

Witnesses ( hilf mill, Francis Bornell

## COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C

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F.A. Davis, Sr.

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Witnesses hilpfindle Hrances & Boxull

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C



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

To all whom it may concern: to prevent the same from spreading. The Be it known that I, FRANK A. DAVIS, Sr., plates are clamped together by the screw 23.

a citizen of the United States, residing at Blountstown, in the county of Calhoun and 5 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 10 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 par-15 tial 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 20 other, or upon angles forwardly and laterally.

In practical fields the details of construc-

However, the rods may be adjusted in the outermost grooves of said plates, in order to 60 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 65 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 70 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 thread-75 ed thereon.

It will be observed that by loosening the nuts, the plates may be adjusted forwardly

within the scope of what is claimed. just the brackets. The lower ends of the 80 25 The invention comprises further features brackets have bearings 31, in which the and combination of parts, as hereinafter set outer ends of the shafts 32 and 33 are forth, shown in the drawings and claimed. mounted. The inner ends of the shafts 32 In the drawings:-Figure 1 is a plan view and 33 have eyes 34, through which the showing the cultivating rollers adjusted anlower ends of the downwardly extending 85 30 gularly toward the rear and laterally from arms 18 extend. The lower ends of the each other, also illustrating the rollers addownwardly extending arms 18 have nuts justed upon angles forwardly and laterally. 36 threaded thereto to support the eyed ends Fig. 2 is a longitudinal sectional view on of the shafts 32 and 33. The eyes 37 of the line 2-2 of Fig. 1. Fig. 3 is a rear view. brace rods 38 also receive the lower part of 90 35 Fig. 4 is a transverse sectional view on line the arms 18. The forward ends of the brace 4-4 of Fig. 1. Fig. 5 is a bottom plan view. rods 38 are connected at 39 to the curved Referring more especially to the drawrod 7, thereby preventing the arms 18 from ings, 1 designates a tongue or pole, to which bending rearwardly. Mounted upon the is secured as at 3 the rearwardly and latershafts 32 and 33 are the cultivator rollers 95 40 ally extending handles 3 terminating in the 40, which are provided with metallic sleeve grips proper 4. Secured to the tongue 1 by bushings 41, secured in place by the threaded the shank 5 of the T-shaped bolt 6 is a nuts 42, threaded to the ends of said bushcurved rod 7, the free ends of the part 8 of ings. The nuts 42 are countersunken in the which are secured at 9 to the handles 3. 45 Secured by the bolt 10 to the tongue 1 is a sectional view. Interposed between the bar 11, the arms 12 of which extend angu- bearings of the brackets and the outer ends larly forwardly from each other and have of the rollers are suitable washers 43, and their end portions secured to the parts 8 of interposed between the eved ends 34 of the the curved rod 7, by means of the staples 13 50 having nuts 14. Pivotally connected to the rollers are suitable washers 44, which extend tongue 1 by means of the bolt 15 are rearpartially into the rollers as shown. The wardly extending rods 16, which are bent at outer ends of the shafts 32 and 33 are se-17 forming the downwardly extending arms cured in the bearings of the brackets by vir-18. Where the rods 16 are bent a pair of <sup>55</sup> plates 20 is provided having grooves 21 upon with suitable cutting or cultivating blades 46, which, as shown, extend radially. When their adjacent surfaces, to receive the rods 16

tion may necessitate alterations, falling or rearwardly, so as to correspondingly adcultivating rollers, as shown in transverse 100 shafts 32 and 33 and the inner ends of the 105 tue of the nuts 45. The rollers are provided 110 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 5 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. 10 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 15 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 20 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 25 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 extend-20 ing 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-

1,166,446 Jacorally or ang 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 40 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 45 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 roll- 50 ers 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 55 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 60 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 65 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."

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