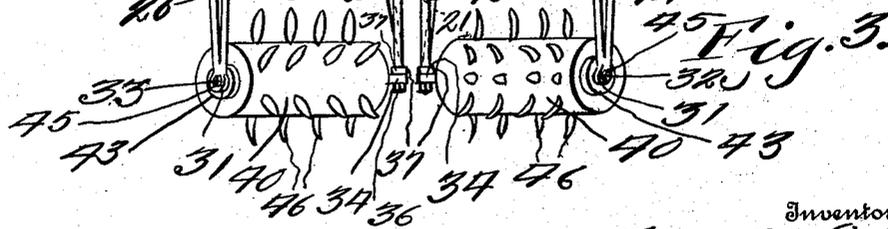
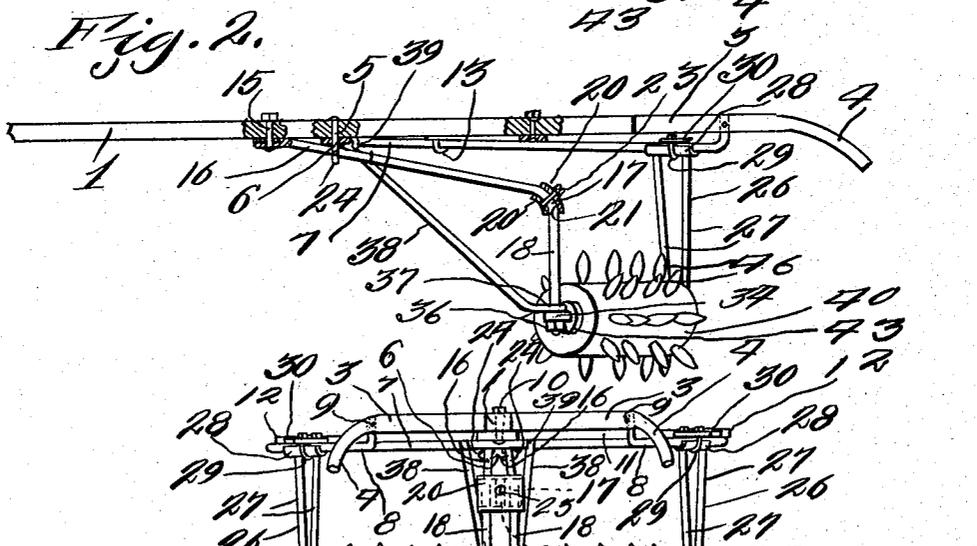
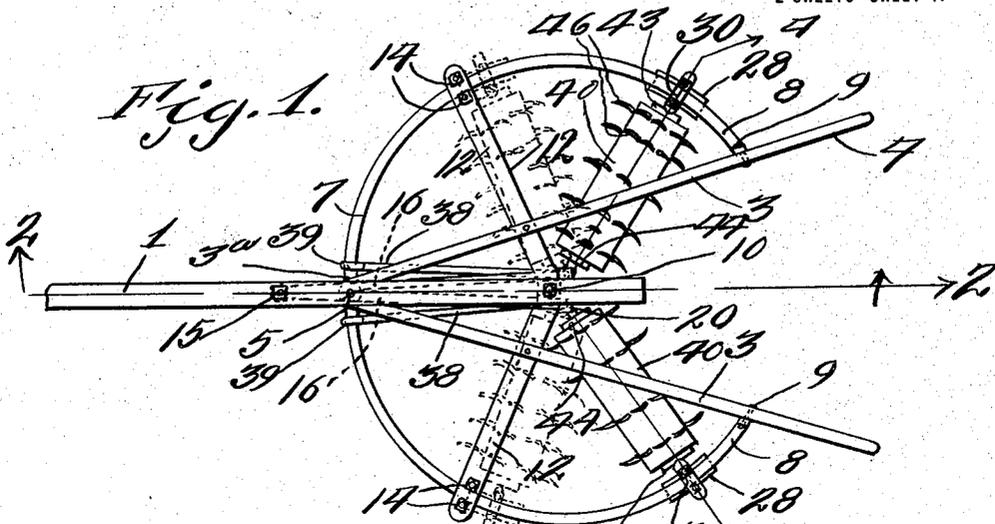


F. A. DAVIS, Sr.
 CULTIVATOR.
 APPLICATION FILED AUG. 2, 1915.

1,166,446.

Patented Jan. 4, 1916.
 2 SHEETS—SHEET 1.

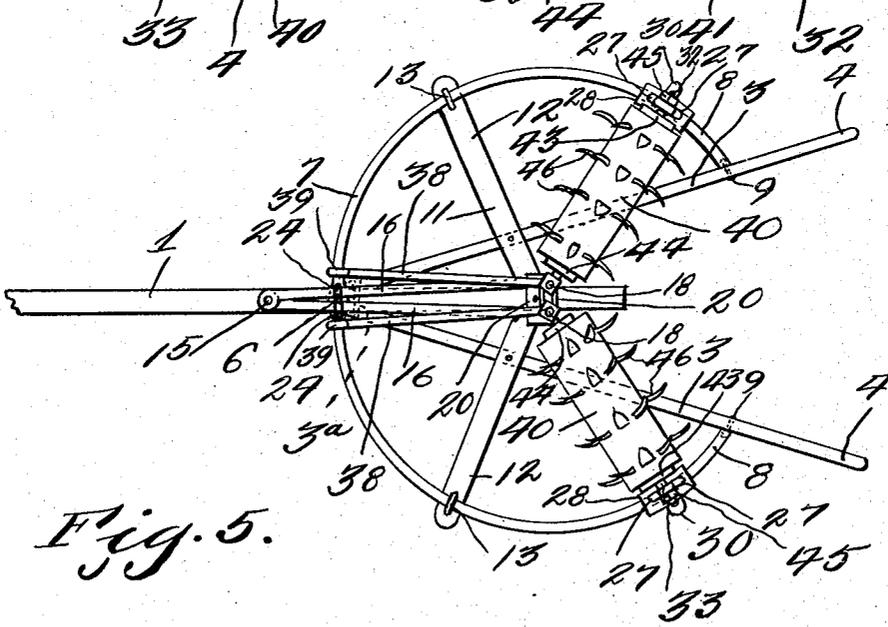
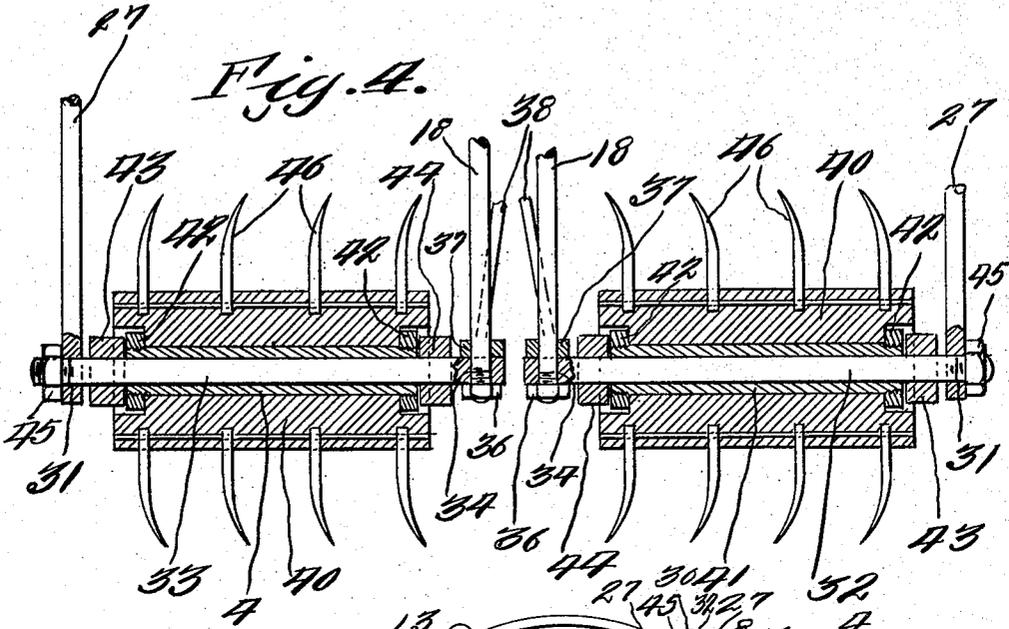


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UNITED STATES PATENT OFFICE

FRANK A. DAVIS, SR., OF BLOUNTSTOWN, FLORIDA.

CULTIVATOR.

1,166,446.

Specification of Letters Patent.

Patented Jan. 4, 1916.

Application filed August 2, 1915. Serial No. 43,320.

To all whom it may concern:

Be it known that I, FRANK A. DAVIS, Sr., a citizen of the United States, residing at Blountstown, in the county of Calhoun and State of Florida, have invented a new and useful Cultivator; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the art of farming implements, and particularly to an improved cultivator, and an object of the invention is to provide a frame having a partial circular guide, to which the cultivating rollers are connected by improved means, so that the rollers may be adjusted on angles toward the rear and laterally, or may be adjusted to assume positions alined with each other, or upon angles forwardly and laterally.

In practical fields the details of construction may necessitate alterations, falling within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a plan view showing the cultivating rollers adjusted angularly toward the rear and laterally from each other, also illustrating the rollers adjusted upon angles forwardly and laterally. Fig. 2 is a longitudinal sectional view on line 2—2 of Fig. 1. Fig. 3 is a rear view. Fig. 4 is a transverse sectional view on line 4—4 of Fig. 1. Fig. 5 is a bottom plan view.

Referring more especially to the drawings, 1 designates a tongue or pole, to which is secured as at 3 the rearwardly and laterally extending handles 3 terminating in the grips proper 4. Secured to the tongue 1 by the shank 5 of the T-shaped bolt 6 is a curved rod 7, the free ends of the part 8 of which are secured at 9 to the handles 3. Secured by the bolt 10 to the tongue 1 is a bar 11, the arms 12 of which extend angularly forwardly from each other and have their end portions secured to the parts 8 of the curved rod 7, by means of the staples 13 having nuts 14. Pivotaly connected to the tongue 1 by means of the bolt 15 are rearwardly extending rods 16, which are bent at 17 forming the downwardly extending arms 18. Where the rods 16 are bent a pair of plates 20 is provided having grooves 21 upon their adjacent surfaces, to receive the rods 16

to prevent the same from spreading. The plates are clamped together by the screw 23. However, the rods may be adjusted in the outermost grooves of said plates, in order to hold the rods farther apart. The lateral arms 24 of the T-shaped bolt are bent slightly upwardly to limit the rod 16 in being adjusted farther apart. Downwardly extending brackets 26 are provided. These brackets consist of substantially parallel arms 27, the upper ends of which are connected integrally to the elongated plates 28, which are curved in cross section and curved longitudinally to correspond with and fit the parts 8 of the curved rod 7. These plates 28 are adjustably secured to the curved part 8 of the curved rod 7 by the staples 29, the arms of which are threaded and passed through the plates 30 and have nuts threaded thereon.

It will be observed that by loosening the nuts, the plates may be adjusted forwardly or rearwardly, so as to correspondingly adjust the brackets. The lower ends of the brackets have bearings 31, in which the outer ends of the shafts 32 and 33 are mounted. The inner ends of the shafts 32 and 33 have eyes 34, through which the lower ends of the downwardly extending arms 18 extend. The lower ends of the downwardly extending arms 18 have nuts 36 threaded thereto to support the eyed ends of the shafts 32 and 33. The eyes 37 of the brace rods 38 also receive the lower part of the arms 18. The forward ends of the brace rods 38 are connected at 39 to the curved rod 7, thereby preventing the arms 18 from bending rearwardly. Mounted upon the shafts 32 and 33 are the cultivator rollers 40, which are provided with metallic sleeve bushings 41, secured in place by the threaded nuts 42, threaded to the ends of said bushings. The nuts 42 are countersunk in the cultivating rollers, as shown in transverse sectional view. Interposed between the bearings of the brackets and the outer ends of the rollers are suitable washers 43, and interposed between the eyed ends 34 of the shafts 32 and 33 and the inner ends of the rollers are suitable washers 44, which extend partially into the rollers as shown. The outer ends of the shafts 32 and 33 are secured in the bearings of the brackets by virtue of the nuts 45. The rollers are provided with suitable cutting or cultivating blades 46, which, as shown, extend radially. When

the cultivating rollers extend angularly to the rear and laterally, the dirt or soil is thrown laterally from each side of the plants, which pass between the inner ends of the rollers. However, when the rollers extend angularly forwardly and laterally, by adjusting the brackets forwardly upon the curved parts 8 of the curved rods 7, the dirt or soil is thrown toward the plants. When the rollers are adjusted, alined axially, the soil or dirt upon each side of the plants is merely agitated or broken. If desired, one roller may be adjusted angularly toward the rear and laterally, while the other roller may be adjusted angularly and forwardly.

It is to be observed that additional gang cultivating rollers may be supplied, and moreover, it is to be noted that bars or plates are provided to prevent spreading or expansion of the gang rollers.

The invention having been set forth, what is claimed as new and useful is:—

1. In a cultivator, a frame, a substantially circular rod mounted on the frame, rods pivotally connected to the forward part of the frame and having rearwardly and downwardly extending parts, shafts pivoted upon the lower ends of said downwardly extending parts, brackets in which the outer ends of the shafts have bearings, cultivating rollers mounted upon the shafts, said bracket having adjustable connections to the curved rod whereby the brackets may be adjusted, so that the shafts may be adjusted angu-

larly toward the rear and laterally or angularly forwardly and laterally, said adjustable connections of the bracket comprising plates semi-circular in cross section and curved to correspond with and fit the curved rod, and staples and means to secure the curved plates to the curved rod adjustably.

2. In a cultivator, a frame, a substantially circular rod mounted on the frame, rods pivotally connected to the forward part of the frame and having rearwardly and downwardly extending parts, shafts pivoted upon the lower ends of said downwardly extending parts, brackets in which the outer ends of the shafts have bearings, cultivating rollers mounted upon the shafts, said bracket having adjustable connections to the curved rod whereby the brackets may be adjusted, so that the shafts may be adjusted angularly toward the rear and laterally or angularly forwardly and laterally, said adjustable connections of the bracket comprising plates semi-circular in cross section and curved to correspond with and fit the curved rod, and staples and means to secure the curved plates to the curved rod adjustably, and means whereby the rearwardly extending rods of the frame may be adjusted laterally.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK A. DAVIS, SR.

Witnesses:

J. M. ATKINS,
BERTHA JONES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."