



What Farmers Want to Know

By W. F. MASSEY

PLOWS AND PLOWING

A Discussion of Some Implements That Do Good Work—How to Break Land

A VIRGINIA correspondent wants to know something about the best plows, and if there is any advantage in the riding plow with wheels. There is a wonderful variety in moldboard plows, and the shape of the moldboard has a great deal to do with the draft of the plow, and the way in which it turns a furrow. For many years I used only the Oliver chilled plows, from a one-horse size to a three-horse plow. Before the introduction of the Oliver I had used a number of varieties of cast iron plows, the Miner & Horton, and all the older sorts of the common cast iron kind that had to be polished by use. The smooth, hardened surface of the Oliver was a vast improvement, and forever abolished the old cast iron, unhardened and unpolished plows. The one defect of the Oliver is its liability to choke where there is much foul growth on the land, and in such land it badly needs a revolving coulter. I found that the Syracuse plow had all the advantages of the Oliver, and was so arranged as to be less liable to choke.

Many years ago I tried a steel plow the moldboard of which was modeled on a segment of a cylinder. I forget the name of it now, and have often wondered that it disappeared, for it did excellent work, and edged up a furrow nicer than most plows. More recently I have had in use a two-horse plow made by the W. J. Oliver Co., of Knoxville, Tenn. This is one of the lightest running plows of its size that I have ever used. The great advantage of the riding wheel plow is that the lower wheel keeps the plow right to its cut and a careless plowman cannot take more furrow than the plow is designed to take. In fact, out at the farm not long ago I saw one of the tenant's daughters about 15 years old sitting on one of these plows and with a pair of mules doing as good work as any one could do.

The average plowman will do better work with one of these plows than with any other, for the average negro wants to cut and cover by flopping the furrow over and merely tearing the sod loose on the outside while running a fair furrow on the landside, thus merely running a series of grooves in the soil, because he will always try to cut more furrow than the plow is intended to take. He cannot do this with the riding plow with wheels. Then of course it is far easier on the man riding with nothing to look after but his team and the furrow wheel, and there will always be the uniform depth to which the plow is set to run, and in this way the whole land is plowed and not a series of grooves with hard ridges between them.

I saw this once where a heavy flood of rain had washed off the plowed ground in a space on a steep hill, and on the hard clay below the plow track there was almost a series of steps made by the careless plowman.

Then, on a heavy clay loam, the sooner the harrow follows the plow the better, for if the upturned soil is allowed to dry and harden the after breaking of the clods will be much more difficult. For this first chopping of the furrows there is nothing better than the cutaway disk. On a sandy soil a fine preparation of the surface can be made by the Acme harrow, and in some situations the spring-tooth harrow does good work, but if there is much trash turned under it will pull out too much.

Then for the final preparation the steel-frame sectional harrow with spike-teeth does excellent work, and with the teeth turned slanting back

it makes the best implement for covering grass and clover seed. For preparing land for fall grain following corn or a pea stubble, the disk of the cutaway is the best possible implement if followed by the steel-frame sectional drag to make the surface fine, for the finer the surface for sowing fall grain the better.

Patent Insect Killer

FROM Alabama: "We have a man in our county trying to sell a remedy for killing insects on fruit trees which he calls Dr. Odom's Peerless Insect Killer. Please tell us what you think of it. It is said to be patented."

I do not know anything about the remedy you mention, and there is no need to invest in any secret or patented insect killers, for you can get from your experiment station at Auburn full directions for the use of the various arsenates for destroying insects on fruit trees, and any of these secret preparations probably

four years ago. Today it would puzzle any one to find a plant of nut grass in my garden. I cleaned it out by merely not allowing it to make green leaves above ground. Chopped off today it was up tomorrow, and it was chopped off again. In a small space this is the best way, for no plant can live long if not allowed to make green leaves.

In the field you can grow smothering crops. Some say that sweet potatoes will run it out. I have never tried this. But if that field that has been in cultivation for 60 years had been run in a regular rotation of crops there would have been no nut grass, as it would not have had a chance to spread. If, when the field was in corn you had sown peas thickly at last plowing, and then cut and shocked the corn and prepared the land and sown oats, and followed the oats with peas and the peas, after curing for hay, with crimson clover, there would have been no chance for the nut grass. A constant succession of smothering crops that will at the same time be making feed for stock and improving the land is about the best way to keep the land clear of any weeds. Constant cultivation year after year in cotton spreads the nut grass, and after the cotton is laid by it goes to seed and spreads farther.

carbon bisulphide remedy which we have often printed. That is, place them in a box that can be closed up tight and pour the chemical in a pan and set it on top the peas and cover tight till it evaporates. Keep fire away from it, as it will explode.

The horse has probably been eating damaged forage. Rotten hay or straw fodder will cause the trouble. Give the horse only sound feed.

Orchard Inquiries

FROM North Carolina: "Is it too late to sow clover? Is clover good for chickens to run on? I have them in the orchard, and is it not best to seed grass or something among the fruit trees? The ground has been used as a garden, and the fruit falls from the trees before ripening. Is the soil too rich? My peach trees have scaly and rough bark and about on the trunks and at the base is a jelly-like substance. Please tell me what to do with them. When should I prune Concord grape vines? Do you prune James grapes?"

If the soil is kept fertile it is best to have grass in the orchard and mow it now and then and leave it on the ground as a mulch to the trees. The poultry can run in the orchard. It is too late to sow clover for them to mow. You could have sown it in September and by this time it would be large enough for the chickens to pick.

Your peach trees have been neglected. It may be that there is San Jose scale on them. Better spray them with the lime-sulphur wash, which you can buy already made and dilute for use. Then clean away the gum and cut out the borers that are killing the trees. Whenever you see gum at the base of a peach tree you may be sure the borers are there. Clean away the gum and all rotten stuff and follow up the track of the borer and dig it out. Do this every spring and fall. Then after spraying the trees give the trunks a thick coat of whitewash. Prune Concord grapes in early March. November is the best time to prune James and Scuppernong. Cut out old stunted wood and train out the one and two-year-old wood.

Aphides on Cabbage

I AM badly bothered with lice on cabbages and turnips. At this season of the year they work on the roots and suck the life out of the plants. If you know of anything I could put in the furrows when I plant the seed or set the plants, I will be glad to know it."

If you use tobacco stems liberally in the furrows they will prevent the lice and feed the plants too. To clear them off one of the best things is an article that is generally sold by seedsmen, called Black Leaf 40. This is a concentrated nicotine extract that can be used as a spray. But if you can get some tobacco stems you can make your own spray by boiling them down to a strong decoction and using that for spraying. Tobacco in some form is the best specific against plant lice or aphides of any sort and on any plant.

Early Cabbage Plants

I WANT to set cabbage plants for spring heading. What is the best variety and what fertilizer is best on sandy loam?"

The Early Jersey Wakefield is the earliest market cabbage, and the Charleston Wakefield is a little later and larger. Make a fertilizer of equal parts of cottonseed meal and acid phosphate and use 1,000 pounds an acre in the furrows and bed on it and open small furrows in the beds and set the plants deep enough to cover the stems. Now is the time for setting, and you will probably find the plants advertised in The Progressive Farmer.

I like the lead the Progressive Farmer is taking in state, county, and neighborhood improvement and uplift.—F. B. Brown, Glass, N. C.

WORK

A SONG OF TRIUMPH

By Angela Morgan, in The Outlook

Work!
Thank God for the might of it,
The ardor, the urge, the delight of it—
Work that springs from the heart's desire,
Setting the soul and the brain on fire.
Oh, what is so good as the heat of it,
And what is so glad as the beat of it,
And what is so kind as the stern command
Challenging brain and heart and hand?

Work!
Thank God for the pride of it,
For the beautiful, conquering tide of it,
Sweeping the life in its furious flood,
Thrilling the arteries, cleansing the blood,
Mastering stupor and dull despair,
Moving the dreamer to do and dare.
Oh, what is so good as the urge of it,
And what is so glad as the surge of it,
And what is so strong as the summons deep
Rousing the torpid soul from sleep?

Work!
Thank God for the pace of it,
For the terrible, keen, swift race of it;
Fiery steeds in full control,
Nostrils aquiver to greet the goal.

Work, the power that drives behind,
Guiding the purposes, taming the mind,
Holding the runaway wishes back,
Reining the will to one steady track,
Speeding the energies faster, faster,
Triumphing over disaster.
Oh, what is so good as the pain of it,
And what is so great as the gain of it,
And what is so kind as the cruel goad,
Forcing us on through the rugged road?

Work!
Thank God for the swing of it,
For the clamoring, hammering ring of it,
Passion of labor dally hurled
On the mighty anvils of the world.
Oh, what is so fierce as the flame of it,
And what is so huge as the aim of it,
Thundering on through dearth and doubt,
Calling the plan of the Maker out:
Work, the Titan; Work, the friend,
Shaping the earth to a glorious end;
Draining the swamps and blasting the hills,
Doing whatever the spirit wills,
Rending a continent apart
To answer the dream of the Master heart?
Thank God for a world where none may shrink,
Thank God for the splendor of work!

depend on the same things. Without knowing what the article is composed of, I could not give an opinion. Any one can patent any recipe they please, and the patenting does not make it any better. Better avoid any one selling secret remedies for plants, animals or mankind.

Preventing Peach Tree Borers

FROM Mississippi: "Please tell me how to get rid of borers in peach trees?"

The only effective way is to go over the trees spring and fall, and wherever gum is seen at the base of the tree go to work and dig out the borer. A heavy coat of whitewash will deter the moths to some extent, and wood ashes around the base of the tree will have a slight effect in preventing their laying the eggs, but regular examination of the trees and cutting out the borers is the only thing to do.

Nut Grass Again

FROM South Carolina: "I have about one-fourth of an acre set in nut grass in a field of nine acres that has been in cultivation for 60 years. The nut grass started in a small way four years ago, and now has spread over one-fourth to one-third of an acre. How shall I get rid of it?"

It started in a small way four years ago, and you let it go to seed every fall, and there are thousands of plants that come from seed to one that comes from the nuts. I have told more than once how I cleared my garden of it. The garden had been lying out for years when I bought it, and was a mat of nut grass

Good farming is the best way to keep down weeds.

Sundry Questions

FROM Florida: "What is the best early Irish potato to grow for market? I am 12 miles east of Jacksonville. Is cottonseed meal a good fertilizer? Land had peas and crabgrass on it, and these are turned under, and I want to plant potatoes the middle of December. Then I will follow with oats. Can sheep be sheared now? The wool is long and they rub it off. I have saved some cowpeas for seed. How can I keep the bugs out of them? Have a fine horse which gets the blind staggers. What shall I do?"

The Irish Cobbler is as good as any early potato and more commonly grown. Cottonseed meal is good as a source of nitrogen in the fertilizer, but after peas you will need more phosphoric acid than nitrogen. But the meal will furnish a little potash which will be hard to buy, and you could make fertilizer of 1,000 to 1,500 pounds an acre with one-third cottonseed meal and two-thirds acid phosphate.

You will run some risk in planting potatoes the middle of December, for in your climate they will come up at once, and I saw some years ago just west of you a patch that had been cut down by frost twice in January. I do not believe there will be any advantage in planting till the January frosts are past. You can shear sheep in your climate if you keep them under cover in cold weather.

Get some moth balls and mix them through the peas to keep out insects. If live insects appear then use the