

Labor-saving Implements and Machinery

Article No. 6 on "Diversification and Independence in 1915!"

By G. H. ALFORD

THE fundamental importance of all farm machinery is that it cuts the cost of growing crops, provides shorter working hours for the farmer, returns larger profits for him, lightens his burdens, increases his crop yields, and makes life worth living.

Labor-saving farm implements have greatly increased the earning capacity of the individual farmer. Before labor-saving implements came general use it required four farms to feed one town family—now one farm feeds two families in town.

The inefficiency of our agriculture is largely due to the lack of the use of labor-saving implements. An analysis of conditions in different states shows a much smaller use of power in Southern farms than in other sections of the country, and consequently less use of labor-saving farm implements and a correspondingly lower earning capacity of the farmers. Thousands of our farmers sweat with the grain cradle and bend their backs and callous their hands with primitive and tools, while they could achieve much greater results with much less labor by the use of labor-saving farm implements.

I shall not attempt to name the most important tool for the Southern farmer, as no man can state just what farm implements each farmer should use; but let me urge every farmer to give much thought to the question of how he can utilize farm implements to lift him above the routine of endless drudgery, increase his earnings, cheapen his production, conserve his energy and health, and give him an opportunity to enjoy life. It is our purpose here to call attention to several inexpensive implements that should be in use on every farm in the Cotton Belt.

The Stalk Cutter a Humus Saver

THERE are still some people who pile up and burn the cotton and corn stalks. This is absolutely inexorable, as the soil badly needs the humus and the stalks can easily be cut into small pieces and turned under. Of course, the stalks should be cut and plowed under in winter, so that they will decay before planting time. However, if it is impossible to plow the land before early spring the stalks should be cut into short pieces with a good stalk cutter as soon after the crop is gathered as possible. Cut in this way, they will rot more

quickly and can be turned under to furnish humus, the thing most needed in the average soil.

The Disk Harrow Is the Enemy of Clods

THERE was a time when the few farmers who owned disk harrows used them to prepare new land and to destroy clods; but intensive methods of farming have brought to light many new uses for the disk harrow. It can be used as a stalk cutter, as an implement for preparing the seed bed on sandy land, for preparing the seed bed after breaking on all kinds of land, and then used to cultivate the crop.

A sharp disk does a fine job of cutting cotton and corn stalks when they are dry. It is the best possible implement to use in preparing a cotton stalk

subsoil, thus stopping the rise of water; (3) to produce a soil mulch on dry land so that after a week or 10 days it can be easily plowed, the moisture by that time having accumulated below the mulch and softened up the land; (4) to form a mulch of fine dirt which fills up the spaces usually left between the furrowed slice and the ground beneath, thus making the foundation a fine, compact seed bed.

In the spring we are all in a rush to get our crops planted. Our plow teams are overworked and even the best farmers often fail to thoroughly prepare their land. It is much better to take time by the forelock and disk the land then break it deep during the fall and winter. The plow stock are rested and the weather is cool. When the last land has been broken during the fall and winter, and for some time prior to planting time,

If the land is flat broken and compacted by heavy rains, the disk harrow is a most effective tool for the preparation of the seed bed.

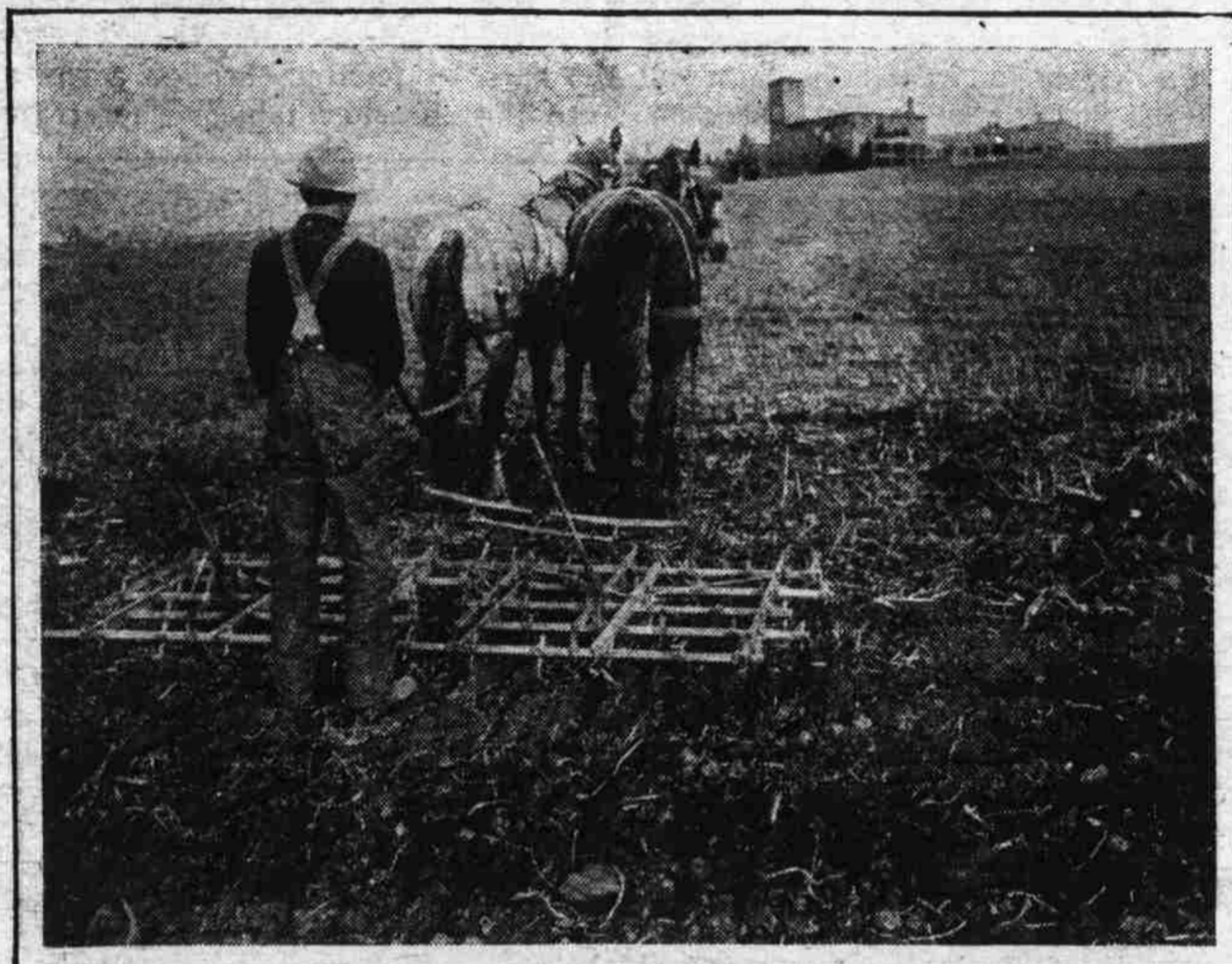
When the ground has been plowed for some time and is covered with grass and weeds, the disk harrow will destroy the weeds and make a most excellent seed bed for all kinds of crops. The soil that is in clods when you plant cotton, corn and other crops will seldom be of use during the season unless you pulverize the clods. When the land is broken up into clods, by all means follow the plow with the disk harrow and thus destroy the clods while moist. The disk harrow pulverizes the soil thoroughly and as each round is lapped no ridges of any consequence will be left.

Your field may be cloddy and weedy, but a double disking with a disk harrow or a single disking with a double disk harrow will make a perfect seed bed of it. In the preparation of land no tool can be used to better advantage than the disk harrow. It has special advantages over smoothing harrows in ground with loose trash or growing weeds, because the disks cut through the trash instead of dragging it along.

How the Manure Spreader Pays Its Way

BARNYARD manure is an important fertilizer and should be carefully saved and used. It represents fertility which is drawn from the soil and must be returned to it if productivity is to be maintained. It adds plant food to the soil, acts upon the soil in such a manner as to render the plant food more available, increases the much needed supply of humus, makes the soil warmer, enables the soil to receive and retain more water, improves soil ventilation, aids in the development of bacteria, and helps to reduce the washing of soil to the minimum. If we realized fully the value of manure as a producer of crops and enhancer of fertility, we certainly would not waste it as we do, and then set about to remedy the consequences of our wastefulness by paying hard earned money for complete commercial fertilizer. Many of us apply fertilizer of which we know little into soils of which we know less. We all know that we can rapidly increase the producing capacity of land by yearly applications of carefully saved manure. Yet in the face of this the great majority of us go on from year to year wasting manure and buying commercial fertilizers.

To get the full value of manure it must be carefully saved and applied to the land with a manure spreader. Many farmers make heaps in the fields as the manure is unloaded. Much nitrogen usually escapes into the air in the form of ammonia, and when the piles are rained on the soil under them is often too rich for some (Concluded on page 30, this issue)



Few Implements Have a Greater All-round Value Than the Section Harrow

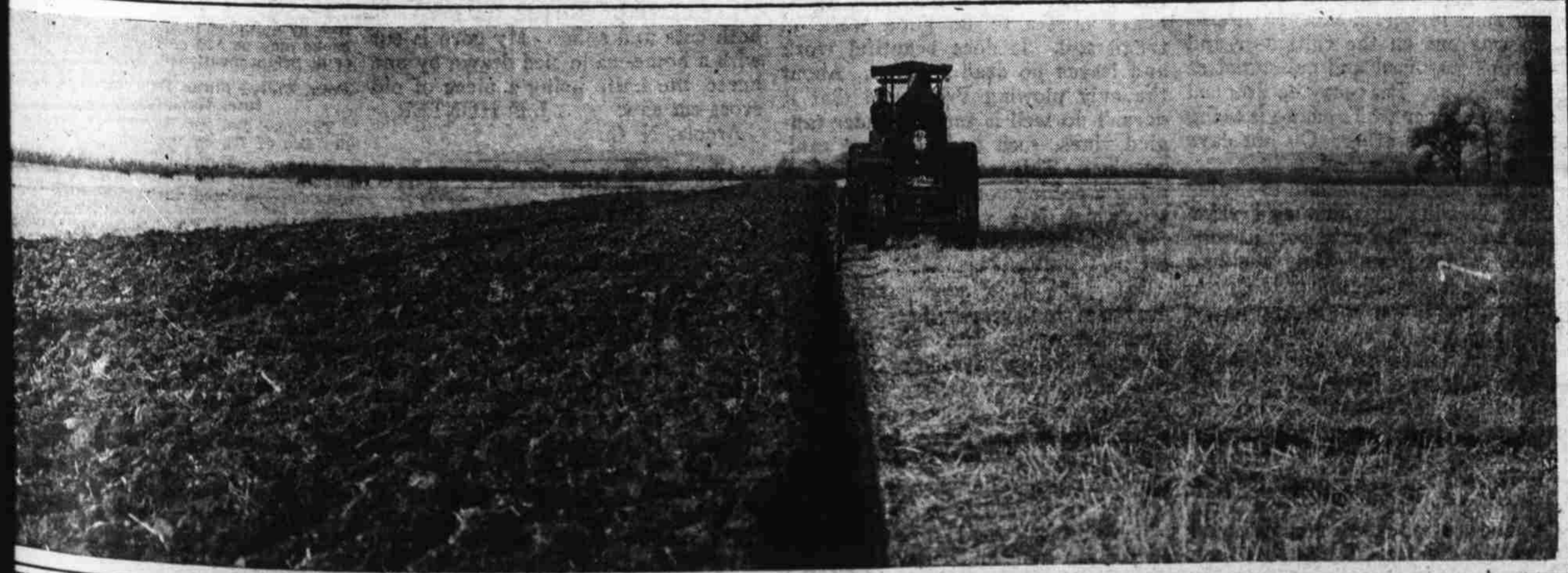
and corn stalk field for the plow. Of course, it is best to use the stalk cutter first, but after the stalk cutter has been used to cut the stalks into pieces, the sharp disks do a fine job of cutting the stalks into small pieces, level the ridges and form a fine soil mulch. The gangs should be set close and run lengthwise over the rows to cut the stalks into very short pieces and pulverize the top of the soil and get the land ready for the plow.

The disk may be used on unplowed land for the following purposes (1) prepare mellow land for grain and other crops, where deep plowing is seldom necessary; (2) to cut and mix barnyard manure, grass and trash so that when turned under the surface soil will not be separated from the

the cotton seed bed can be quickly and easily made by arranging the disk harrow for an inthrow and by adjusting the inner ends of the gangs higher than the outer. With the harrow so arranged a man and two good animals can make much better seed beds and do the work more quickly than several men in the old-fashioned way.

Cotton and other crops come up quicker, grow off faster, and begin bearing sooner on a well settled, firm seed bed; consequently it is not wise to plant on freshly plowed land. When the beds have been made by the use of the turning plow for some time before planting time it is usually necessary to remake them and destroy the little grass and weeds by properly adjusting the disk harrow.

This series of articles will run throughout the year, the next two articles in the series are: February 13—Growing and Saving Soil Fertility. February 20—Full Corn Cribs and Smoke-houses This Year.



The Tractor, Where the Area Farmed Is Sufficiently Large and Free From Stumps, Gullies and Steep Slopes, Will Be a Satisfactory and Economical Source of Power