C. A. BENTLEY.

CULTIVATOR.

No. 183,280. Patented Oct. 17, 1876.

Fig. 3.

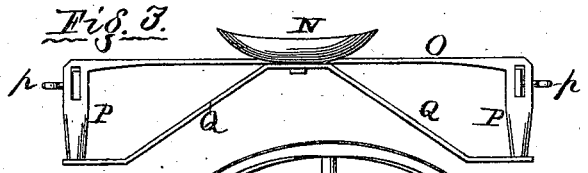


Fig. 2.

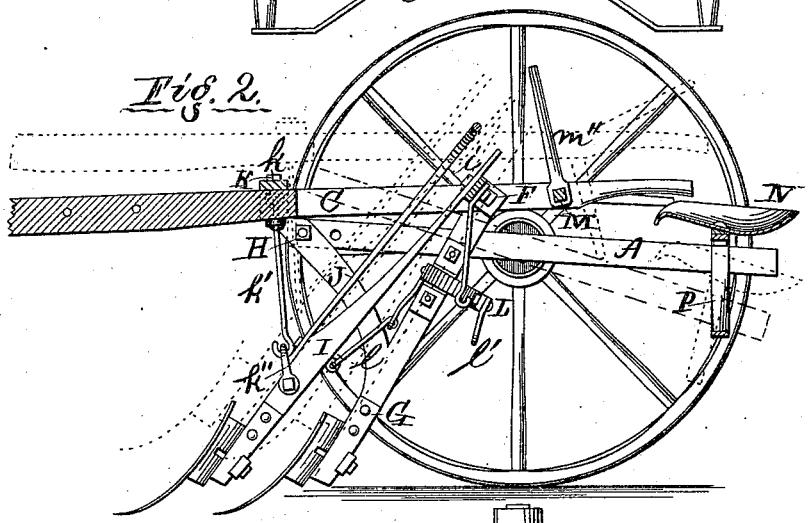
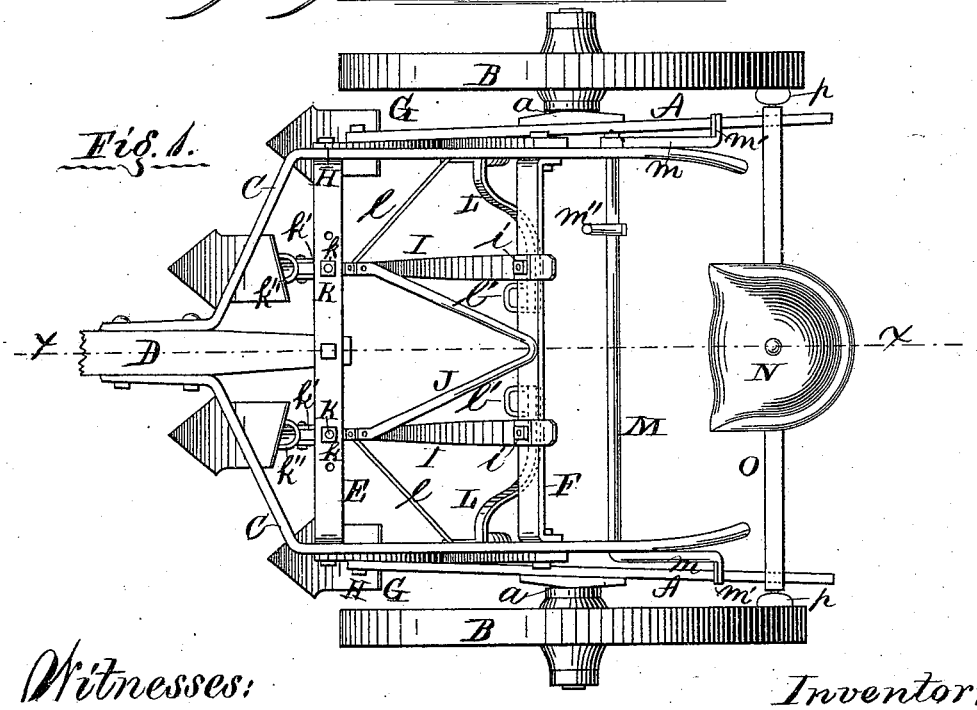


Fig. 1.



Witnesses:
P. R. Richards.
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Inventor:
Chas. A. Bentley,
By W. B. Richards,
Atty.

UNITED STATES PATENT OFFICE.

CHARLES A. BENTLEY, OF CANTON, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO MARTIN HOFFMAN, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **183,280**, dated October 17, 1876; application filed August 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES A. BENTLEY, of Canton, in the county of Fulton and State of Illinois, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention relates to improvements in cultivators of that class known as "riding-cultivators"—machines in which the operator sits or rides upon the machine, and controls its operations, principally with his feet, and partially with his hands; and the invention consists, first, in the combination, with a main supporting-frame pivoted to the supporting-wheels, of a plow-supporting frame pivoted thereto, and provided with a crank and hand-lever on a rock-shaft, by means of which both frames may be oscillated, and the plows elevated and lowered at pleasure, and locked in an elevated position when desired; further, the invention consists in the peculiar construction of the seat-supporting bar, all as hereinafter fully described.

In the accompanying drawing, Figure 1 is a top view of a cultivator embodying my invention. Fig. 2 is a sectional view in the line *x x*, Fig. 1, the parts in position as in operation in the field. Fig. 3 is a rear elevation of the driver's seat and its supporting-bar, and a sectional view of the frame-pieces on which the supporting-bar is placed.

Referring to the parts by letters, A A represent the side bars of the main frame, and carry spindles *a a*, on which the supporting-wheels B are journaled. C C are the side bars of the plow supporting frame, converging at their forward ends, to which is attached the draft-pole D, and connected rigidly by transverse bars E and F. G G are the outside and rear plows, the standards of which diverge at their upper ends, and are bolted rigidly to the bars C by the same bolts which attach thereto the bars E and F, as plainly shown in the drawings. H H are bolts, pivoting the forward ends of the bars C to the upper ends of the forward branches of the plow-standards G. I I are the central and forward plow-standards, pivoted by bolts *i* at their upper ends to the bar F, and connected midway their lengths by a rod, J, pivoted to each standard at its ends, and its central part curved upward to pass over the growing corn. K K are eyebolts, adjustably secured in the bars E by nuts *k*, and connected by hook-and-eye rods *k'* with yokes *k''*, toward and on the lower ends of the standards I. The rods *k'* allow the standards I to swing laterally, the rod J makes their movements simultaneous, and the eyebolts K may be adjusted to change and adjust the horizontal angle thereof. L L are bell-crank-shaped foot-levers, pivoted at their angles, one to each rear branch of the bifurcated standards G, and their lower ends connected by eye-rods *l*, one to each standard I, and their other ends extending inwardly to near each other, and provided with stirrups *l'*. M is a rock-shaft, journaled in the bars C C, and carrying on its ends crank-shaped bars *m*, with feet *m'*, and on its central part a hand-lever, *m''*. N is the driver's seat, supported centrally on a bar, O, from the ends of which extend downwardly-projecting pendants P, pierced for the passage of the bars A, on which they slide, and on which they may be fixed in any desired position by set-screws *p*. Q Q are truss rods or braces, extending from the lower end of the pendants P to the central part of the bar O.

The operation is as follows: The driver in his seat N, and with his feet in the stirrups *l'*, may control and operate the lateral movements of the plows I at pleasure, in the obvious manner; and to control their vertical movement, or raise and lower them together with the outside plows, as required during the passage of the machine, he may take hold of either handle formed by properly shaping and turning slightly inward the rear ends of the bars C, and thereby raise and lower them as desired, and when raised high enough may turn down the lever *m''*, and bring the feet *m'* on the bars A, and thus support the plows above the ground, as shown by dotted lines at Fig. 2. The parts of the machine are bal-

anced generally by the driver in his seat, and the seat-bar O may be adjusted, as already described, on the bars A for different-weight drivers.

I claim as new and desire to secure by Letters Patent—

1. The frame C, carrying the plows G and I, and tongue D, pivoted to the frame A, and arranged to operate with the rock-shaft M, cranks *m*, and hand-lever *m''*, substantially as and for the purpose specified.

2. The seat-support, constructed as described, of a truss-frame, and adjustably seated on the bars C, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES A. BENTLEY.

Witnesses:

W. B. RICHARDS,

THOMAS MCKEE.