

The Farm.

PESTS IN FARM SOIL

In discussing the losses sustained by farmers, the injury done by pests in the soil, is rarely credited to a sufficient extent, they doing far more damage than is seen at first sight. We hear much of the damage done by sparrows, flies and other creatures on the face of the earth, but there are pests under the earth, quite as injurious as, if not more so than the above, although their depredations may not be so easily noticed. Who has not frequently seen patches, and even whole fields of barley or oats, become yellow and sickly in the early summer, before the ears began to show, or just when the plant was a little above the ground? Little notice may have been taken of it by the farmer, and it would most likely be passed with the remark: "Oh it will grow out of that." Quite true, it generally does grow out of it, more or less, but does it never occur to the owner or cultivator, how much the crop is deteriorated by the check it receives at a time, when it is most desirable that the plants should all be in the most robust health, and progressing daily towards making a growth, that will be full and fruitful to the greatest extent? We know that in stock if the foal, calf, or whatever it may be, is checked in growth at an early stage of its development, a deficiency follows, which is never regained, and we may deduce that the same thing occurs in the case of crops that are checked in the soil.

The easy going term "Oh they will grow out of it," is one not acceptable to really good farmers—men ever on the look out for the welfare of their crops, and they view with uneasiness the disturbance of any grain or root crops by pests under the surface. Turnips are very subject to be eaten at the root, before they are singled, or immediately afterwards, by grubs. They may take them here and there in large or small patches, and the grower will still be regardless to a considerable extent, so long as there are enough left to furnish a crop. But, when patches are eaten over like this, those remaining, although they may seem healthy and full in the leaf, are generally nibbled more or less at the bottom. The crop in such a field, no matter if all the surface is covered, will never be so good and heavy as in another where the pests are absent. Fields where pests abound, are never so productive as where they are kept under restriction, and those who know they are there, but think not in sufficient quantity to do harm, will find out their mistake to their cost. It is impossible for these pests to exist under any crop without doing harm. They are hurtful to grass crops too, but these are generally so close grown that they do not indicate the damage so readily as the roots or the grain. When it is seen that some crops are suffering in the way described, a little nitrate of soda or some other manure is often thrown over them to make them grow more rapidly, or "grow out of it" as some say. But this is a poor remedy, and at best can only hurry growth a little, without increasing yield. The time to apply a remedy is before the seed is sown. If the grubs can be destroyed at the various stages of their development, and the young plants allowed an uninterrupted growth from the first, the fullest advantage will be derived. There are several grubs or pests destructive to farm crops, but the worst is the wire-worm, and if that can be destroyed, none of the others will live. (1).

Artificial manures are thought to help in their extinction. They do not. Salt is also useless. Lime is the only remedy, and gas lime is the best if it can be carefully used. The roots of vegetation do not like gas lime, in a fresh state, but if it is used thinly, and applied two months or more before the seed is sown, it will kill the grubs and be harmless to the plants. If any fields showed signs of containing many grubs

(1) Crosskill's clod crusher will arrest the progress of the wireworm, as we proved in 1850. E11.