was 54° at four and 47° at twelve. On March 15 (about the earliest date mentioned by Mr. Henderson) of this year, with an unusually mild winter, the soil was still at freezing point and only 36° at eight inches lower down.

From observation and experience, I judge that in this section there is not much gained, even if the ground is in workable order, in sowing before the middle of April, unless in a very exceptionable season. It often happens that we have a very few warm days at the latter end of March or the beginning of April, warming just the surface of the soil, while underneath the frost is probably lingering, and lasting long enoug to start such quickly-germinating seeds as cabbage, radishes, &c. A return to the normal temperature of the season would seriously injure, if not destroy, the chitted seeds, chilled as they must be by the cold soil underneath them. The ground should be warmed to a temperature which will not only start but keep up a quick and continual growth before seeds are committed to it. In 1887, as an experiment, I drilled in a row of black wax bush beans April 14, and three weeks later (May 5) another row beside it, the seed for each row being taken from the same bag; the beans on the earlier sown row were not ready a day before those on the other, both being picked July 5. Mr. neighbor, Mr. Joseph Harris, for the purpose of obtaining the luxury of an early dish of peas every year, carefully soaks and sprouts the seed which is sown at the very earliest opportunity, and which subsequently receives the treatment which his well-known skill in agricultural matters enables him to give it. This generally happens two or three weeks sooner than I sow mine, and he is often enabled to enjoy a feast of peas a week or so before I can gather a sufficient quantity to take to market, but my crop is larger and the peas are of better size and quality.

But to no seed is this question of planting at the right time more important than to corn. As market gardeners frequently do, we used to plant sweet corn before we had any right to expect it to grow; of course much of it rotted instead of sprouting, so after a lapse of some two weeks, during which time the temperature of the air and soil had risen to a more suitable point, we planted again with the result that the earlier planted corn was nowhere in the race. Now if corn is planted about the middle of May, and after an interval of a week, any gaps are filled up, it will be found that in this case the first planted is the best, showing the necessity of endeavoring to plant under just the right conditions if you wish to obtain the best results. A few years ago we planted early in April some potatoes which we had sprouted on shelves in the house-cellar, putting them carefully in the ground and covering them about two inches with the hoe; two weeks later we put in some of the same kind—only not sprouted—with the plow, and these were fit to dig at same time as the sprouted ones. The following year we planted the sprouted ones later and had a much earlier crop. No matter if the seeds sown before the soil is fittingly warm come up sooner than those sown later, there is a want of vigor in their growth which is very perceptible when the two are seen growing side by side.

Another thing, probably noticed by others long ago, that each years's experience shows me to be of importance when early sweet corn is desired, and that is, not to cultivate it too often or deep. I used a harrow tooth cultivator directly, I can see the corn so as to kill the small surface weeds, afterwards using the hoe in the rows and for all big weeds, only running the same cultivator through as often as it is necessary to break the crust after a rainstorm. It may be different on stiffer soils, but on a good garden one it is certain that by abstaining from cultivating as much as possible, you will be able to pick ears several days sooner.

Last year I lost my early turnips, radishes and bunching onions through the maggot, but I saved some later sowings by the application of the burdock remedy mentioned by Prof. Lituer in his bulletin of November, 1888. It is there credited to a correspondent of the New-England Homestead, and is as follows: "Take green burdock leaves and stalks, run them through a hay cutter, put them in a large kettle or tub, and mash them with an old ax or maul adding water and pounding them to a pulp. Let it stand over night, have the decoction strong, and when you see the first sign of the maggot, use this, and it will be found a dead shot for the worm. I have used it 40 years on onions. I use a sprinkler taking off the nozzle and pouring the solution along the rows. I seldom have to apply it the second time." We are advised to use it at the first sign of the maggot, but I applied it as soon as the young plants were visible, hoping at the same time to ward, off the flea, but that lively little gentleman required a dose of air-slaked lime flavored with turpentine before he could be induced to quit. For the maggot, the burdock is a capital remedy In powdering a patch of cabbage attacked by the flea, with the turpentine lime, it appears as if the further you proceed the thicker the fleas become; and so they do, since you are driving them before you, and when the last row is reached it seems alive with them; where they then hop to I cannot tell, but I know that they will not again visit the cabbage plants you have dusted, so long as there is a smell of turpentine about them.

J. H. C. *Monroe County, March* 17.

SMUT IN GRAIN, p. 184.—Prof. Jensen thinks that water heated from 110° to 132 is better than limestone. I tried limestone over thirty years ago and it had the desired effect, and since then it has always done well. No matter how much you put on, it will not hurt the wheat. I tried in boxes, with and without all that water would dissolve, and it grew all the stronger for it. T. R.

Allawakee County, Iowa.

DE OMNIBUS REBUS.

Sheep and cattle.—Mr. J. C. Wing, writes to the Country Gentleman that "sheep herded with cattle will starve the latter quite to death". I cannot agree with Mr. Wing, for, as all farmers know or ought to know, all soils in their natural state—and it is of the great prairies Mr. Wing, is speaking produce a great variety of plants or herbage, and we may safely infer that it was not intended for one class of animal alone. Variety is clearly the order of nature in the animal and vegetable kingdoms, and the farmer who wishes to thoroughly utilise all the produce of the soil will not restrict himself to one class of animals for one portion of his pasture.

Those who have the care of flocks and herds ought to pay close attention to the localities where early grasses and plants