

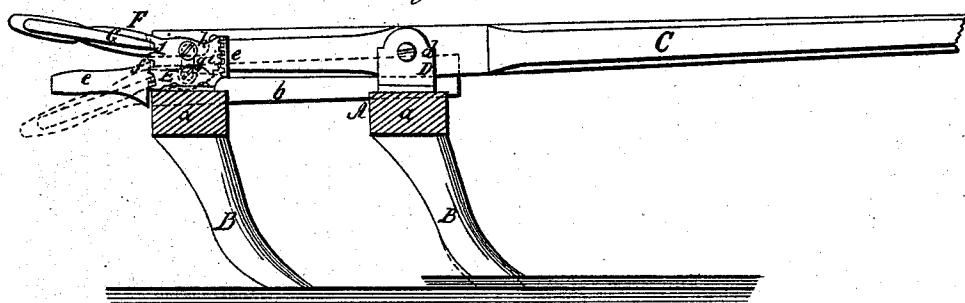
P. S. CARHART.

Cultivator.

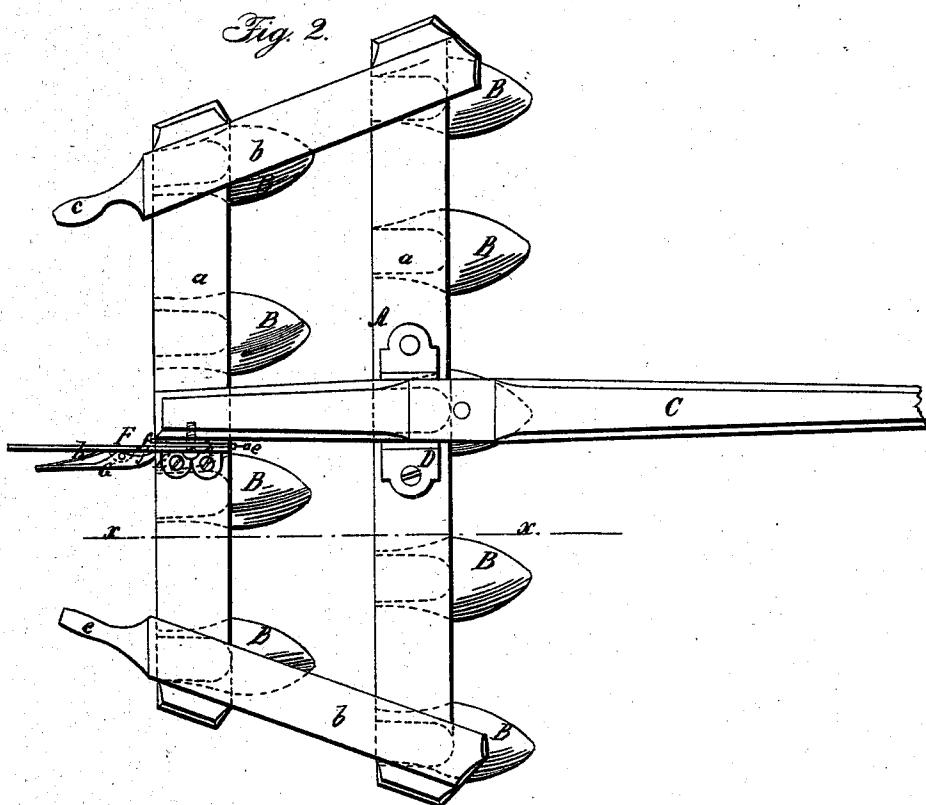
No. 35,505.

Patented June 10, 1862.

*Fig. 1.*



*Fig. 2.*



**Witnesses:**

James Deard  
Ernest Gray

**Inventor:**

Peter S. Carhart,

# UNITED STATES PATENT OFFICE.

PETER S. CARHART, OF COLLAMER, NEW YORK.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 35,505, dated June 10, 1862.

*To all whom it may concern:*

Be it known that I, PETER S. CARHART, of Collamer, in the county of Onondaga and State of New York, 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, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line  $\alpha\alpha$ , Fig. 2. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improvement in that class of cultivators designed to be drawn by two horses and be capable of being adjusted higher or lower, so that the teeth may penetrate a greater or less distance into the earth, as circumstances may require. Cultivators of this class have hitherto been mounted on wheels and provided with means for raising and lowering the frame bodily, forming a rather complex arrangement.

My invention consists in attaching the draft-pole to the frame of the implement in such a manner that the latter will be supported by the former when the implement is in use, and at the same time admit of the frame being adjusted to regulate, without the aid of wheels, the depth of the teeth in the earth as may be required.

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

A represents the frame of my improved implement, which may be constructed of wood and formed of two parallel transverse bars,  $a a$ , connected near their ends by oblique bars  $b b$ , having reverse positions relatively with each other, so as to cause the frame to be rather wider at its front than at its back part. (See Fig. 2.) The back ends of the side bars,  $b b$ , are rounded to form handles  $c c$ , and to the front and back bars,  $a a$ , teeth B are attached, which may be of the form usually employed in cultivators. The teeth of one bar  $a$  are in line with the centers of the spaces between the teeth of the other bar, as shown in Fig. 2.

C is the draft-pole, which is attached to the front bar  $a$  of the frame A by means of a bolt,

$d$ , which passes horizontally through the pole, and a socket, D, in which the latter is fitted. The bolt  $d$  passes loosely through the pole C, and the latter extends back over the back bar  $a$  of the frame A, and has a metal plate, E, at its right-hand side, which plate is provided with a rack,  $e$ , at its front end, and is serrated or notched at its back end, as shown at  $f$ . The plate E is secured to the back bar  $a$  of the frame A, and it has a vertical slot,  $g$ , made in it, through which a screw,  $h$ , passes into the pole C, said screw securing a lever, F, to the pole C, and keeping the former in contact with the outer side of plate E. The front end of the lever F has a toothed segment,  $i$ , formed on it, which gears into the rack  $e$  of the plate E. To the lever F there is attached a small lever, G, the front end of which is bent to form a pin,  $j$ , which passes through the lever F and into any of the notches  $f$  at the back end of plate E. The small lever G has a spring,  $k$ , attached, which has a tendency to keep the pin  $j$  in the notches of plate E.

When the implement is in use or being drawn along, the draft-pole C is fitted as usual to the pole-straps of the harness, and when it is desired to have the teeth B penetrate the earth to their greatest depth the lever G is depressed at its back end, and this causes the front teeth B of the implement to be about on a level with the back teeth. When, however, they are not required to penetrate so deep the back end of the lever G is raised, and this gives the front teeth a greater elevation than the back teeth. In adjusting the lever F the pin  $j$  of course is thrown out from the notches  $f$  of plate E by pressing on the small lever G, the spring  $k$  throwing the pin  $j$  back into one of the notches  $f$  as soon as it is liberated by the driver. It will be seen that by this adjustment of the lever F the frame A of the implement is varied relatively with the draft-pole, the slot  $g$  in the plate E not allowing the screw  $h$  to interfere with the rising and falling of plate E and frame A. By this arrangement I dispense entirely with the use of wheels, and hence have an implement of much lighter draft than usual, while the adjustment of the frame A as described, to regulate the depth of the penetration of the teeth B in the earth, may be made

with much greater facility than by the means hitherto used for adjusting frames mounted on wheels.

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

The means, substantially as shown and described, for regulating the depth of the penetration of the teeth B of the implement in the ground, to wit: the attaching of the draft-pole

C to the front bar a of the frame by a bolt, d, and having its back end connected to the back bar a of the frame by a rack-plate, E, lever F, provided with a toothed segment, i, and an adjustable pin, j, which fits in notches f in plate E, to operate as set forth.

PETER S. CARHART.

Witnesses:

JAMES LAIRD,  
J. W. COOMBS.