

G. BRADLEY.
Wheel-Cultivators.

No. 145,331.

Patented Dec. 9, 1873.

Fig. 1.

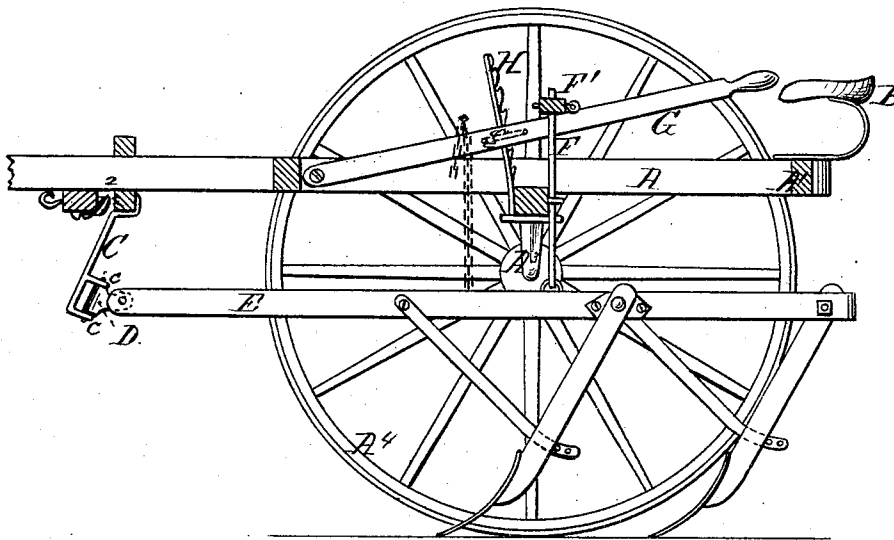
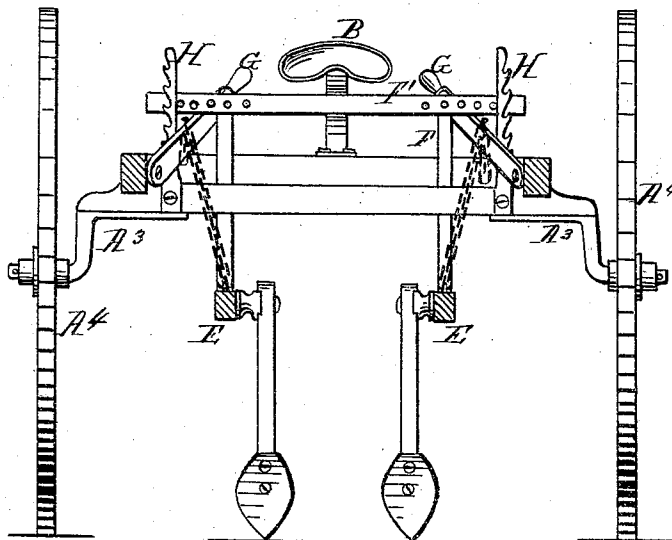


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE BRADLEY, OF ROCKFORD, ILLINOIS, ASSIGNOR TO CHARLES R. CHANDLER, OF SAME PLACE.

IMPROVEMENT IN WHEEL-CULTIVATORS.

Specification forming part of Letters Patent No. **145,331**, dated December 9, 1873; application filed August 7, 1873.

To all whom it may concern:

Be it known that I, GEORGE BRADLEY, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Corn-Cultivators; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 is a longitudinal section of my improved cultivator, and Fig. 2 is a transverse section of the same.

Similar letters of reference denote corresponding parts in both figures.

The invention relates, more particularly, to the manner of hinging and operating the shovel-beams, so that both a lateral and vertical movement can be given to them by means of hangers, double joints, with foot-pieces, and levers within reach of the driver, for avoiding the plants, or for raising the shovels entirely out of the ground for moving the cultivator from one field to another, all as hereinafter explained.

In the accompanying drawings, A A' A² are the side and end bars of the frame, A³ the axle, and A⁴ the wheels, these parts being constructed in any usual or desired manner. B is the driver's seat, mounted on the rear bar A¹. C are brackets projecting down from the front bar A², the lower end of which brackets are provided with ears *c*, projecting rearward, in which the shovel-beams E are swiveled. The forward ends of the beams have pivoted to them a T-shaped piece, D, the head of which fits between the ears *c* in the bracket C, and a pin passing down through the ears and head in a perforation in the head of the T-shaped piece D secures the parts in position. The shovel-beams E are made of such a length that but a slight variation is observable between the swing of the forward and rear shovels. The shovel-beams are connected together by uprights F, pivoted to them and to a slotted cross-bar, F', above the axle. These uprights are secured to the rear side of the axle by means of staples, which admit of their lateral

movement within certain limits, but prevent the shovel-beams from swinging out against the wheels. The cross-bar to which these uprights are pivoted is slotted near both ends, and is provided with a series of perforations along said slots, so that the shovel-beams can be set at any desired distance apart by changing the position of the uprights in the slots; or any desired lateral movement can be given to the shovels by means of a foot-rest on the upper side of the beams. (Not shown.) G are hand-levers pivoted to the longitudinal beams of the frame, and extending rearward, and with the free end within convenient reach of the driver. These hand-levers are connected with the shovel-beams by means of chains permanently secured to said beams, and hooked to the hand-lever in any convenient manner, so that they may be lengthened or shortened at will. H are upright racks, secured to the axle, one near each end, around which a staple, *g*, secured to the hand-lever, works. The side faces of these uprights are provided with notches, into which the staples fit for holding the shovel-beams in any desired position through the chain secured to the shovel-beams and levers.

It will be seen that either beam can be raised independently of, and without in any way interfering with the operation of, the other.

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

1. The pivoted upright link-rods F and slotted connecting-bar F', in combination with the bracket C and swivel-block D, for effecting the adjustment of plow-beams E, as described.

2. The racks H H, hand-levers G G, and loops *g g*, in combination with the uprights F and slotted connecting-bar F', arranged and operating substantially as described.

This specification signed and witnessed this 16th day of July, 1873.

GEORGE BRADLEY.

Witnesses:

G. W. FORD,
H. H. HIBBARD.