

# MAKING the FARM PAY

By PROF. P. G. HOLDEN, Former Dean of the Iowa Agricultural College.



Excellent Seed Corn.

## PREPARING SOIL FOR CORN

There are no "ironclad" rules which may be followed blindly for the growing of corn any more than in other farm work.

There is no one best method suited to all sections or to the different soils of a section nor even to the different fields of the same farm. Frequently two very different methods may give equally good results.

"Have good ground, do the work on time, and do it thoroughly," should be the motto of every corn grower.

Nothing can make up for poor ground. Too many are trying to raise corn on old "worn-out" ground that has produced corn, oats and wheat for years. I met a man at an institute in Illinois who said in all seriousness that he was satisfied the seasons were less favorable for growing corn than they used to be, as he could get no such crops as he used to raise. Inquiry developed that he had grown corn for 17 years in succession on the same piece of ground. No wonder the "seasons" were becoming less favorable.

Let us remember that it was but a few years ago that the farms of the corn belt were broken from the virgin soil, and that because we have been able to crop the ground continuously in the past, is no assurance that we may continue to do so in the future with

2. Unless the ground is disked early in the spring there is a loss of moisture and a consequent "firing" of the corn during the latter part of July and August, especially in dry seasons.

3. The fall plowing does not give as good an opportunity to spread manure during the late summer and through the winter.

The soils department of the Iowa State college has conducted many experiments with fall and spring plowing in different parts of Iowa, and in every case the yield of corn was greater on the fall plowing than on the spring plowing.

The mistake is commonly made of leaving the fall-plowed ground without disking until time to plant. The ground has become packed by snow and rain and should be disked or harrowed as soon as the oat seeding is over. This will conserve the moisture and lessen the firing of the corn in August, so common to fall plowing.

Ground that is very rolling and likely to wash should not be plowed in the fall.

### Late Planting Bad.

One of the most serious losses to the corn crop every year is due to late planting. Experiments show that late-planted corn seldom yields as much as that planted earlier, and the quality is inferior. The ground becomes hard and out of condition, the weeds have

First, because the weeds which have been started will be prevented from seeding, and the weed seeds will be brought near to the surface, where they will germinate and be killed by the frost before they have seeded in the fall; and second, there is more spare time for the work.

Late fall plowing is best for soil because:

1. It gives us the benefit of late summer pasture.

2. It is the best possible place to spread the barnyard manure during August and September, as there is the least danger of washing or leaching.

3. The ground can be much better prepared and with less work than when plowed in the spring.

4. There is less danger from damage by cutworms and other insect enemies.

### Spring Plowing Abused.

We often abuse our spring plowing by turning the earth up to the sun and dried winds to bake and dry out, depending upon a shower to mellow the ground before planting time.

With spring plowing it is a good rule never to leave the field at noon or might without harrowing the newly plowed ground. In my estimation no ground can be properly prepared, giving a good seed bed for corn, without the use of the disk.

### Depth to Plow.

What is known as deep plowing is not advisable in the corn belt.

There is seldom any advantage in plowing more than six inches deep. On heavy soils the bad effects of too deep plowing are often apparent for several years.

### Too Deep Planting.

Too deep planting is especially bad when the seed is weak or the spring is cold and backward. When the ground is not well prepared or is very mellow, there is danger of putting the seed down four or five inches when two inches would be better.

### Dry, Mealy Surface Bed.

On the other hand, there is no more serious mistake than shallow planting



Fine Shock of Corn.

in lumpy, dry soil. The moisture is not sufficient for rapid germination, much of it scours or rots, and the remainder comes up unevenly, with a large per cent of sickly plants. This condition is most frequently found where the spring plowing is not followed by the harrow the same day or where the disk was not used in preparing the seed bed and especially when these two conditions are accompanied by a dry, cold May.

### Cultivation.

Cultivation should be level and frequent when the corn is small. It may be deep at first, but it must be shallow later.

Many assume that there is nothing more to do after the corn is planted for two weeks, or until it is up and large enough for the first cultivation. There are others who believe in harrowing and even in cultivation before the corn is up, but on account of the pressure of work neglect it. Where ground is left two weeks and often longer it becomes foul with weeds, which take up the moisture and plant food and also make it difficult to work the corn. The ground becomes packed by the rains and baked by the sun until it is hard and dry.

It is especially important in the case of corn that it should not become stunted when young, as it never fully recovers even under the most favorable conditions.

The time to kill weeds is before they come up and before they have deprived the corn of moisture and nourishment. Where it is possible to do so it is a good plan to cultivate the corn once before it comes up, following the cultivator with the harrow.

This practice of cultivating the field before the corn is up following the planter marks as a guide, is a good one, and especially on old and badly worn ground or heavy clay ground and land that has become foul.

It is a common practice with some to harrow corn after it is up, but I prefer to cultivate and harrow as described above, especially on cornstalk ground. Even on stubble ground the harrow does considerable damage to the young corn.

It is a very common mistake to cultivate shallow when the corn is small and "lay it by" with a deep cultivation. The reverse will be more profitable. There is little danger to the roots from deep cultivation the first time and there is great advantage going deep enough to secure a good mulch.

## NYGREN TELLS HOW HELP CAME

Minneapolis Man Describes the Work of Tanlac in His Case.

Minneapolis, Minn., Oct. 24.—F. O. Nygren, electrician, who lives at 4023 Central avenue, northeast, this city gave a statement on August 12, regarding the surprising relief he gained through use of Tanlac, the Master Medicine.

"For a long time I suffered from stomach trouble," Mr. Nygren said. "I was bothered with accumulations of gas in my stomach and I often suffered with heartburn. Usually I was in a constipated condition."

"I read in the newspapers of the relief others derived from Tanlac and I decided to give this new medicine a trial. The constipation is gone since I've tried Tanlac and my bowels act regularly now. The gas has disappeared from my stomach entirely and my liver also seems to have been placed in good condition by Tanlac."

Tanlac, the Master Medicine, is especially beneficial for stomach, liver and kidney trouble, catarrhal complaints, rheumatism, nervousness, loss of appetite and the like and is a fine tonic and general system purifier.

Tanlac is now being specially introduced and explained in Warren at North Star Drug Store.—Adv.

## MOOSE RIVER

About a foot of snow fell last Wednesday evening thus giving us good sleighing.

Hans Gudvaugen sold at auction all his cattle and farm machinery. The auction was well-attended and prices were very good.

Two of the Knutson brothers made a business trip to Middle River last Thursday morning. Roads proved bad for wagons.

Amund Aase, of Thief River Falls, has been visiting with his brother at Gatzke and is now spending a few days with his sister and brother-in-law, Mr. and Mrs. C. Haraldson.

Mr. and Mrs. Jacobson, who has been visiting at the home of their parents, Mr. and Mrs. Wolden, the past few weeks, returned to their home at the Forks last Saturday.

Mr. and Mrs. Larson, Mr. and Mrs. M. Nelson, Mrs. H. Gudvaugen, Mr. and Mrs. M. Naseth, and Mr. and Mrs. Peterson called at C. Haraldson's last Sunday.

Miss Abrahamson has been staying at the home of Mr. and Mrs. C. Knutson a few days last week.

A number of the people of this vicinity attended the confirmation last Sunday.

## STEINER

Mr. and Mrs. H. Best and daughter Fay were callers at Thief River Falls last Saturday.

Winter paid us a visit last week, Tuesday and Wednesday. A quite heavy snowfall fell here. P. B. Malberg completed threshing for this season last week.

Mr. Wold, a watchmaker of Thief River Falls, called at the Peter Liden home Monday.

John Christianson was a caller at Thief River Falls last Tuesday.

An auction sale was held at the Joseph Peterson farm near Steiner Wednesday, Iver Berg being the owner. The auction was quite well attended and the cattle went especially high in price.

C. A. Swanson was busy last Friday hauling some wood for P. Liden.

Among those around here who attended the Iver Berg auction sale were noted: John Berg and son Harold, Peter Liden, C. A. Swanson and John Kellberg.

Lawrence Best was a caller at the Peter Solem home last Saturday.

August Carlson, a drayman of Thief River Falls, attended the Iver Berg auction sale.

John Berg and son Harold transacted business at Thief River Falls Friday.

Miss Ruth Solem was a Steiner caller Saturday.

Messrs. C. A. Swanson and Fred Cops were callers at Thief River Falls Saturday.

C. A. Swanson and P. Solem were callers at the P. Linden home last Sunday.

Waldie Christiansen threshed for the following last week: Fred Copp, John Kellberg, John Christiansen and H. Best.

Miss Alice Solem, who is teaching school near Thorwick, came home Friday for a few days' visit with her parents, Mr. and Mrs. Peter Solem. Her sister Ruth, met her at Steiner and accompanied her home.

H. Best was a caller at the J. Christiansen home last Monday.

Alfred Solem spent last Sunday afternoon visiting with his friend Julius Liden.

C. A. Swanson was a caller at Thief River Falls last Thursday.

Gust Opseth, of Rosewood, who is erecting a residence for P. B. Malberg, spent last Sunday visiting his home near Rosewood.

John Berg is busy with his fall plowing.

Messrs. Peter Liden and John Kellberg were callers at Thief River Falls, Saturday, on business. Mr. Liden also called on relatives at that place.

Fred Copp transacted business at Thief River Falls Wednesday.

H. Best was a caller at Thief River Falls Saturday.

Miss Lena Riede is at present employed as clerk in G. L. Leisners store.

## THE GOOD JUDGE GETS POSITIVE INFORMATION



JUST put it up to a gentlemanly fellow and watch him take to the tobacco that calls for a small sized chew. A few facts like these appeal to his common sense:— W-B CUT Chewing is rich tobacco. It's shredded, you get next to all the good tobacco taste. The touch of salt helps bring out the flavor. It's not sweetened and flavored to death—you don't have to keep grinding and spitting.

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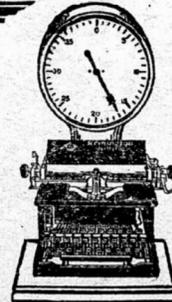
Here is a list of goods that we keep on hand ready to deliver on a minute's notice.

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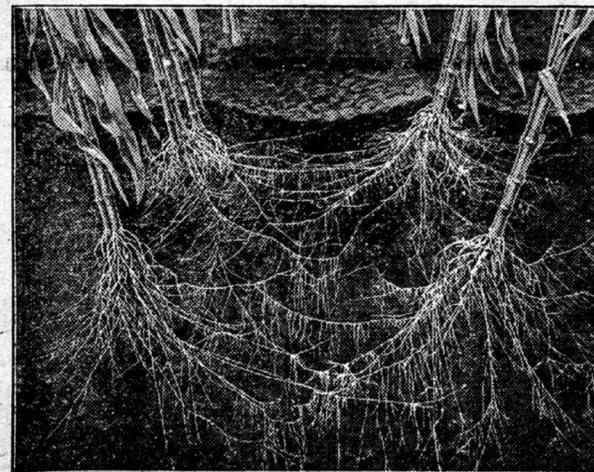
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Roots of Corn Do Not Grow Straight Down as Some Farmers Seem to Think—Notice How Near the Surface These Corn Roots Are—Deep Cultivation Late Will Cut the Roots of the Corn.

credit. The fact is that the time is near at hand when we must give greater attention to the fertility of our soil.

What is needed is more clover, better use of barnyard manure and less of the continuous cropping with corn, oats and wheat.

### Fall Plowing for Corn.

There is a difference of opinion regarding the merits of fall and spring plowing for corn. Among the advantages of fall plowing are the following:

1. The work is done at the slackest time of the year, when both men and teams would otherwise be idle.

2. Having the ground already plowed in the spring gives us time to better prepare the ground, and, what is of equal importance, to get our corn in on time.

3. A better prepared and a warmer seed bed, and consequently a better stand of corn.

4. Less danger from insect enemies, especially in the case of sod ground.

5. Weeds are prevented from seeding and the seeds already in the ground will mostly germinate and be killed by the fall freezes before they have seeded.

Some disadvantages of fall plowing are:

1. Occasional losses from blowing and washing on rolling ground.

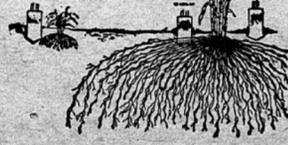
drawn upon the moisture and available plant food, the crop comes to the dry spell in a more critical stage, the proportion of barren stalks is greater and it matures more slowly, contains more water and is much more likely to be caught by the frost.

Every year thousands of farmers lose heavily from late planting. Many of these are good farmers, but are un-

### THE LAST CULTIVATION SHOULD BE SHALLOW

DEEP CULTIVATION EARLY IN THE SEASON SAVES THE MOISTURE

SHALLOW CULTIVATION LATE IN THE SEASON SAVES THE CORN ROOTS



expectedly delayed with the spring work, by a combination of bad weather, sick horses and scarcity of help.

It is generally advisable to plow stubble ground early in the fall.