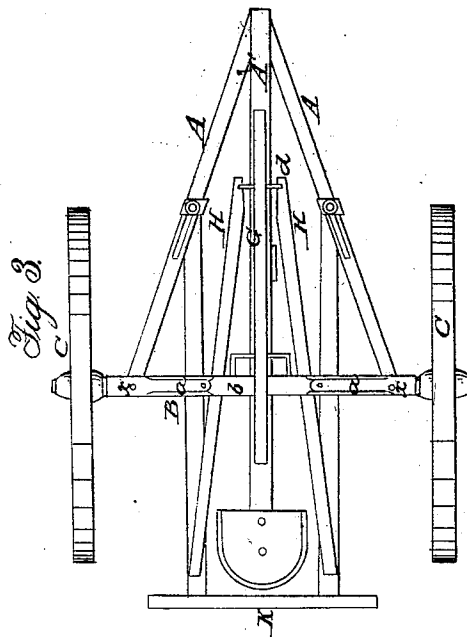
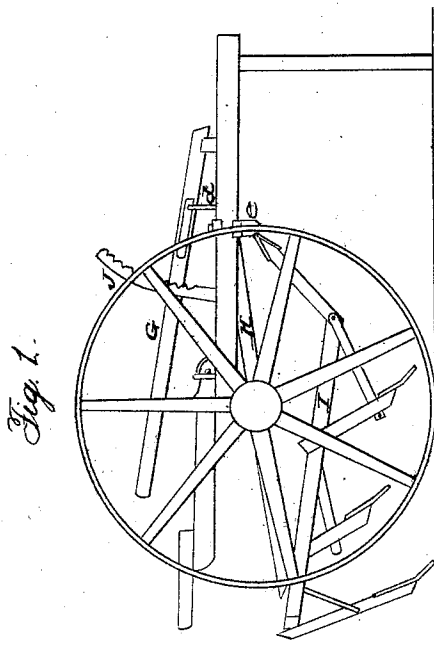
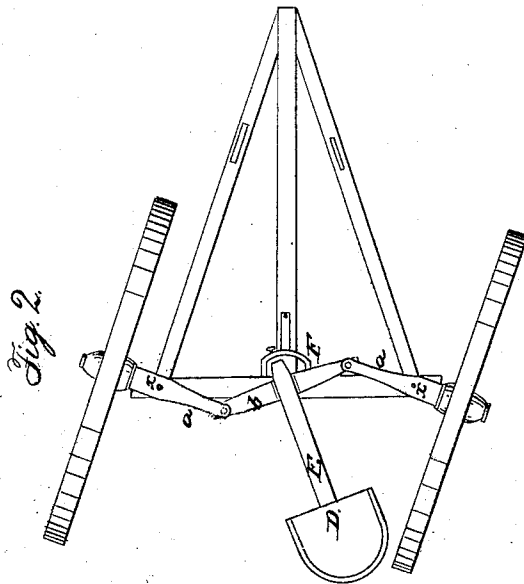


A. J. MANNY.
Wheel-Cultivator.

No. 50,018.

Patented Sept. 19, 1865.



Witnesses.
J. M. Mann
Charles Alexander

Inventor.
A. J. Manny
Charles Alexander
Attorney

UNITED STATES PATENT OFFICE.

ABRAHAM J. MANNY, OF FREEPORT, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 50,018, dated September 19, 1865.

To all whom it may concern:

Be it known that I, ABRAHAM J. MANNY, of Freeport, in the county of Stephenson 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 of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A A and A' represent the frame of the machine. These frame-pieces are securely attached at their rear ends to a beam or axle, B, as shown. The two side frame-pieces, A A, converge and are secured to the center piece, A', at their forward ends.

C C represent the two wheels which support the frame and beam. These wheels are secured upon short axles, and these axles are permanently secured to two jaws, which said jaws receive the ends of the beam B between them and are pivoted to them, as seen at *x x*. The upper sides of these jaws form levers *a a*. *b* represents a bar, which is pivoted at its center to the beam B, and at its ends to the levers *a a*. D represents the driver's seat, which is secured upon the outer end of a bar, E. The bar E is permanently secured to bar *b* by means of the bolt which pivots said bar to the beam B. The forward end of the bar E is provided with a friction-roller, which said roller plays under and against a yoke, F, which is attached to the beam B.

It will be seen that by the arrangement of the several parts described the bar E acts as a lever, and that the driver, while in his seat can, by means of this lever, the bar *b*, and the levers *a a*, turn the wheels in any desired position without the aid of the power drawing the machine.

G represents a lever, which is hinged at its forward end to the piece A', and which extends back toward the driver's seat, so as to be operated from it. This lever has in it a pin which catches into the teeth of a ratchet-bar, J, which said bar is secured to the piece A', as shown. The lever G is also provided with a slot made longitudinally of it, in which slot works a metallic loop, *d*. The loop *d* has its ends made fast in the forward ends of the two levers H H.

H H represent two levers which hang about center way in stirrups, the stirrups being pivoted upon the under side of the beam B. These

levers are connected at their forward ends by the loop *d* and at their rear ends they hinge to the plow-beams I I.

I I represent the plow-beams, which are made in the form represented. The forward ends of these beams hinge to clasps *e*. The clasps *e* are attached to the hounds or side pieces, A A, by means of bolts which pass through slots in said side pieces. These clasps can be moved longitudinally of the pieces A by the bolt sliding in the slot, and can be stationed at any desired point by means of a nut on the end of the bolt. The rear ends of the beams are sustained, as shown, by means of the levers H, to which they are hinged. The two beams I I are connected together at their rear ends by means of a cross-tie, K. The plows of this machine are secured to these beams I, with the exception of the center and last plow, which is secured to the cross-tie K.

It will readily be seen that by means of the slots in the hounds or converging side pieces the plow-beams may be set wider apart or nearer together at their forward ends, thus regulating the plows to suit the width of the furrows.

The levers H H and G serve to raise and lower the plow-beams.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The employment of the lever E, the bar *b*, and the yoke F, or its equivalent, for the purpose of giving direction to the machine from the seat, as is herein fully set forth.
2. Attaching the plow-beams to the hounds or side pieces, A A, in such a manner that said beams can be brought closer together or separated by moving them forward or backward, as is herein represented.
3. The combination of the triangular frame with the devices for changing the direction of the machine, as and for the purpose specified.
4. The combination of the levers G and H with the plow-beams, as and for the purpose herein specified.

In witness that I claim the foregoing I have hereunto set my hand in the presence of witnesses.

ABRAHAM J. MANNY,

Witnesses:

J. S. CRAIN,
DANIEL GOODLANDER.