

easily fancy that this mixture would be preferable to my own recipe of flower of brimstone and wood-ashes.

Wire-worms.—If the Experiment Stations of the U. S. succeed in devising means of arresting the ravages of this pluripresent beast, they will have deserved well, not only of their country, but of the world at large. My own idea is, that the animal is too hardy to suffer itself to be destroyed, and too crafty to fall into traps in any number. Though here and there, there may be found a simpleton amongst the tribe, the majority will keep themselves aloof from slices of potatoes, bouquets of clover, or any other deceitful form of food.

The wire worm has an especial liking for the tender roots of grain—whether to satisfy its appetite therewith, or for what object, I really do not know. This I know: he does not like obstructions to be placed in his path from one plant to another, and I proved this satisfactorily on my farm in Kent, England, some time about the year 1848 or '49. I had sown a small piece of oats—some five acres. The previous crop had been white turnips fed off by sheep eating pease and cake with a little clover-chaff; the land was ploughed in December, a long frost ensued—long, that is, for the S. E. of England,—and the seed-bed was, as the Kentish man says, like an ash-heap. The oats—Black Tartars—came up well and were flourishing, when one morning I saw that the wire-worm was at them. I had seen Crosskill's clod-crusher at work, and had heard of its effects, so I immediately ordered one to be sent to me from the Beverley works. It arrived within a week; the oats were rolled with it twice; and the crop was saved. The weight—2240 lbs.—of the twenty wheels jammed down the ground so tightly that the brutes could not travel. At least that was my solution of the question.

Mr. Charnock, in his essay on the farming of the West-riding of Yorkshire, which received the gold medal of the R. Ag. Soc. of England, propounded, as a cure for the wire-worm, the exhibition of rape cake, not as usual when used as a manure, in powder, but in pieces the size of a small marble. The brutes, he said, gorged themselves with the cake, and died in their gluttony. But Miss Ormerod, the celebrated entomologist to the R. Ag. Soc., having tried this as an experiment, declares that it failed utterly.

"The wire-worms are the *larvæ* of certain beetles, called *click-beetles*, from their peculiar habit of jumping with a *clicking* sound. Hence, if the parents are destroyed, the offspring will soon disappear. Baits of sliced potatoes, corn-meal-dough sweetened with sugar, and clover, were placed in various places in a badly infested field, and a series of twelve traps caught in three days no less than 482 beetles." Very possibly; but only conceive the time and labour expended in the setting and examining of the traps. The clover traps seem to have been the most successful.

Corn for the Silo.—In the words of the IV Bulletin of the Agricultural Experiment Station of Cornell University: "It has been for some time practically settled by those that are most successful in growing and making ensilage of a good quality that the corn must be grown, either in hills or in drills, with much the same cultivation that is given the crop when grown for the grain." So it comes to this, that the corn-crop being grown and ripened as usual, it is easier to harvest it in a silo than in the usual way of shocking it in the field until sufficiently dried for stacking. Well and good, and the same might be predicated of the oat-crop, the pea crop, or any other crop destined to the consumption of the stock of the farm. Unfortunately, this is not the general procedure, for "a large majority of the farmers of the State of New York, who annually raise a patch of fodder-corn, still

sow it broadcast in the manner that has long ago been shown to be disadvantageous, at least. In a ride of fourteen miles through Tompkins County, the past season, more than thirty such patches of sown corn were counted."

The illustrations on the page 53 will show what some of the corn was. see Nos 2-8. All were of the large varieties. No. 8 is a sample of State corn, and grew within a few feet of No. 7, the latter was green when the frost struck it, while the former, being nearly mature, was unaffected by the frost. I observed just the same effect on green tobacco after an early frost in 1869. the ripe leaves were uninjured.

Experiments were made at Cornell Station on the best periods for cutting silage-corn. The seed was planted May 7th, the first cutting was made July 24th, just as the bloom was showing. The second cutting was made August 8th, when the corn was hardly in roasting-eat condition. The third, September 3rd, when the majority of the ears were out of the milk, and in one week's time the adjoining corn was fully ripe. The enormous difference in the quality of the three lots will be seen by the following table:

| Period | Date of Cutting | Yield pounds per acre | Per cent Water. | Dry Matter pounds per acre. | Protein lbs. per acre | Fat lbs. per acre | Carb-hyd. lbs. per acre |
|--------|-----------------|-----------------------|-----------------|-----------------------------|-----------------------|-------------------|-------------------------|
| I | July 24 | 18762 | 89.34 | 2000. | 250.6 | 42. | 1543.6 |
| II | Aug. 8 | 24578 | 83.57 | 4039. | 368.4 | 81.99 | 3328.5 |
| III | Sept. 3 | 27674 | 73.93 | 7214.2 | 585.8 | 199.1 | 6166.7 |

Other experiments, notably a series with artificial manures, were tried. Neither ground bones, cotton-seed-meal, nor the ash of cotton-seed, seem to have had any effect on the corn-crop. It is a pity, I think, that nitrogen in the form of nitrate of soda or of sulphate of ammonia was not used, as I can easily understand that though some 25 lbs. of nitrogen per acre was applied in the dressing of 400 lbs. of cotton-seed-meal, this nitrogen was hardly in a state to be assimilated by so rapid a growing plant as maize. Besides, during the whole time of growth, the season was very dry.

| Plot. | Kind of Fertilizer. | Amt. per acre. | Yield. Lbs. per acre. |
|--|--|----------------|-----------------------|
| 1. | Ground bone..... | 400. | 17100. |
| 2. | Cotton-seed-meal | 400. | 15450. |
| 3. | Cotton-seed ashes..... | 400. | 13900. |
| 4. | Equal parts of cotton-seed ashes and cotton-seed-meal..... | 400. | 13600. |
| 5. | Equal parts ground bone and cotton-seed-meal..... | 400. | 13200. |
| 6. | Equal parts ground bone and cotton-seed ashes..... | 400. | 14730. |
| Unfertilized plot on similar soil, but in a moister situation..... | | | 20610. |
| The corn was cut September 12th and was well matured. | | | |

Sheep and pastures.—Dr. Hoskins is right, as usual, when he says: We have never been able to believe all that has been said of the "golden hoofs" of the sheep, when by that is meant to convey the idea that sheep necessarily improve a pasture. E. K. Seabury of Walpole, N. H., says, in this connection: "I know one pasture that years ago would keep 400 sheep as well as it does now 100, and there has never been anything but sheep on it since it was once a good hill farm, there is hardly a bush on it, and it brings up a mighty question: How can we renovate the pastures without its costing more than they are worth? Most of the farmers here