

Making Money On the Farm

I.—Drainage

By C. V. GREGORY,

Agricultural Division, Iowa State College

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C. V. GREGORY,
Author of "Home Course in Modern Agriculture"

In order to make money on the farm it is first necessary to get the land in shape to respond liberally to the work put upon it. One of the first and most important steps in getting it in such condition is to drain it thoroughly. There are two general types of drains—the drains and open ditches.

About the only place where an open ditch can be used to advantage is in draining large sections of the country where natural drainage is insufficient to carry off the surface water or to provide an outlet for tile. Such a ditch is really an artificial river. Its large size prevents it from becoming easily clogged. It should be made deep enough to provide a good outlet for the systems from the farms tributary to it. The sides should have a slope of at least one to one—run back one foot for every foot of rise.

The Use of Tile.

The major portion of the drainage, however, must be done with tile. In starting out to tile a farm it pays to go at it systematically. Few farmers are able to tile their whole farms at once but by planning the whole system before any work is done and then putting in as many rods as possible each year the farm will in the end be thoroughly drained at much less expense than if the work was gone at in a hit or miss fashion.

The proposed lines of tile should be laid off by a good engineer. He has the tools and ability to do it properly, and a little money spent in this way will be made up many times over in the added efficiency of the system.

The first money that is spent for tile should be put where it will yield the quickest returns. On almost every farm there are sloughs and draws that are too wet to work long after the rest of the field is dry. The loss is not so much from the land that is taken up by these sloughs, though that often amounts to considerable, as to the trouble and loss of time in working around them. A line of tile can be run up to such a place to take out the water and laterals put in later to drain the surrounding ground more thoroughly.

Often after the slough is drained there will be a strip of corn over the tile that will be the best in the field, while out a little farther the corn will be small and yellow. The width of this strip of corn is a very good indication of the distance apart that the drains should be placed. The ground over the tile is warmer and drier in the spring than the other, and consequently the corn gets a better start. Through the summer, when there is no water in the tile, air is flowing down through them. This pulls air down through the soil, making root growth more rapid and the plants more vigorous. A deep root system means a large feeding ground and consequently a larger yield. For these reasons all low, flat lands should be thoroughly underlaid with rows of tile, even though the surface water never stands on them. A map showing the exact location of the drains should be kept so that they can be readily found when it is desired to add laterals to the system.

Planning the Drainage System.

In planning a drainage system there are three especially important considerations—the depth and size of the tile and the distance apart of the drains. More tile drains are put in too shallow than too deep. In most soils four feet is about the right depth. In

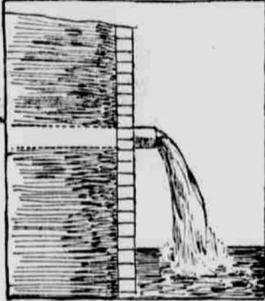


FIG. 1.—PROTECTING TILE OUTLET.

hardpan the tile may have to be laid shallower or the water will never get to them. Deep tile means a deep layer of mellow soil, which acts as a sponge to hold capillary water for the crops. The deeper the tile the farther their effect will be felt on either side.

The size of the tile depends upon the fall and the amount of land to be drained. The engineer who lays out the drain will usually be able to compute the size required.

In estimating the number of acres to be drained by a given line of tile all the land from which surface water flows toward it should be included, as well as all land drained by laterals which empty into it.

The depth of the drains and the character of the soil are the chief factors that determine the distance apart to place the drains. Tile four feet deep

on a sandy soil will draw seventy-five feet on either side, while in clay soil their effect will not be felt a third as far. As already stated, the width of the strip of good corn or other grain over a drain is a good indication of the "pulling power" of the drain. Where a drainage system is being put in a little at a time the laterals can be put in from 75 to 200 feet apart at first, depending on the soil, and others put in between laterals if experience shows them to be necessary.

The Outlet.

One of the most important parts of the drainage system is the outlet. If the drain empties into a ditch or stream a stone barway should be built up to keep the end tile from being washed away. The drain should enter the stream above the level of the water if possible. When it enters below the force of the current is checked, and if the water is carrying much silt some of it will be deposited in the



FIG. 2.—POOR WAY TO LAY TILE.

tile. It is a good plan to use sewer pipe for a few feet back from the outlet, as it is not so easily displaced by freezing.

Many drains are built with an outlet in a box at the side of the road or next to a neighbor's fence. Such an outlet is not very satisfactory, but sometimes it is the best that can be provided. The box should be well built to keep out rubbish. The mouth of the tile in this as well as in other forms of outlets should be covered to keep out small animals during dry weather. The bottom of the box should be at least a foot below the tile. The silt that settles here should be cleaned out occasionally. A much better plan than the use of a tile box is to cooperate with the road authorities or with the neighbors and extend the line of tile to some permanent outlet.

Laying the Tile.

It rarely pays a farmer to lay his own tile, but he should keep close watch of the men whom he hires to do the work. A little carelessness in laying the tile may make the drainage system practically worthless. If at any place the tile dips an inch below the grade line, that inch will fill up with silt, and the capacity of the whole system will be reduced that much. The old saying that a chain is no stronger than its weakest link applies with especial force to a tile drain. No man can lay tile to grade accurately by eye, even if there is water running in the ditch at the time. Remember that it is your money that is paying for the drain and that it is your privilege to have it put in as you want it.

The only way to get the tile laid exactly to grade is to use targets. When an engineer lays out a line of the tile he sets a row of grade stakes, each one marked with the depth the ditch is to be at that point. When the ditch is down nearly to the required point targets are set up at these grade stakes. A target consists of an upright stick on each side of the ditch with a crossbar clamped to it. These crossbars should be adjusted so that they are level and just seven feet above the grade line. For instance, if the cut marked on the grade stake is four feet the crossbar should be three feet above the stake. After a number of these targets have been set a string is stretched across the tops of them. Then a measuring stick seven feet long will just reach from the string to the correct grade line. With one man to hold the measuring stick and another to scrape out the bottom of the ditch, it can be dug to grade very accurately.

Of course both digging the ditch and laying the tile should begin at the outlet. Don't let the men stand on the bank and lay the tile with a hook. Make them get down into the ditch and put them in by hand, standing on those already laid to hold them in place. By handling each tile any cracked or imperfect ones can be discovered and thrown out. After the tile are laid a little dirt should be scraped from the side of the ditch to hold them in place. As soon as the whole line is in no time should be lost in covering the ditch.

(ADVERTISEMENT)

Independent Telephone

Manager Pollock States That The Rates Will Not be Raised.

Below is given a letter from Mr. Clark Perkins, secretary of the Nebraska State Railway Commission, which was received by Manager T. H. Pollock of the Plattsmouth Telephone Co., which speaks for itself. It deals with the subject of telephone rates and is as follows:

Lincoln, June 9, 1909.

Mr. T. H. Pollock,
General Manager Plattsmouth Telephone Co.,
Plattsmouth, Nebraska.

Dear Sir:—

Referring to your favor of the 25th ult., in regard to rates charged by the Nebraska Telephone Co., for its Plattsmouth exchange:

Since our letter of the 1st inst. was written, giving you a copy of the rates of file at that time, the Nebraska Telephone Co. has applied for authority to make the following changes in its rates:

METALIC CIRCUIT.

Individual line, business, reduce from \$35 to \$30 per year.

Individual line residence, reduce from \$24 to \$18 per year and to eliminate all grounded circuit and special rates now in effect at said exchange; also for authority to establish the following new rates:

METALIC CIRCUIT.

2-party line, business \$24.00
2-party line, residence \$15.00
4-party line, residence \$12.00

As it appeared to the Commission that these rates, in no case, cut below the rates charged by the competing company at Plattsmouth, application was granted, the new rates to become effective on and after July 1, 1909. This for your information.

Very truly yours,

CLARK PERKINS,
Secretary.

The Plattsmouth Telephone Company was organized and started in business in Plattsmouth in 1899, and was a pioneer in the independent telephone business. The rates then established were from \$1.50 to \$2.00 per month for business phones and \$1.00 per month for residence phones.

The Plattsmouth Telephone Co. own and operate over 3,000 telephones now; owning nine exchanges and five toll stations in Cass county, so that it is possible to reach nearly every farmer, business man and telephone user in Cass county over the Plattsmouth Telephone Company's lines.

The Plattsmouth Telephone Company operate 600 telephones on the Plattsmouth exchange which is being rebuilt and made an all-cable plant which will insure first class service. The capacity of the Exchange is being increased so that within the next two weeks it will be possible to supply a telephone to every resident in Plattsmouth on short notice.

The long distance service over the Independent or Plattsmouth Telephone Company's lines is all that could be desired, having first-class copper lines to all points within 500 miles. Fine service to Omaha, Lincoln, Council Bluffs, St. Joseph, Kansas City, Des Moines and all intermediate points.

It was the Plattsmouth Telephone Company that has brought down telephone rates to a reasonable price.

Manager Pollock says that no change in rates will be made, the old rates of \$2.00 per month for business phones and \$1.00 per month for residence phones will prevail.

The patrons of the Independent telephone will continue to receive the same courteous treatment which has been accorded them in the past. We therefore solicit your patronage.

Yours truly,

PLATTSMOUTH TELEPHONE COMPANY.

Wedding Bells

On Saturday, June 5, 1909, at the

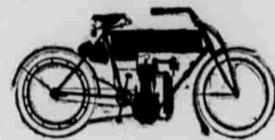
OMAHA BICYCLE CO.

16TH AND CHICAGO

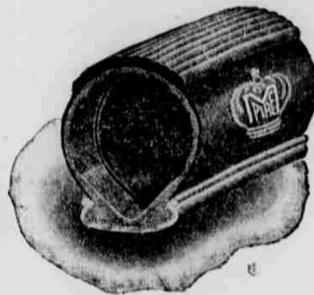
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County Court House Judge Beeson performed the ceremony which united in marriage Mr. Cecil L. Thomas of Long Beach, Cal., and Miss Minnie Stohlman of Plattsmouth, Nebr.

The wedding took place in the court room and but few persons were present it being purposely arranged to have the affair pass off very quietly.

Mr. Thomas is the eldest son of Mr. and Mrs. Walter Thomas who recently moved to Long Beach, Cal., and where Cecil has also been employed in an automobile garage owned by his father and J. H. Helps.

Miss Stohlman is the daughter of Mrs. Aug. Stohlman of this city and enjoys the acquaintance of a wide circle of admiring friends.

The happy couple will make their home with the bride's mother for a part of the summer during which time the groom will be employed in the local shops.

The NEWS-HERALD joins with many friends of these young people in wishing them a sunny and prosperous voyage on the matrimonial sea.

Entertains Bride to Be.

A charming entertainment was given at the home of Mrs. C. S. Johnson Thursday afternoon by Miss Bessie Edwards in honor of Miss Nellie Whelan whose marriage occurred Saturday night.

The guests had been requested to bring their needles and upon their arrival were at needling and talking while they listened to several instrumental and vocal solos by Miss Hattie Hoffman, Etha Crabill, Bessie Edwards, Mrs. E. H. Westcott and Mrs. Johnson all being thoroughly enjoyed.

Two mock weddings were a part of the afternoon's fun, being performed by Mrs. E. H. Westcott while those united for weal or woe were Misses Estelle Baird and Nellie Whelan; and Mrs. C. S. Johnson and Mrs. L. A.

Moore.

A chase for the pot of gold at the end of the rainbow occasioned much sport, the bride-to-be finding it necessary to follow a string through many rooms and over and under much furniture until at last the precious prize was found in a cupboard drawer in the kitchen.

The guests all rested from their laughter a moment to examine the find after which a dainty two course luncheon was served by the hostess.

Before returning home the company danced the Virginia Reel, and the guests were unanimous in expressing the afternoon as having been delightfully spent.

The invited guests were; Mesdames L. A. Moore and E. H. Westcott, Misses Carrie Baird, Estelle Baird, Helen Travis, Pearl Statts, Alma and Esther Larson, Lucille Randall, Hattie Hoffman and Etha Crabill.

Producer to Retailer.

W. O. Fine, traveling salesman for the Western Grocery Co.'s, Mills, was in Plattsmouth Friday seeking interviews with our merchants. This company is incorporated to do business at Marshalltown, Iowa, and claims to do producer to retailer business, thus saving the middlemen's profits to their customers. Mr. Fine has been sent into the territory as a special ice breaking representative—as he terms it—and that he will get business for his firm, there is little doubt as he appears to be a very clever and experienced man in his line. Mr. Fine and family will reside at Lincoln which is about center of his territory.

Mrs. Joslin Passes Away.

Mrs. B. B. Joslin departed this life in the home of her parents, Dr. and Mrs. A. A. Randall in this city Saturday. She was conscious until almost the last. Miss Ina Maie Randall was

born in Nelson, Nebraska, on November 25, 1887, and was united in marriage in the home of her parents in this city on Dec. 23, 1908. She was a consistent member of the Methodist Episcopal church, the Epworth League, was a teacher in the Sunday School, possessed a cultured voice and was a member of the choir, possessed many accomplishments of high order and was highly esteemed and loved by all who knew her. The funeral services were held this afternoon, Dr. D. W. C. Hunting, ex-Chancellor of the Nebraska Wesleyan university, preaching the sermon. The body will be taken to Lincoln Tuesday morning for burial.

Will Teach Here.

Miss Helen, daughter of Judge and Mrs. H. D. Travis returned from a visit at Omaha Friday. Miss Travis has just recently returned from West Point where she was an instructor in languages at the High School. Miss Helen has shown remarkable ability, in her chosen profession and the NEWS-HERALD is glad to note that the city school board of Plattsmouth were able to secure her services for the coming year.

Accident to Shop Man.

Peter Roucka, one of the workmen employed at the local shops on the repair track, received an injury to his thigh this morning which will place him on the relief list for a few days.

He was working on the trucks when a heavy draw bar fell and catching his leg bruised that member quite severely.

He was taken to the office of Dr. Stewart Livingston where his injuries proved to be only painful bruises. The doctor dressed the limb carefully and thinks no serious results will follow.

Acorn cigars 5 cents each. Smoke an "Acorn" and be happy.



JOHN BAUER

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A good, close clip will add greatly to its personal appearance, as well as prevent "dandruff" and "falling out." In other words, your lawn will do better if kept in shape by regular trimming with a good mower. We have them in several styles and prices from \$2.25 to \$15.