

Wheel Cultivator.

No. 40,367.

Patented Oct. 20, 1863.

Fig. 1.

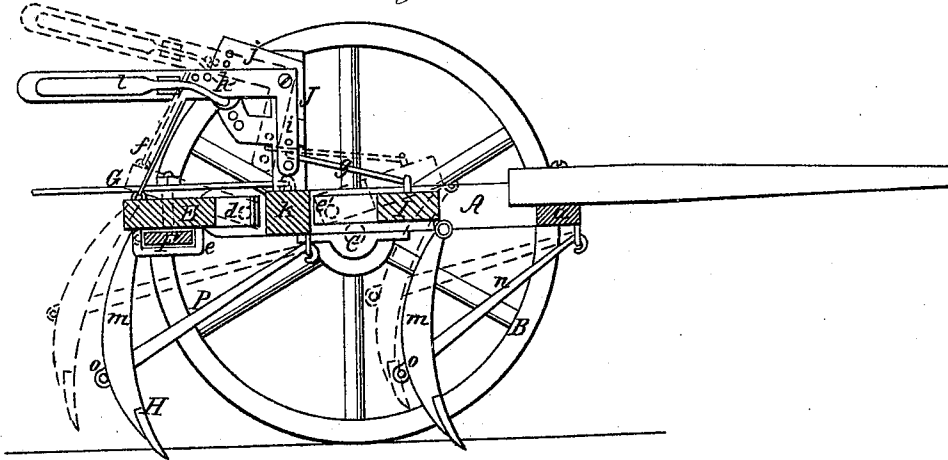
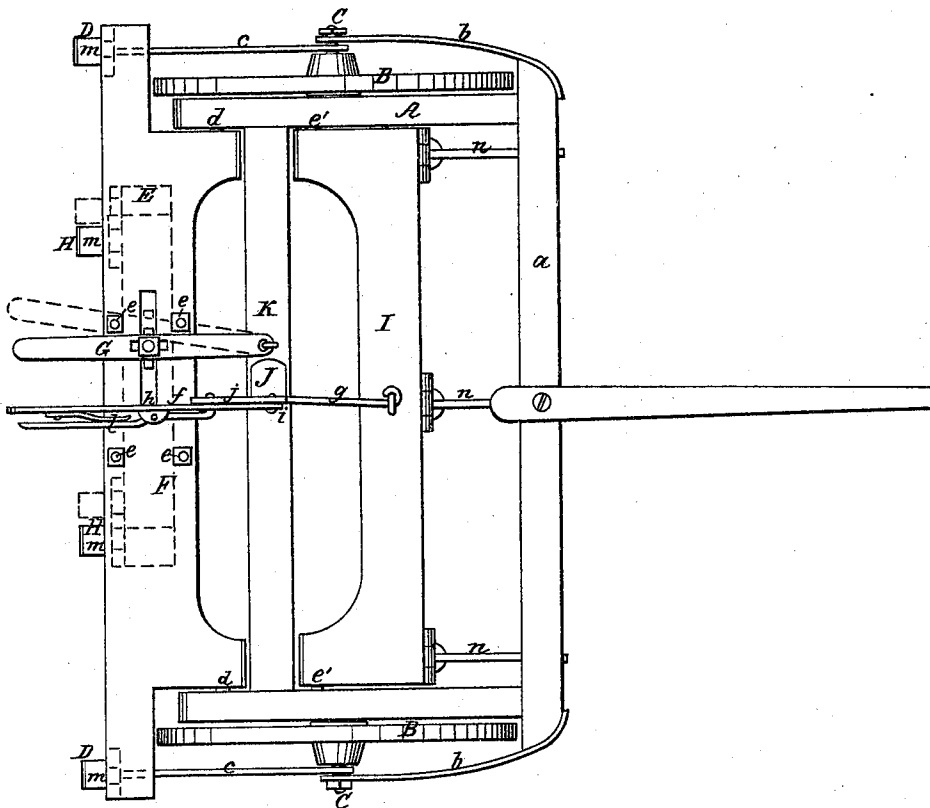


Fig. 2.



Witnesses:

W. Boombs.
G. W. Reed.

Inventor:

R. H. Springstead
per Wm H
Atty

UNITED STATES PATENT OFFICE.

RICHARD H. SPRINGSTEAD, OF CONSTANTINE, MICHIGAN.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 40,367, dated October 20, 1863.

To all whom it may concern:

Be it known that I, RICHARD H. SPRINGSTEAD, of Constantine, in the county of St. Joseph and State of Michigan, have invented a new and Improved Cultivator; 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, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a plan or top view of the same.

Similar letters of reference in both views indicate corresponding parts.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a frame, made of wood or any other suitable material, and supported by two wheels, B, one on each end. These wheels run on axles C, and the beams *a*, in front of the frame, extend beyond the wheels, as clearly shown in Fig. 2 of the drawings. From the ends of these beams guards *b* extend to the ends of the axles, and braces *c* extend from the axles to the outside plows, D, so that the wheels are fully protected against any lateral obstruction.

The plows D are hinged to the ends of the beam E, outside of the wheels B, so that they will run close up to a fence or stump, and the standards to which these plows are secured are held in position by the braces *c*, which are hinged to the axles C, and which also form guards for the wheels.

The beam E is connected to the frame A by means of gudgeons *d*, so that it can swing up and down, and attached to its under surface by staples *e*, or any other suitable means, is a bar, F, to which a laterally-sliding motion can be imparted by means of a hand-lever, G.

Two or more plows, H, are hinged to the bar F, and by means of the hand-lever G these plows can be adjusted in a lateral direction. At the same time said plows are also adjusted in a vertical direction by turning the pivoted beam E up or down, as may be desirable.

I is another beam, which is connected to the frame A by means of gudgeons *e'*, in front of the beam E, and both beams are attached by means of rods *f g*, one to the arm *h* and the other to the arm *i* of an elbow-lever *h i*. This lever is pivoted to a standard, J, rising from the cross-bar *k* of the frame A, and it works over a segmental plate, *j*, with a series of holes, and a spring-catch, *l*, serves to adjust and retain said elbow-lever, and with it the pivoted beams E and I, in any desired position. By these means the plows secured to the beams E and I can be raised or depressed simultaneously.

The standards *m*, to which the several plows are attached, are hinged to the beams E I, and they are held in position by braces *n*, which are hinged to the frame A, and which retain the standards by means of wooden pegs *o*, so that if one of the plows runs against an obstruction the peg gives way and the other parts of the cultivator are preserved from injury.

This cultivator is cheap in its construction and very simple in its operation, and all its parts are so arranged that they are not liable to get out of repair.

I am aware that cultivator-teeth have before been attached to hinged beams to permit their elevation, and to slides to permit their lateral motion. I therefore do not desire to be understood as claiming either of these inventions.

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

1. The arrangement of the lever G, sliding bar F, its attached teeth H, and their hinged bar E with the hinged bar I, its attached teeth, lever *h i*, and standard J, all in the manner herein shown and described.

2. The arrangement, with the hinged bars E I, axle C, and wheels B, of the guards *b c*, all operating together in the manner herein shown and described.

RICHARD H. SPRINGSTEAD.

Witnesses:

S. C. COFFINBURY,

T. H. CALAM.