

(No Model.)

C. E. BOOI.
CULTIVATOR.

No. 471,841.

Patented Mar. 29, 1892.

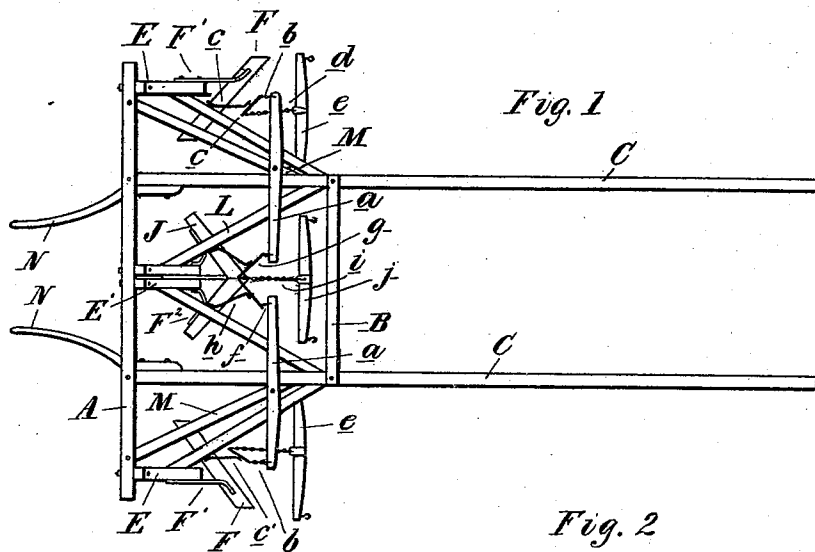


Fig. 1

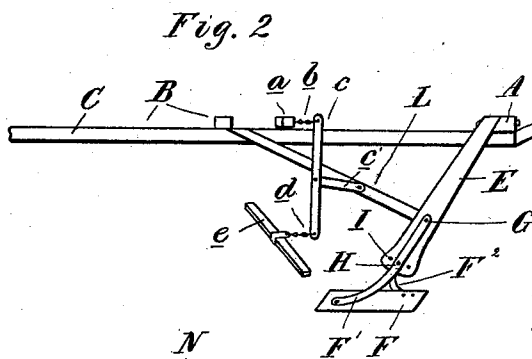


Fig. 2

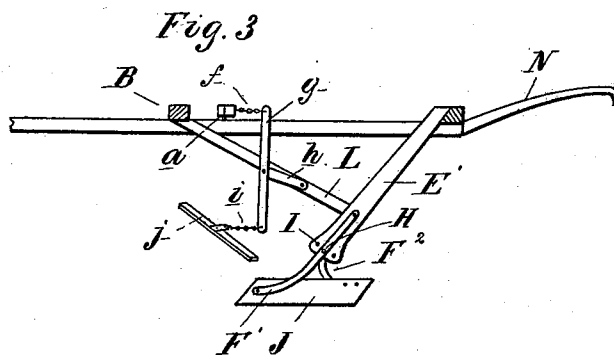


Fig. 3

Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES E. BOOI, OF DANFORTH, ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 471,841, dated March 29, 1892.

Application filed November 12, 1891. Serial No. 411,751. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BOOI, a citizen of the United States, residing at Danforth, in the county of Iroquois and State of Illinois, have invented certain new and useful Improvements in Cultivators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in cultivators; and the invention consists in the peculiar construction of the frame with the cultivator-plows, whereby I cultivate upon both sides of two rows at the same time.

The invention further consists in the peculiar construction of the plows and the means for adjusting the same, and, further, in the peculiar construction of the draft attachment in combination with an elevated frame, whereby three horses may be used to draw my cultivator harnessed abreast, the frame passing over the tops of the growing crop, and the draft may be applied at a sufficiently low point to insure the easy working of the cultivator.

The invention further consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a plan view of my improved cultivator. Fig. 2 is a side elevation thereof, and Fig. 3 is a longitudinal central section.

My frame consists of a cross-bar A at the rear end of the device, the front cross-bar B, and two tongues or shafts C. The cross-bar A extends at its ends beyond the shafts, while the cross-bar B is secured at its ends to the shafts.

To the cross-bar A are secured the depending inclined standards E E', the standards E being located at each end of the cross-bar and the standard E' in the middle thereof.

To the lower end of the standards E are secured the scraper-plows F, the attachment between the plow and standard consisting of the shanks F', pivoted by means of the bolt G at their upper ends to the standard and secured by means of a bolt H in any one of a series of adjusting-holes I at the lower end of the standard, whereby the plow may be raised or lowered, according to the depth of cut desired, or to adapt the device to be used with horses of

different sizes, the standard being preferably widened at its lower end to allow of sufficient adjustment of the plows. A second shank F² is also preferably secured to each of the plows, by means of which the angle at which they stand may be altered.

To the lower end of the central standard E' is secured a double scraper-plow J. The plow J consists of two scraper-blades connected together at their forward ends and inclined rearwardly from that central point, and the plows F upon the standards E consists of single blades inclined from the front toward the middle of the frame, all so arranged that the central plow J will cultivate the entire space between two rows of the crop and the plows F will cultivate one-half of the space upon the outside of those rows, or, in other words, that both sides of two rows of the crop will be cultivated at the same time, thus doing double the work of the ordinary cultivator.

The standards E E' are braced to the shafts C by means of the inclined braces L.

In order that I may conveniently attach three horses to my cultivator and apply the draft sufficiently low, so as to give the best results, I use the following construction of draft attachment: *a* are eveners pivoted upon the diagonal braces M of the frame and extending above the top of the frame from near the middle to both sides. *b* are chains at the outer ends of these eveners connected with the vertical levers *c*, which are pivoted to the draft-links *c'*, secured to the inclined braces L, and at their lower ends are provided with the chains *d*, connecting to the whiffletree *e* on each side of the shafts. The center connection I form by means of chains *f*, connected to the eveners and to the vertical levers *g*, which are pivoted upon the draft-links *h*. The levers *g* at their lower ends are connected together and to a draft-chain *i*, which in turn is connected to a central whiffletree *j*, the vertical levers *c* and *g* carrying the whiffletrees down, so that the draft is applied at or near the vertical center of the frame, giving the best results in the application of the power for cultivating.

To the rear of the frame are secured the handles N, by means of which the device may be controlled by the operator walking behind.

What I claim as my invention is—

1. In a cultivator, the combination, with the shafts, draft attachment, and frame, of the cross-bar A, connecting the shafts at their rear ends and extending beyond the same, the
5 forwardly-inclined depending standards E, secured at their upper ends to the same, a forwardly-inclined depending standard E', secured at its upper end to the middle of the bar A, a double scraper-plow J on the lower
10 end of the standard E', and single scraper-plows inclined inwardly, secured to the lower ends of the standards E, respectively, at sufficient distances from the plow J to permit of the passage of a row between the same, substantially as described.
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2. In a cultivator, the combination, with the shafts, draft attachment, and frame, of a cross-bar A, connecting the shafts at their rear ends

and extending beyond the same, the forwardly-inclined depending standards E, secured at 20 their upper ends to the same, a forwardly-inclined depending standard E', secured at its upper end to the middle of the bar A, a double scraper-plow J, adjustably secured to the lower end of the standard E, and single scraper- 25 plows inclined inwardly, adjustably secured to the lower end of the standards E, respectively, at sufficient distances from the plow J to permit of the passage of a row between the same, substantially as described. 30

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. BOOI.

Witnesses:

J. B. SCHERMERHORN,
ADOLPH BARTHEL.