. It makes it harder work, and if the ground, when ploughed, was laid in lands, say from east to west, and when ready to sow the wind should blow from either of those quarters, in order to have the advantage of that wind so as to spread wider at a east, the targets would have to be placed north and south, and sown in that direction; consequently one would have to harrow across the lands or wait until the lot is sown. I object to sowing from a basket or pail, because the weight of the seed is at the side of the sower. To balance himself he leans in the opposite direction, which deprives him of a portion of his power to spread the seed, and it makes his back ache.

After forty years' experience, I believe a better principle of broadcast sowing is to have an oblong box with a hollow in one side to fit the body; carry the box directly in front, fix it there with two bands, one on each shoulder; then the seedsman can walk upright and have both arms at liberty to use as required. When entering the lot to sow the seed, he either knows or inquires which way it is to be harrowed, and commences to sow in that direction, using both hands at the same time—that is, filling the left hand at the same time that he empties the right hand, and vice versa; and whether there is a perfect calm or a strong wind blowing from north, south, east or west, if he does not try to cover too wide a space, and has judgment enough to give the greater force to that arm that has to deliver its seed in opposition to the wind, the grain will always come up even. As to how wide can be sown at a east, depends much on the kind of grain or seed, as heavy seed will spread easier than light. As to how many acres a man will sow in a day, will depend on the strength, durability and perseverance of the sower, and the state the land is in to travel on, &c.—*Rural American.*

Silver Maple as a Shade Tree.

FROM its very rapid growth, and making so quick a shade, as well as cheapness, this variety of maple is more extensively planted, both in town and country than any other. It has also the merit of being extremely hardy. In the country, it is not attacked by insects, and in the cities it is not destroyed by them.

Its *dormit* as usually managed is, that it is not a compact tree, being loose and open in the head, and its long branches and soft wood are often terribly injured and broken by storms. To remedy both these and make of silver maple a really beautiful shade tree, with a head nearly as compact as a Norway maple or horse chestnut, it is only necessary to shorten in the branches with the pole pruning shears, not only early in the spring, but twice at least afterwards, when in leaf, and whenever the long pendant branches are inclined to spread beyond proper limits. It bears such cutting back well, and we have seen it trimmed into an oval, round, or pyramidal shape and make a beautiful tree. For planting on avenues or to make a quick shade around new buildings, or for protection, the silver maple is remarkably well adapted, and cannot be spared. Were it not so common and cheap it would be more admired. The leaf is really very pretty, especially the silvery appearance on the under side, and by thorough and repeated trimming as proposed, it will deserve to have a place among our finer ornamental trees.

The silver maple has also another advantage over the silver poplar, and other fast-growing trees, in that it does not throw up suckers.

Change of Seeds.

WE find the following suggestive paragraph in the Report of an Agricultural Tour in Europe, by John H. Klippart, Esq., recently submitted to the Ohio State Board of Agriculture, and published in the late annual report of that body:—

"I made many inquiries and collected quite a number of items, facts, or at least supposed facts, in relation to the change of farm crop seeds, but as it would require entirely too much space to give the details of a tenth part of them, I must content myself by giving a simple statement of the conclusions I arrived at, based, of course, upon the statements detailed to me. It appears that any farm crop, as wheat, for example, may be much improved by culture on a farm with appropriate soil; but there is a limit to the improvement of this variety, which I will designate as variety A, on this farm, which I will designate as farm No. 1. After the limit of improvement has been attained on No. 1, it will then, for a series of years, remain stationary, and after that, even with the best culture, will deteriorate. But if, when it has attained its limit on No. 1, it is then transferred to a farm No. 2, it will improve again on farm No. 2, etc. Whilst the variety A. is deteriorating on farm No. 1, the variety B, under proper treatment from farm No. 2 or 3, will improve by the side of it. Hence, the German farmers have adopted a system of seed exchanges, and are anxious to obtain seed from foreign countries. They seem to have given this subject a great deal of attention, and take into account the kind of soil, meteorology, and level above the sea where the seeds were grown, and I am inclined to think they make it a point to obtain good seeds from elevated regions grown on an inferior soil. The exchanges are conducted mostly by the local agricultural societies. The Sonderhausen agricultural association have made many experiments in the exchange of seeds, and now recommend, as the result of their experience, that the transfer of "seeds from a good rich soil, to a cold and indifferent one, is profitable, and vice versa."

WASHINGTON'S PATENT FENCE.—We direct the attention of our readers to an advertisement which appears in the present issue, of a patent fence by Stephen Washburn, of St. George, Co. Brant. This appears from the cuts accompanying the advertisement, to be a neat and conveniently portable fence. Prizes were awarded to the inventor at the Provincial Exhibitions held in London and Hamilton. It appears that it can be quickly made and readily put up; and when it is desirable to remove the fence, the panels can easily be separated, packed up in small compass, and hauled off in a waggon. We commend the invention to the attention of those who have occasion for portable fences; and there is scarcely a farmer to whom such a convenience is not of great advantage.