ALL ROUND THE FARM

CULTIVATORS AND CROP CULTIVATION

III.—Styles of Cultivator Shovels

[Under the above heading a series of five articles will appear. These articles should be read by every farmer interested in raising a maximum corn or cotton crop.]

THERE are almost as many varieties of shovels and teeth used on cultivators as there are makes of automobiles. It is true that the land in some sections of the South demands the use of different cultivators and cultivator attachments than those in another section but in a large majority of cases the same style of shovels can be used in both.

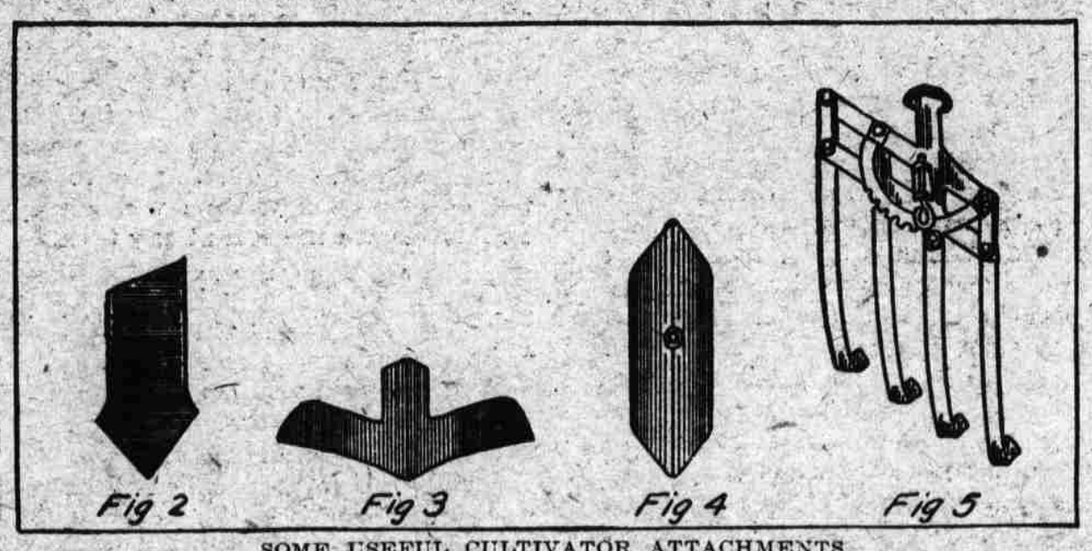
The disk cultivator, Fig. 1, is especially recommended for use before planting in bedding up land, in working these beds down more level, or merely to loosen up the beds just ahead of the corn or cotton planter. It can also be used for the first one or two cultivations of the young corn or cotton. But for all-purpose cultivation the disk cultivator is not as satisfactory as some styles of shovels, sweeps, or teeth.

Early cultivation should be deep, and consequently the best attachment for this purpose is the plain two and one-half to four-inch V-point shovel, Fig. 2. A six-shovel cultivator set to penetrate three to four inches will destroy or cover all young weeds and will assure a good layer of loose soil being left to hold the soil moisture throughout the growing period of the crop. After the first or second cultivation these shovels should be replaced by sweeps, Fig. 3. These will not penetrate deep enough to injure the rapidly spreading roots of the growing corn or cotton, but if kept sharp, will destroy all weeds and leave a good, loose mulch on the surface of the ground. On a six-shovel cultivator, eight or ten inch sweeps should be used. The two outside shovels do not need to be removed until about the last cultivation.

Many farmers find the spring-tooth attachment, Fig. 5, very satisfactory, especially for late cultivation. For the first two or three cultivations they do not penetrate deep enough to thoroughly open the surface and provide a good layer of loose soil so essential for proper moisture control. The "diverse" or "Gee Whiz" one-horse cultivator is merely a spring-tooth walking cultivator. The one-horse walking cultivator should be a five-shovel machine equipped with the shovels shown in Fig. 4. These can be used for early cultivation and then removed and the eight-inch sweeps, Fig. 3, attached in their place.

F. R. JONES.

FIG. 1.—THE DISK CULTIVATOR AT WORK



SOME USEFUL CULTIVATOR ATTACHMENTS

PREPARE STORAGE ROOM FOR SWEET POTATOES

One-fifth of the Crop Is Lost Annually Through Careless Methods of Handling and Lack of Proper Storage Facilities

ONE-FITH of the sweet potato crop of the Southern states—10,000,000 bushels of the average crop of 50,000,000—is lost annually by decay. Careless handling at harvest time and improper storage cause almost the entire loss. To save these 10,000,000 bushels to the food supply this year and also take care of the probable increase in production is the object of efforts the United States Department of Agriculture is making to induce growers in the South to prepare well-ordered storage houses as soon as possible for the coming harvest.

Storage can be provided by converting vacant buildings into storage houses, or in specially constructed buildings. Two things are essential in the store room—good insulation and provision for thorough ventilation. These things are provided for in plans for a model storage house given in Farmers' Bulletin 548, "Storing and Marketing Sweet Potatoes." The plans there described are for a building of 2,500 to 3,000 bushels capacity, but the principles of construction can be as readily followed and applied in providing storage for 500 bushels or for 50,000 bushels.

It is economy to build a substantial sweet potato storage house, because it will last longer and require less attention than a cheap, poorly constructed one. It would be possible to keep sweet potatoes in a cheaper and less carefully constructed house, but the attention required and the additional fuel used would soon exceed the cost of the extra care and material required in a better one. The chances of loss are much greater in a poorly built than in a well built house.

Storage houses may be built of wood, brick, cement, or stone. Wooden houses are preferable because they are cheaper and easier to keep dry. It is difficult to keep moisture from collecting on the walls of a cement, stone, or brick house. The house should be built on posts or piers, so as to allow a circulation of air under it. The "dugout," or a house built partly under ground, fails because it is practically impossible to keep this type of house dry, and moisture in the storage house will cause the potatoes to rot. The sills should be placed on posts or pillars 12 to 15 inches from the ground, or just high enough so that a wagon bed will be on a level with the floor of the house.

On many farms in the South there are buildings, such as abandoned tenant houses, that could be converted into sweet potato storage houses at very little expense. Where there are such buildings they should be used rather than to build a new house. These houses will usually need to be ceiled on the inside. For this purpose 2 by 4-inch scantlings should be set against the wall and covered first with building paper and then a layer of matched lumber. The windows and doors should be made tight and ventilators put in where needed. The bulletin already mentioned describes how the bins may be made.

MEETING THE HIGH-COST-OF-LABOR PROBLEM

Better Management Lessens Labor Needs—More and Better Machinery and Horses Will Help

THE exodus of colored help from the Southern states to Northern cities, where munition and industrial plants offer high wages to common labor, has put a severe crimp in the cropping schedule and farming activities of many Dixie farms. In my section I have found it advisable to hire farm labor by the year, supplying married men, who are more permanent and contented than single men, with houses, garden patches, fuel and an average of 300 pounds of pork, one barrel of flour and eighteen bushels of corn meal, in addition to a cash wage of from $200 to $250 per year. It means added bother and annoyance to have to fool with rations, but most of the married Southern laborers are accustomed to such arrangements and will not hire for an out and out cash wage.

My experience has been that month hands and day labor are not dependable. They are with you today and without warning probably leaving you tomorrow in many cases. Single men usually are very independent, and as soon as things do not suit them they quit. Married men have to care for their families and are never so hasty about taking or leaving a job. I find that it pays to locate the best laborers in my section and pay them a little premium above the average wages to obtain and retain their faithful service. It pays to study the individual workers and to treat them according to their temperaments. A sluggish worker needs driving and supervision, while a man of nervous makeup who is active, energetic and conscientious will do better where he is placed largely on his own resources and made responsible for the satisfactory performance of his work. It pays to treat farm labor kindly and considerately, and to remember that the workers are just as human and susceptible to courtesy and kindness as you are yourself.

Scarcity of labor obliges me to use heavier machinery and larger horses in order to increase the efficiency of man labor. It compels me to utilize livestock in the handling of crops which with an abundant and cheap labor supply could be harvested and marketed for cash. Lack of help makes for the practice of a simple rotation and system of management. It leads to the lessening of losses by the control of leaks. It develops intensity of operation and production, for the farmer soon appreciates that if he cannot have as large an acreage in crops he must aim to increase the yield per acre of the land which he is able to till.

Four or five horses to the double-action disk harrow under the direction of one man will accomplish more and better work than will two or three single disks which will require three drivers. A two-bottom riding plow drawn by heavy horses is more economical of labor than two moldboard plows. Five or six horses hitched to the heavy binder will cover more ground and cut more grain than if the horses are used on two smaller machines with twice as many men. A gasoline tractor of adequate size and power will minimize soil preparation work on the farm, while it will prove valuable at threshing and silo-filling as well as wood-cutting times. The use of such an outfit involves experience and knowledge on the part of the owner concerning its proper operation and repair.

I can cut down livestock labor expenses by grazing rye during the early spring, removing the animals in time for the grain to mature and then "hogging off" the crop with swine. By the use of hurdles and temporary fences I can graze crops of cowpeas, soy beans, clover and alfalfa instead of harvesting them. I can "hog off" a portion of the corn crop. In fact, under present conditions it is most profitable to directly convert field crops into meat products or into milk, cream or wool by obliging the animals to harvest the crops, instead of performing this work with expensive man labor and marketing the produce as cash crops.

Instead of extra farm hands we will use this year a gasoline engine for pumping water, sawing wood and grinding feed; a seven-foot-cut binder; a double-action disk harrow; a farm water system; seven and eight-foot-cut, triple-geared mowers; hay loaders where the ground is sufficiently level; manure spreaders; gang plows; tractors and combination tools for harvesting and threshing a crop in the field.

G. H. D.

Squeaky Auto Springs

SQUEAKY auto springs are annoying, and the only way to overcome this is by oiling them with graphite or heavy grease. This is objectionable, however, as it causes dust to collect on them, hastening wear and making them unsightly. To overcome this, wrap the springs after they have been oiled with adhesive tape or heavy cord the color of the car. This will prevent the accumulation of dust, and will not look unsightly if tape or cord of the proper color is used. If heavy cord is used and the springs are well wrapped, it will increase their riding qualities as well as strengthen them. This is proved by the fact that the springs on most racing cars are wrapped in this manner.
—P. T. H.