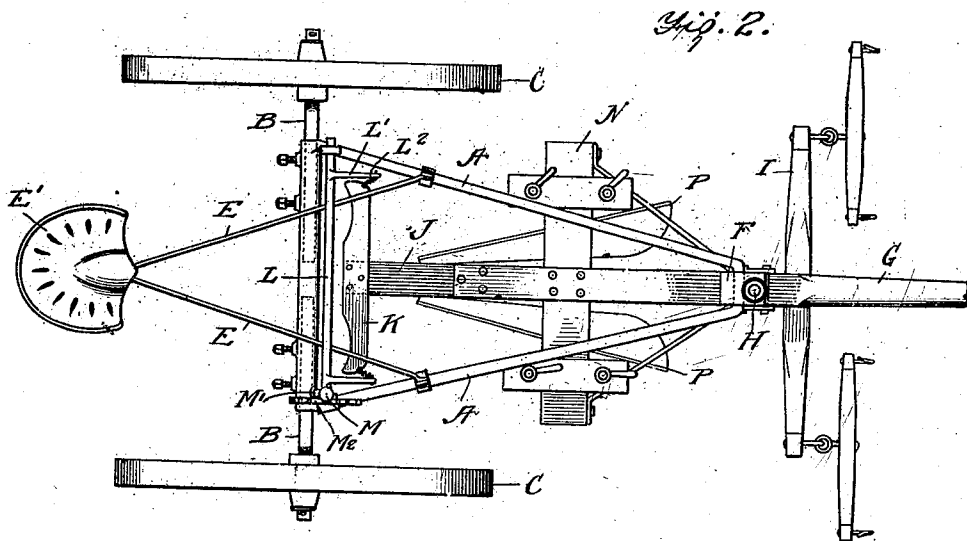
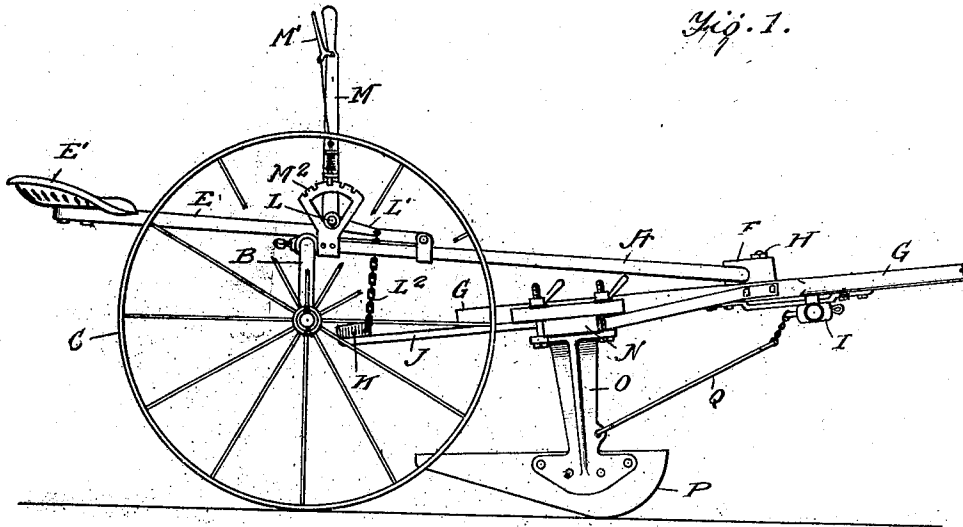


F. S. WOODMAN.
WHEEL ATTACHMENT FOR HORSE HOES.
APPLICATION FILED FEB. 21, 1911.

1,061,437.

Patented May 13, 1913.



WITNESSES:

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UNITED STATES PATENT

FREDERIC S. WOODMAN, OF FAIRFIELD, MAINE.

WHEEL ATTACHMENT FOR HORSE-HOES.

1,061,437.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed February 21, 1911. Serial No. 610,115.

To all whom it may concern:

Be it known that I, FREDERIC S. WOODMAN, a citizen of the United States, residing at Fairfield, in the county of Somerset and State of Maine, have invented a new and useful Improvement in Wheel Attachments for Horse-Hoes, of which the following is a specification.

This invention relates to cultivators and more particularly to wheel attachment for horse hoes the object being to provide a cultivator especially adapted for cultivating potatoes and the like, whereby the blades can be quickly adjusted vertically in order to regulate the depth of the same.

A still further object of my invention is to provide a cultivator which is provided with a seat for the driver so arranged in respect to the operating lever and foot piece whereby the blades can be shifted from left to right or raised vertically.

A still further object of my invention is to provide novel means for carrying the cultivator blades, whereby the same can be readily moved in order to shift the position of the same when it is desired to cultivate rows of different widths.

With these objects in view, the invention consists in the novel features of construction, combination and arrangements, of parts hereinafter fully described and pointed out in the claims.

In the drawing forming a part of this specification:—Figure 1 is a side elevation. Fig. 2 is a top plan view.

In carrying out my improved invention, I employ a substantially V shaped frame A in which are mounted bail axles B carrying wheels C, said axles being mounted in clips D whereby they can be adjusted in order to increase or decrease the distance between the same, whereby the cultivator can be adjusted to suit the width of rows in which it is to be operated. Arranged on the frame A is a V shaped seat frame E having a seat E' at its rear end.

The apex portion of the frame A is pivotally mounted within a block F which is pivotally mounted on a tongue G by a king bolt H as clearly shown, said tongue being provided with the usual double tree I to which the draft horses are to be connected for drawing the cultivator. Secured to the

rear end of the tongue G is a bar J provided with a transverse foot, piece K provided with foot receiving portions in which the operator's feet are adapted to be placed for shifting the tongue from right to left. Mounted on the seat frame C is a transverse shaft L provided with crank arms L' to which are connected chains L² which have their lower ends connected to the ends of the foot bar as clearly shown, and said shaft is operated by a lever M which is locked in its adjusted position by a hand lever M² acting with a rack M² as clearly shown. It will be seen that by this construction the tongue can be readily lifted vertically or moved transversely by the operator.

Arranged transversely on the tongue is a cross bar N having depending stocks O secured to its under side which carries converging blades P adapted to engage the sides of the hill of potatoes in such a manner that the same will cultivate the soil being thrown upwardly. The blades P are so shaped that the soil will be lifted by the curved forward portions of the same and thrown upwardly, and be deposited alongside of the plants. The stocks are connected to the tongue by stay rods Q in order to relieve the strain, and by this construction the cultivator blades will be held in such a manner that all danger of the same becoming twisted off is prevented.

From the foregoing description it will be seen that I have provided a cultivator which will accomplish the same result as a horse hoe now in use, and enable the driver to ride upon the same and manage the team as well as to have the blades under perfect control so that when an obstruction is met the same can be raised.

What I claim is:—

1. In a cultivator the combination with cultivator blades, and stocks to which they are attached, of a cross bar to which said stocks are secured, a tongue attached to said cross bar, a block upon said tongue, a wheeled frame, the forward end of which is pivotally connected to said block, a lever carried by said frame and a connection between said lever and the rear end of said tongue for the purpose set forth.

2. In a cultivator, a tongue, a block rotatably mounted upon said tongue, a V-shaped

frame having its apex portion pivotally mounted in said block; wheels adapted to support the rear end of said frame, a foot rest carried by the rear end of the tongue
5 and providing means for swinging said tongue relative to said frame, and cultivator blades adjustably supported from said

tongue and at a point between said foot rest and said block, as and for the purpose set forth.

FREDERIC S. WOODMAN.

Witnesses:

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