## How Tile Drainage Will Help.

It Will Not Only Remove Surplus Water From Our Lands. But Will Also Increase Their Moisture-Holding Capacity, Thus Making Better Conditions for Crops in Wet Weather or Dry.

By A. L. French, Byrdville, Va.

territory the more I see of the business necessity of tile draining certain soils everywhere.

In the mountains tile drainage will turn water-"sobbed," unproductive bottoms into fine fertile land of great value, and because of the small proportion of such level soils these sections contain, it is especially important that every one be put in condition to produce maximum crops every year.

In the Piedmont sections are thousands of acres of spongy soils that can never be depended upon except during droughty years. These soils can be made "as good as new" by judicious tile drainage; taking the surplus water out from below instead of allowing it to rise to the surface to ruin the crops and spoil the looks of the field. Then there are thousands of miles of open ditches running through the sags, between the hills, that should be tiled if for no other purpose than to do away with the open ditches that are now obstructing the work of modern farm tools. But tiling these sags will do more than this. It will allow for the cultivation of the rich soils, now given up to ditch banks, usually the most fertile in the fields, will deepen these soils until profitable crops will become the rule.

The level coast plain country needs tiling the worst way, as soils from which surplus water must evaporate can never be depended upon, and cropping such soils is mostly a gamble. We need a number of well equipped tile-making plants in our territory, especially in North and South Carolina. The writer found a good plant at West Point, Miss., where good tile was being made and sold at a reasonable price.

The ordinary farmer, producing the staple farm crops, will probably want to begin his tiling on the lowest spots on the farm and trench out as he finds time and means to expand his operations. The more of the work he does the more he will want to do, as no improvement that can be made on the farm, will speak in such a convincing way as will properly laid tile drains, and the beauty of the business is that the longer the tiles are used the better they work, and that, without any additional expense, if the work be thoroughly done in the beginning.

The sized tile used for a certain section of land will depend largely upon the fall available, the nature of the subsoil, the average rainfall, etc., and no fixed rule can be made to apply to all cases, but when we get at the main reason for tile drainage the matter will become plainer for us. The principal thing in tile drainage is not as some seem to think—the running of water from the soil, but the lowering of the water table, making said soil several times its present depth, thus providing for a much larger moisture-holding capacity. This explains the fact that rather small-sized tile will take care of the surplus water from a piece of land that, if only surface drainage be depended upon, will require ditches of ten times, or more, the size of the tile necessary to properly handle the surplus water.

When small sags are to be drained where the lines of tile will be not more than 20 rods 'n length, 3-inch tile will be found of sufficient size

HE BETTER acquainted I get and will do the work as well as largwith The Progressive Farmer er and more expensive tile. But when several of these lateral drains are connected with one main, this main should, of course, be of a size equal to the combined capacity of the small

> In another paper I shall go into the details of laying tile drains and that paper will answer hundreds of questions we have been asked by Progressive Farmer readers during the past ninety days. The strong interest being manifested in the subject of tile drainage argues well for the intelligence and enterprise of our people. A thoroughly tile-drained soil filled with vegetable matter will make us masters of the situation, whether the seasons be wet or dry or just "megium."

WORK FOR LEISURE DAYS.

Paint the Wagon and Farm Implements, Fix up Fences and Gates, Patch the Roofs, Clean Out the Well.

Messrs. Editors: Now that the busiest farm work is over, at least for the present, I wish to make a few suggestions to the farmers, for their leisure time. Many of them are taking a season of rest and vacation, but the progressive and wideawake farmer can find plenty to do at all times. I am not opposed to farmers taking a much needed rest occasionally, but do believe too many of us more around, killing much valuable time, which if used properly would mean much to us in the future. I find plenty of light work around the house and out-buildings to keep me right busy, and am more contented, and I believe others could do the same.

How about your wagons, buggles, surries, plows and other farming im-

plements? Do they need a coat of the owner failed to patch the roof, new paint? If they have not been and he knew it needed it-but put painted since last summer, and have it off till another time. been exposed to all kinds of weather, they certainly do. If this is the case, go and buy one quart of paint, one pint of turpentine and a small brush. Wash and clean the wagon or implement and see how much good your paint will do, and see how much space one quart will cover. If you do not have enough, buy more, for money spent painting your wagons and farm machinery pays handsome dividends. It will keep the air out and will also prevent rain and water from getting in and causing it to rot or rust. It will look better and you will be proud to see how much you have accomplished. Besides it adds to the life of your machinery.

Now is as good time as any to repair that old fence, put in new posts where needed, tighten up the wire, or nail on a new plank where needed. Those gates that have been swinging and hanging need repair and bracing-see that you do it.

If the granary roof needs patchcrib last winter with fully 100 bush- ton and all my stock seem to relish it. els of corn rotten, simply because

Clean out the well, draw off the water, and have some one go down and take up what mud and trash might be in it, and insure yourself and stock some good water.

There are hundreds of other things I might mention, but these suggestions may put you to thinking, and to work, and you will be the happier thereby. T. D. BROWN.

Rowan Co., N. C.

## Save All the Hay You Can.

Messrs. Editors: More soy beans have been planted this year in Pitt County than ever before—and they are fine. I saw the other day several lots planted in 31/2-foot rows that had entirely covered the land and were at least, 3 feet high.

I would suggest that the farmers also cut the bull grass that is plentiful in the low places in the fields. Cut just as about one-half the plants have formed the head and this will ing, do it now, for it doesn't pay to admirably supplement the peavine let the rain in on it. I saw a corn hay. I have cut and saved about one

A. J. MOYE.

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