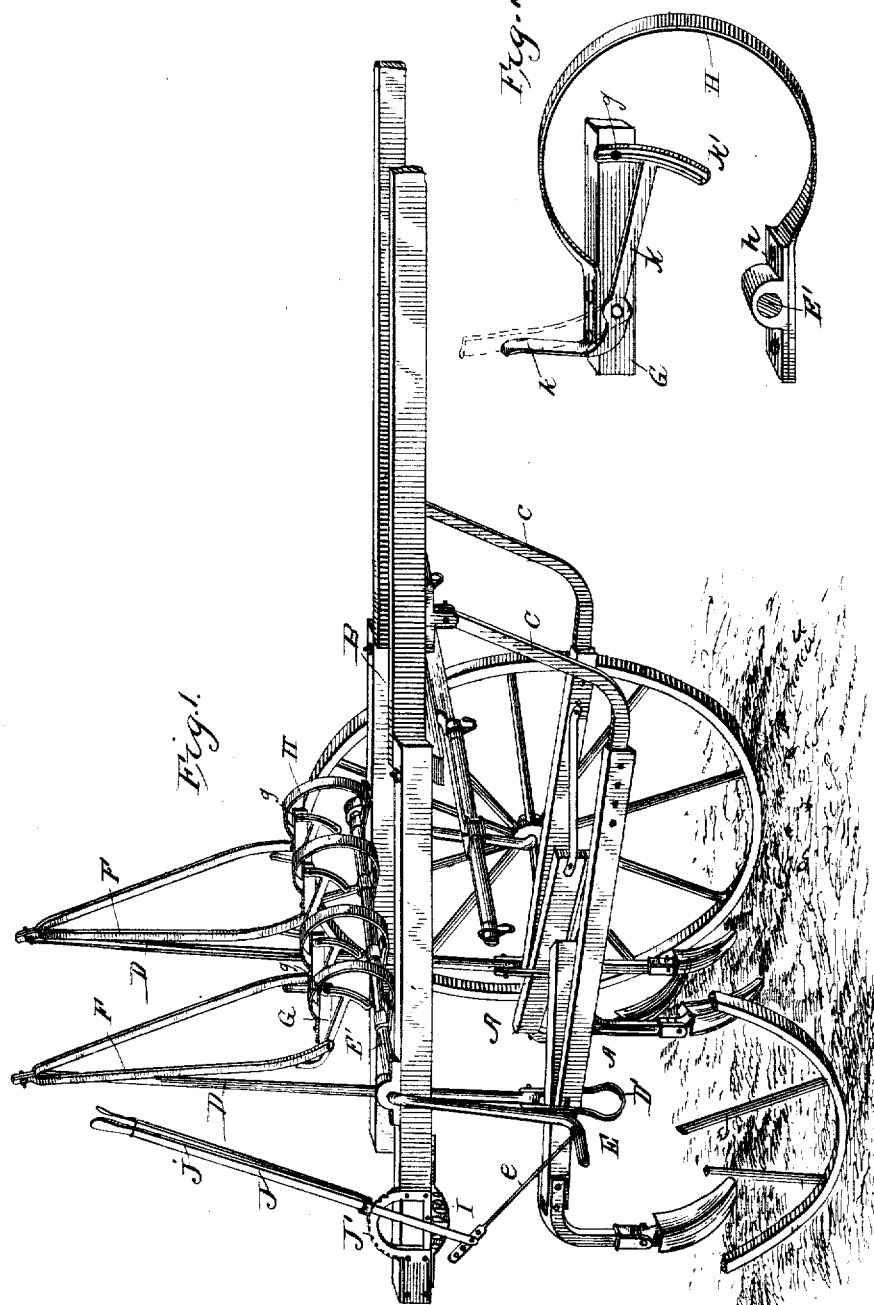


(No Model.)

E. R. CONKLIN.  
WHEEL CULTIVATOR.

No. 346,193.

Patented July 27, 1886.



Witnesses:  
R. C. Laurie  
Sarepta Speck.

Inventor:  
Edward R. Conklin  
By R. B. & A. Lacey  
Attys

# UNITED STATES PATENT OFFICE.

EDWARD R. CONKLIN, OF WAUSEON, OHIO.

## WHEEL-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 346,193, dated July 27, 1886.

Application filed April 20, 1886. Serial No. 199,544. (No model.)

### *To all whom it may concern:*

Be it known that I, EDWARD R. CONKLIN, a citizen of the United States, residing at Wauseon, in the county of Fulton and State of Ohio, have invented certain new and useful Improvements in Wheel-Cultivators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of cultivators which have the plow or cultivator beams pivotally connected at their front ends to a draft-frame mounted on an arched axle, the draft-frame and plow-beams being adjustably connected by standards pivotally connected at their lower draft ends with the plow-beams and with the draft-frame by rods or links.

The object of my invention is to simplify and improve the construction of this class of implements, to devise a construction whereby the cultivator-beams may be raised or lowered simultaneously with the adjustment of the draft-frame, and the cultivator-beams be adjusted independent of the draft-frame.

It consists in the novel features more fully hereinafter set forth, claimed, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view, parts broken away, of a cultivator of my construction embodying my improvements. Fig. 2 is an enlarged detail perspective view of the means connecting the lower ends of the standard-rods with the axle.

The cultivator or plow beams A are pivotally connected with the draft-frame B by curved draw-bars C. Standards D, supporting the rear ends of the beams, are connected at their upper ends with the arched part E' of the axle E by a standard-rod, F, bar G, and connection H, at their lower ends with the beam by loops or stirrups I'. The standard-rod F may comprise two parts, as shown, and a bar, G, may be provided for the lower end of each part. These bars may be independent of each other or connected together, as desired. The lower end or ends of the standard-bar F are pivotally connected with the rear end of the bar G, which in turn is rigidly

connected with the upper end of the curved connection H, the lower end of which is rigidly secured or clamped to the arched part of the axle by a clip, h. The draft-frame is extended beyond its pivotal connection with the arched part of the axle and supports the driver's seat I. The lower part or spindle of the axle E is adjustably connected with the lower end of a lever, J, pivoted on the draft-frame, preferably to the rear of the arch or raised portion E', by a link, L. Latch j and segment J' hold the lever in an adjusted position. By operating the lever forward or backward the draft-frame is correspondingly moved relative to the lower part of the axle, so that the seat is brought nearer to or farther from a line passing vertically through said lower part of the axle. By reason of the rigid connection of the bars G with the raised part or arch of the axle, and the rotation of the latter relative to the frame, said bars are correspondingly moved with the movement of the draft-frame; but the standard-rods F, being pivotally connected with the bars, are not in the least affected by their movement, and, as one of the vital points of my invention is to move the standard rods simultaneously with the adjustment of the draft-frame, the following means have been devised to cause a rigid connection between the bars and rods at the advance movement of the frame, to throw the rods forward and elevate the cultivator-beams. Levers K, having their rear ends, k, curved upward and bearing upon the rear sides of the standard-bars on their parts, and having their forward or front ends provided with slotted segments K', are pivoted to the rear ends of the bars G, preferably on the same bolt which connects the rods and bars together. A bolt or pin, g, passing through the slotted segment into the bar, serves to hold the same, when adjusted relative to the standard-rods, and bars G, whereby the throw of the standards may be regulated and the amount of elevation or adjustment of the beams be governed.

In practice, the driver's seat may be adjusted relative to the axle according to the weight of the driver. The lighter the weight the greater must be the leverage to effect a balance for the frame, and the heavier the weight the less the leverage. The leverage is the distance between vertical planes passing through the

driver's seat and the lower parts or spindle of the axle. When the planes coincide, the leverage is practically nothing, and the driver's seat is directly in line with and above the lower part or spindle of the axle. This leverage is adjusted by the lever J and link c, and simultaneously therewith the bars G and levers K are moved, carrying with them the standard-rods F and standards D, which effect a corresponding adjustment of the beams. The amount of adjustment of the beams is governed by the position of the lever K. If it be desired to raise the beams independent of the levers K and the movement of the bar G, it may be done by simply moving the rods F in the usual manner, as will be readily appreciated. Again, when the draft-frame is adjusted to a fixed position, in order that a perfect equilibrium may be had, it is necessary to adjust the beams to a certain elevation and hold them there, and the rods F are moved till the required adjustment is effected, when, by adjusting the levers K till their ends k bear against and support the rods, the desired result will be obtained.

The connection II may be rigid, if desired; but in practice the best results are had if it be of elastic or spring material.

The lever K may be a fixture and its curved end a permanent stop in case the machine is not to be adjusted for carrying varying weights.

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

1. In a wheel-cultivator, the combination of the beam, the standard D, the standard-rod F, a bar, G, and a stop, as K, bearing against the standard-rod and forming a support therefor, substantially as and for the purpose set forth.

2. In a wheel-cultivator, the combination, with the beam, standard D, and standard-rod F, of a spring-support, II, for bodily sustaining the standard-rod, substantially as shown and described.

3. In a wheel-cultivator, the combination of the beam, the standard D, standard-rod F, a bar, G, a revoluble support, E', and a connection, II, between the support and bar, substantially as described, and for the purposes specified.

4. In a wheel-cultivator, the combination of

the beam-standard D, standard-rod F, bar G, lever K, pivoted thereto, and having a curved end bearing against and forming a support for the standard-rod, and a spring-support, II, for the short bar, substantially as shown and described.

5. In a cultivator, the combination of the beam, the standard D, the standard-rod F, a bar, G, and a pivoted lever, K, having one end bearing against and forming a stop for the standard-rod and its other end vertically adjustable, whereby the elevation of the beam may be regulated, substantially as described.

6. The combination of the beam, draft-frame, arched axle supporting the draft-frame on its arch, a bar, G, at a distance above the axle, a connection, H, securing it to the arch of the axle, a lever, K, having a curved end pivoted on the bar, a standard-rod, F, pivoted to the bar G and resting on the curved end of the lever, a standard, D, connecting the standard-rod with the rear end of the beam, and a lever under the control of the driver for shifting the position of the supporting-wheels and simultaneously effecting vertical adjustment of the beam, substantially as and for the purposes set forth.

7. In an agricultural implement of the herein-described type, the combination, with a support and the standard-rod pivotally connected therewith, of an adjusting device directly interposed between the support and standard-rod for adjusting the inclination of the latter, substantially as and for the purposes described.

8. The combination of the draft-frame, the axle, beam, a bar, G, located above the axle, curved spring-connection uniting the bar and axle, a lever pivoted on the bar and having one end curved and its other vertically adjustable, a standard-rod pivotally connected with the bar and resting on the curved end of the lever, and a standard having a stirrup embracing the beam, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD R. CONKLIN.

Witnesses:

G. P. KRAMER,  
T. N. GRIFFIN.