

hay has been well got in, and free from waste, which was not the case last season, and this will make up for some deficiency; but there cannot be any doubt that the crop is short of an average. We have seen an indication of rust in the straw of some of the grain crops, and about this time is the most dangerous of the season for producing this disease, that is so fatal to a crop if attacked by it before the grain is near maturity. There is scarcely a possibility of remedy for this disease, except by draining well and having the crops clean. Perhaps that drilling and hoeing the crops would also be a preventative. It is a remarkable fact, that on clay lands wheat is not so liable to rust or other disease, as on light or loamy soils. Clay soil is always the most certain for wheat, though occasionally good crops of this grain may be raised on other soils in favorable seasons. We have raised 33 bushels of wheat to the acre, on a sandy loam of good quality, but it was sown early in April, and previous to the infliction of the wheat fly. Weeds prevail to a considerable extent in the crops this year, and it is very hurtful to the farmer to allow them to do so without destroying them. We have observed smut in the oats this year, and suppose that if the seed had been washed, as the seed wheat, previous to sowing, it would prevent this disease. We do it with barley and wheat, and find it an effectual remedy against smut. Agriculturists should take the trouble to raise new specimens of grain, which might be done by selecting choice ears of wheat, barley, oats, peas, &c., sowing these carefully, and again sowing the produce of them, until a considerable quantity would be obtained for seed. It is in this manner that all new varieties have been propagated, and by a little care it might readily be done. Our next Report will, we hope, be favorable and interesting, as the fate of the year's crop will be decided by that time. The next five or six weeks will be regarded with deep interest by farmers, so much of their success will depend upon the weather for that period. Farmers may well be anxious about these matters, and may be so without having any distrust

in the goodness of our Creator.—July 30, 1852.

To the Editor of the Agricultural Journal.
DRAINING.

SIR,—Seeing a communication in your last Number, seeking information about draining, induces me to communicate my own experience, in hopes it might suggest some hints that may be beneficial to parties similarly situated.

I have been for many years something of an amateur farmer. My *penchant* for that honorable and interesting pursuit led me to outlay considerable money in *supporting* my farm, but, within the last five years, I determined my farm should support me. But there stood in my way to improvement about 20 acres of *wet*, most forbidding cedar swamp—yet the best of my land. I began, “wrong end foremost,” by availing myself of the winter; I removed off all the cedar and other valuable timber. Having then let the fire in, it burnt off all brush and rubbish *above water*, and left me with an army of black stumps that would frighten “Hercules.” At the seasons I could spare my men and teams, it was so wet that neither could do any work to advantage. I made the discovery that *draining* was my first step, and that, too, to begin and drain my neighbour's land first, in order to secure a good outlet. Having no stones near me, the next consideration was what sort of drains could I make? In digging, I found, in sinking through black muck and other soils, I invariably came, in 2½ to 3 feet, to blue clay, and the water ran off beautifully. I found, then, that leaving my drains open would spoil my fields for tillage. With advice, I concluded to fill the bottom of the drains (about 15 inches wide) with small billets of cedar, about 3½ feet long; making the mouth with side blocks and a cross block, laying them along well fitted, and overlapping about a foot, covering carefully with brush and other rubbish above that, and neatly filling in, towering the drain about six inches above the level for sinking. In the following winter, I found they ran beautifully, the outlet of the drains never freezing, and smoking like a warm spring. In the spring of the year, not a *gill* of water lodged in any part of this field. (I was, of course, careful to follow the sinuosities of the lowest ground). I felt as elated with my success, as if I had been the first who had discovered the advantages of under-draining.