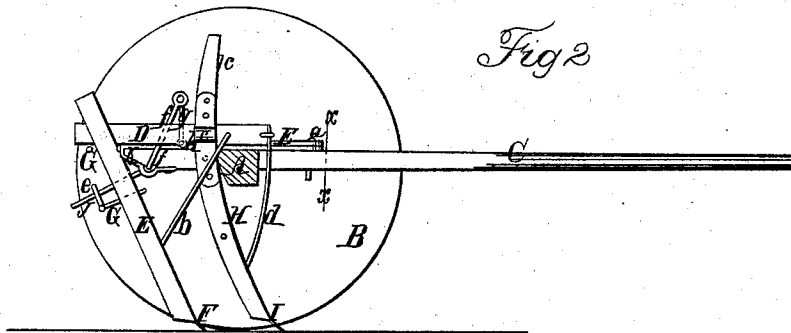
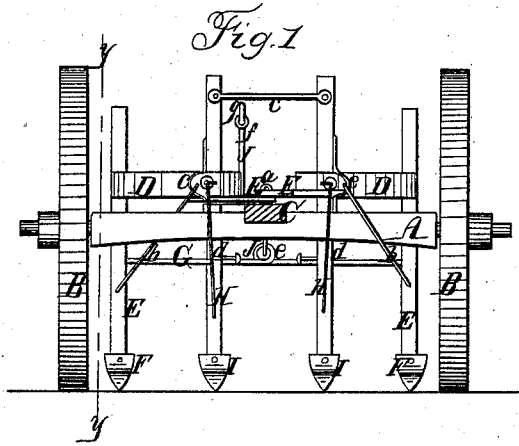


ANDERSON & EDWARDS.

Wheel Cultivator.

No. 56,157.

Patented July 10, 1866.



Witnesses;
J. M. Livingston
Wm. Brown

Inventors;
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UNITED STATES PATENT OFFICE

ANDREW P. ANDERSON AND BYRON EDWARDS, OF PRINCETON, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 56,157, dated July 10, 1866.

To all whom it may concern:

Be it known that we, ANDREW P. ANDERSON and BYRON EDWARDS, of Princeton, in the county of Bureau and State of Illinois, have invented a new and Improved Cultivator; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of our invention, the draft-pole being in section, as indicated by the line *x x*, Fig. 2; Fig. 2, a side sectional view of the same taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved cultivator of that class in which movable or adjustable plows are employed; and it consists in a novel arrangement of said plows, as hereinafter fully shown and described, whereby they may be adjusted with the greatest facility by the driver, all of them raised vertically out of the ground when necessary or desired, and the two front plows moved or adjusted laterally, in order that they may be made to conform to the sinuosities of the rows of plants.

A represents an axle, having a wheel, B, at each end of it, and a draft-pole, C, framed into it at right angles. D D represent two beams, the front ends of which have metal plates E attached to them, said plates overlapping each other and secured to the draft-pole by a rod or pin, *a*. These beams D D have an oblique position relatively with each other, the front ends being made nearer together than the rear ends, and these bars project a considerable distance beyond the rear of the axle, and have each a plow-standard, E, attached to them at their rear ends, and each standard has a plow, F, secured to its lower end. The two standards E E are connected by rods G G, and are braced from the beams D D by rods *b*.

To each beam D D there is also attached, by a metal strap, *c*, a plow-standard H, said straps being fitted around cylindrical portions made on the beams, so as to form swivel-con-

nections, which admit of a swinging movement of said standards in a lateral direction. These standards are attached to the beams D D in front of the standards E E, and owing to the oblique position of said beams the standards H H are at the inner sides of the planes in which the standards E E work, as will be seen by referring to Fig. 1. The standards H have plows I secured to their lower ends, and the upper ends of the standards H are connected by a rod, *c*, and they are braced by rods *d* from the front ends of the beams D D.

The lower rod, G, which connects the two standards E E, is bent or formed with an eye, *e*, through which a rod, J, passes, and this rod J is bent or curved so as to pass through the draft-pole at right angles, and is bent upward, forming a crank, *f*, within convenient reach of the driver on seat K, which is on the rear of the draft-pole, and by shoving forward this crank the rear part of rod J will be raised, and all the plows will consequently be raised and entirely out of the ground, if desired, and they may be held or retained out of the ground by means of a hook, *g*, attached to the upper end of the crank and fitted over a pin, *h*.

The standards H may be moved laterally by actuating them at their upper ends, and the plows I moved laterally to conform to the sinuosities of the rows of plants, the plows I working one at each side of a row, while the plows F work in the centers of the spaces between the rows of plants.

The plows, it will be seen, are under the complete control of the driver, and the device is extremely simple, capable of being constructed at a small cost.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The beams D D, in combination with the plow-standards H H and the plow-standards E E, substantially as and for the purpose set forth.

ANDREW P. ANDERSON.
BYRON EDWARDS.

Witnesses:

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C. D. JOHNSON.