

We Must Control Surface Water.

How Deeper Plowing and Better Drainage Will Enable the Farmer to Prevent Washing and Make Better Crops—Tiling Increases Yield of Corn on One Field from 10 to 40 Bushels.

A FEW WEEKS AGO I heard a farmers' institute speaker say: "Nine-tenths of farming is the problem of taking care of water"—a statement that seemed very broad at first, but which, after thinking it over for some days and applying it to the farm here, seems fully true.

Sometimes, as last spring, the problem is to get rid of the water, and sometimes, as a few weeks during last summer, to conserve the water for plant use.

The best way to conserve the water is by deep plowing and shallow, frequent cultivation. Neither does the deep-plowed land wash as badly when the water must run off as the shallow-plowed lands. When this surface water does run off it will not carry with it nearly as much soluble plant food or small particles of soil in suspension, as from the shallow prepared lands.

How Deep Plowing Lessens Damage By Washing.

We noticed examples of this depletion of land while passing a large field during a heavy rain, not long ago. There was the black, gray and red lands recently plowed shallow. Near was black land plowed six to eight inches deep. On the other side of the path was a meadow and a pasture. The water running from these shallow-plowed lands was the same color as the land, and much soil was carried along. This was shown especially after the rain stopped and the deposit of soil could be seen. The water was running but little from the deep-plowed piece and was nearly clear, but not clear like that coming from the meadow and pasture, where the grass prevented any washing. The deep-plowed land took care of the heavy rain, while the other did not, because there was not room in the hard ground for it. If the water has to be taken off the surface, it should be taken as quickly as possible through nearly level ditches.

Deep plowing will go a long way toward improving drainage, conserving water and plant food.

While almost everywhere open ditches are used to carry water, the few places that have used tile drains have found them to generally be a paying proposition. One incident in connection with this method of drainage will show how valuable it often is, and there are many places where it can be duplicated.

A Poor Field Changed to a Good One.

The piece of land—about 40 acres—was a rich, black prairie; very waxy, seepy and wet most of the year. It was almost impossible to plow or cultivate, except in a very dry time. Weeds and grass characteristic of wet lands, thrived on it. Ordinary years it would not produce over ten bushels of poor corn per acre. The stalks were spindling, yellow, and the roots close to the surface, showing an excess of moisture so the air could not get down in the soil. In a very dry year it would make 40 to 50 bushels of corn per acre.

This land was tilled with 3-inch tile in the summer, after the rush of farm work was over. The lines of tiles were placed three to three and one-half feet deep, and 24 to 30 feet apart. It was drained before this by several large open ditches, which carried off much water. The next spring the land was plowed and planted in corn. In place of the land's

being waxy or gummy it was very loose and easily plowed as deep as desired. It was easily cultivated, easily kept mellow and in good condition. It was easier prepared and cultivated than in the dry seasons, when it had been making its best crops.

The land was plowed level, corn planted with a check rower and the corn cultivated on a level. That year and the years following were ordinary ones, yet the land produced its 40 to 60 bushels of corn per acre every year. The corn could be planted early, with no trouble to get a good stand. Before it was tile-drained, corn could not be planted until late and then it was hard to get a stand.

The water flowed the year round from the opening of the drains, even after weeks of dry weather.

Tile Drainage Will Become General.

The time is coming when tile drainage will be used more and more and found to pay well; especially as lands become higher in price and are farmed more intensively. Of course the depth to place the tile and the width apart to run the lines depend on so many conditions of soil, amount of water, and other things that no general rule can be made.

In most of the prairie sections, and other sections as well, it will help to lower the high water level, thus better aerating the soil and allowing the roots of plants to penetrate deeper, for, to do well, they must have, not only a good surface preparation and tillage, but deep aeration.

JESSE M. JONES.

Montgomery, Ala.

A SUCCESSFUL FARMERS' SCHOOL IN TENNESSEE.

The week beginning November 29th a farmers' school was held at Winchester, Tenn., by Prof. C. A. Keffer, assisted by Messrs. Lane, Barnes and Hite, and Director Morgan, of the Tennessee Experiment Station. The school lasted a whole week, 135 farmers were enrolled and the average attendance was about sixty.

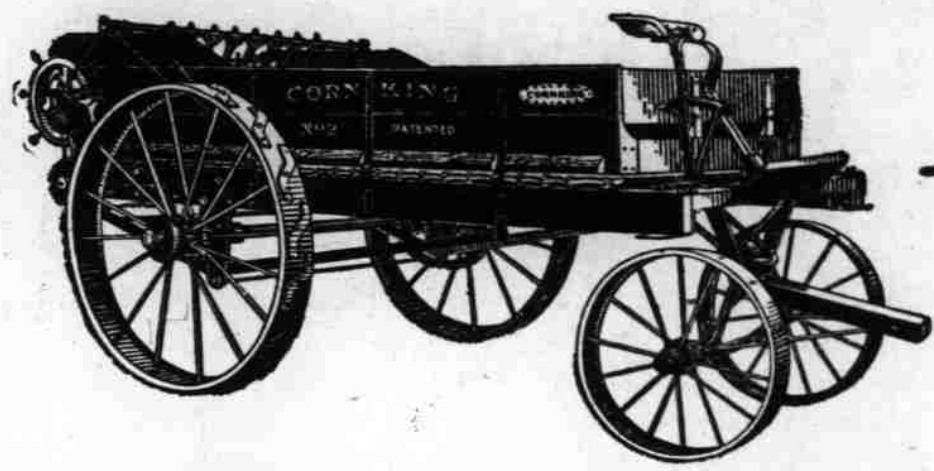
Our friend, Mr. A. O. Ring, of Winchester, writing of the school says:

"Already there are three or four men talking of building silos, and I hear of at least two men who have determined to 'kill the grade bull.' (This is the battle cry of our State Dairy Association.)

"We have a county dairy association as a result of the farmers' school; and the prospect of building a creamery. This last we have been talking of for some time. We are doing this without the help of a promoter; will not put over \$3,000 into it, I guess, and decided sometime ago that we would do nothing till we had at least 400 cows in sight."

Other schools of this kind are being held in Tennessee, and so the good work goes on.

In wedging on axe handles select the fattest, rich pine you can find that has parallel grains and good crushing strength. The rosin oozes out on the smooth split hickory and adheres to the handle better than any other known wood without working out. I learned this from an "old-time darkey."—H. E. Fant.



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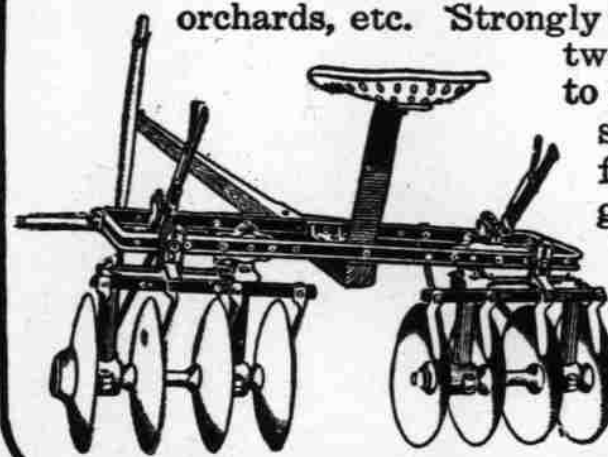
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