

Professor Massey's Editorial Page.

Farm and Garden Work For April.

F YOUR land is high and mellow and well drained, why not try good preparation and drilling the cottonseed on level land. Then start the cultivation, before the seed germinate and get above ground, by running the smoothing harrow and breaking all the crust. When the cotton is up on a bed you run through after it germinates and leave all the crust right around the plants for the wind to chafe the stems against. But when the harrow is used the crust is all taken away. Then use the weeder both ways as soon as the plants show, and you will rapidly destroy the grass that is just starting. There is nothing like rapid work at this time to prevent getting in the grass in rainy weather. It takes hard work to kill grass after it gets a few inches high, while it takes little time with the wide weeder to kill it as soon as the seed germinate.

Then keep using the weeder, and if your rows are run out exactly, you can take out two teeth over two rows and keep the weeder going till the cotton is near blooming. Then if you have a Keystone weeder you can shut it up like a cultivator and keep on scratching, and as you do not turn up fresh earth with more weed seed, you will have clean rows.

But while this can be done with the weeder I would prefer to use a two-horse riding cultivator after the crop has been brought to a stand, and thus cultivate both sides of the rows at once, setting the cultivator to run shallow. For we must remember that the roots in the soil are feeding the tops, and cotton roots run far and wide across the rows and the surface roots are within three or four inches of the top of the ground, and any deep cultivation, or any use of a turning plow, will not only tear the roots, but will turn up soil to dry out and weed seed to grow.

BUY COWPEAS NOW.—If you have not saved your own seed, do not wait till sowing time when the price has gone up, but buy early. Do not imagine that you can not afford to sow peas because the price is high. You can not afford to neglect them. Cowpeas and crimson clover are the team that will bring prosperity to the Southern farms if properly used and fed. If you can not feed beeves, you can at least feed hogs, and there is no better place for the hogs than a pea field, and no better way in which to make the peas of value to your soil. At present prices, the feeding of hogs promises to be the most profitable industry on the farm.

CORN PLANTING TIME.—If you have, as you should have, a crop of crimson clover to turn for corn, do not be in a hurry about it. The largest crop of corn I saw last summer after clover was planted after the clover was dead and had done all that it could do. We have plenty of time to make corn in the South without hurrying in the spring, and it is far better to let the clover mature and then turn and harrow it and plant on the fresh and warm soil where the corn will grow off rapidly.

But in turning the clover do not try to turn it over flat, but edge it up nicely. Turned under flat it may interfere with the rise of capillary moisture and the crop may suffer from drouth. But edge up the furrows, even if a little clover is left on top. It will do no harm at all.

You may have bought seed corn. Do not plant it till you have tested its germination by taking a few grains from each ear you intend to use, putting them in squares marked on a piece of cotton cloth laid on a box of wet sawdust and covered with a gunny sack and placed in a warm place. You can soon see the percentage that will germinate. It pays to test the seed and avoid blanks in the rows.

Take off the tip and butt grains of the ears, not because they will not grow, but because in planting with a corn planter you want grains of uniform size to make the machine drop right.

IN THE GARDEN.—April is a busy month here. The tender seeds can now go into the soil. Snap beans are to be started, onion seed sown for sets, sweet corn planted, and the early potatoes work-

ed. Try to plant in a space together such crops as will soon come off, such as snap beans, radishes and early beets, so that you will have quite a space for the succession crops. The succession crop of cabbages to follow the Early Wakefield should now be ready to set. Cauliflower plants set in early March should be encouraged to grow as rapidly as possible so as to get them headed before the weather gets too hot.

Do not follow the Northern plan of sowing parsnip and salsify seed now. Wait till July for that.

As soon as you have the first planting of snaps above ground, plant more and keep that up till September and you will have an abundant supply all summer. Then as each planting of snaps is off plant more corn for a succession of roasting ears, and keep that up till August. In short, keep the garden at work all the time.

Set good strong tomato plants in rows three feet apart and two feet in the row, and put a strong stake to each plant and train it to a single stem, pinching out the side shoots as they show. You can get better crops in that way than by letting them tumble.

Sow late in the month seed of tomatoes in the open ground to take the place of the early ones that may become exhausted in midsummer. Keep the onions sown early perfectly clean and thinned to three inches. Pull the earth from them as the bulbs form, so the bulb will set on the ground, and only the roots under, and you will get far better crops.

Green onions tied in bunches will sell well almost anywhere in town, and can be made very profitable. Work the garden for all it is worth, and manure it heavily, and you will find that it will be a profitable spot, and what your family does not consume, you can take to town whenever you go, or to the factory village. In the South there need not be a day in all the year when the garden will not give you something.

Celery seed should be sown the last of the month. Sow in rows on the surface and pat them down with back of spade. Then lay a gunny sack on the bed and water lightly, and the sack will keep the surface moist till the seed germinate.

Matters of Interest Just Now.

HUMUS IS THE thing we must continue to insist upon. Dr. Butler shows how we have the advantage of the West in everything else. The Southern soils on the uplands did not have as much humus as the Northern uplands in the start, for in the open woods of our hills the leaves are blown to the lowlands and hollows, while in the North the heavy snows pack them down to decay where they fall.

We have better corn weather, no risk that frost will catch the crop in an immature state, more rainfall, if we only plowed deep enough and practiced shallow and constant level cultivation to retain the moisture; and all we lack is the mellowing, moisture-retaining influence of the vegetable decay with its swarm of living organisms that are continually bringing food into availability in such a soil.

Dr. Butler says: "We can beat the West whenever we set out to do it." Every great corn contest for yield per acre has been won in the South with the Southern prolific corns, and I do not believe that there will ever be a corn developed for the North that has this prolific character, for associated with the making of more ears per plant comes in the need for a long season to mature corn of this character.

We have shown that we can beat the Corn Belt in product per acre when we try, and now we want to try to bring up all our acres to such production.

It can be done, and done in an economical and profitable way, by good farming and an everlasting abandonment of the old planting idea and gambling on the chances with a little low-grade fertilizer. I asked a trucker here to-day what character of commercial fertilizer he uses. He said that nothing less than 7-6-5 would give him the results he wants, that he had lost thousands of dollars by using a low-grade fertilizer, and wanted plenty of nitrogen to push his early crops along.

This, of course, is for growing early truck crops, and our truckers have learned that they must have a high-grade fertilizer for these. On the other hand, I thought of the thousands of farmers who are using 200 pounds of 2-8-2 with the hope of squeezing a little more cotton out of the land from which all the humus has been burnt out. They do not need a fertilizer so high in nitrogen

as the truckers do, but they do need to use more heavily the phosphoric acid and potash to get large crops of peavines on the land for hay and crimson clover to turn for the cotton and corn and for putting humus-making material in the soil.

WHAT SORT OF FERTILIZER?—Mr. Miller tells you how to find out, and you can find out more about your soil by plot experiments than any chemist can tell you by making an analysis of the soil. And you can find out, too, that the chief thing needed in our old soils is phosphoric acid. You can get the nitrogen from the air by the growing of peas and clover, but to grow these successfully you must have an abundant supply of phosphoric acid, and in the lighter soils plenty of potash, too. Supply these in a liberal manner and the peas and clover will do the rest if you feed the forage and return the manure to the land. It is humus-making material you need far more than commercial fertilizers containing nitrogen.

KILL THE GRASS AS IT STARTS.—It is a hard job to get out of the grass when you are once in. It is an easy job to go rapidly over a field with smoothing harrow before the crop comes up and then with the weeder keep down every sign of crust. It takes a mere scratch to destroy grass that is just germinating from the seed, and if you keep up the shallow cultivation through the season, you kill all the grass seed that are within the limit where they can germinate. But the man who waits for the grass to get the start has to turn a lot of earth to cover it, and he brings up more seed near the surface to sprout, and has the slow work to do over again, all because he did not have an implement that he could run rapidly over several rows before the grass got a start.

REPEATING FERTILIZERS.—The fact that a second application of fertilizer gave Mr. Wannamaker more crop simply shows that the crop had not as much as it could use in the first application, and if the first application had been more liberal, or equal to both, I have no doubt that as good, or better, results would have been had from a single fertilization. The only case in which I would use another application after the first would be where in a wet season the nitrates had been washed away early, and in that case an application of nitrate of soda to the growing crop would be of benefit. When a man does not put on enough at the start he may find the additional application of benefit, but where there was plenty used at first, there will be little results from another application.

Caustic Lime or Ground Limestone.

CORRESPONDENT, who is one of the many interested in lime and its effects on the soils, writes as follows:

"Please tell me which is better to use on land, caustic lime or ground limestone? Will caustic lime destroy the humus in the soil? How long will it take for the lime to take effect? When should it be applied to the land?"

To him I made this reply: It depends largely on the condition of the land as to whether I would use the freshly slaked burnt lime or the ground limestone. If the soil is well supplied with humus and needs lime from being in an acid condition, I would prefer to use the burnt lime slaked with water to a powder. The ground rock applied heavily will gradually sweeten the soil and bring about conditions similar to those in lime soils. But we use either, not as manure, but as a reagent for bringing about mechanical changes in the soil, and sweetening it and releasing plant food. Lime hastens the nitrification of humus and thus brings it into use as nitrate, and if the humus-making material is not kept up it will, doubtless, aid in destroying it. Twenty to twenty-five bushels per acre is enough in any case. It is best applied to the land after turning a sod, and should then be well harrowed in, as it sinks in the land and should be near the top so as to pass through the whole soil, on which it begins to act at once.

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