

G. MOORE.

Wheel-Cultivator

No. 68,643.

Patented Sept 10, 1867

Fig. 1.

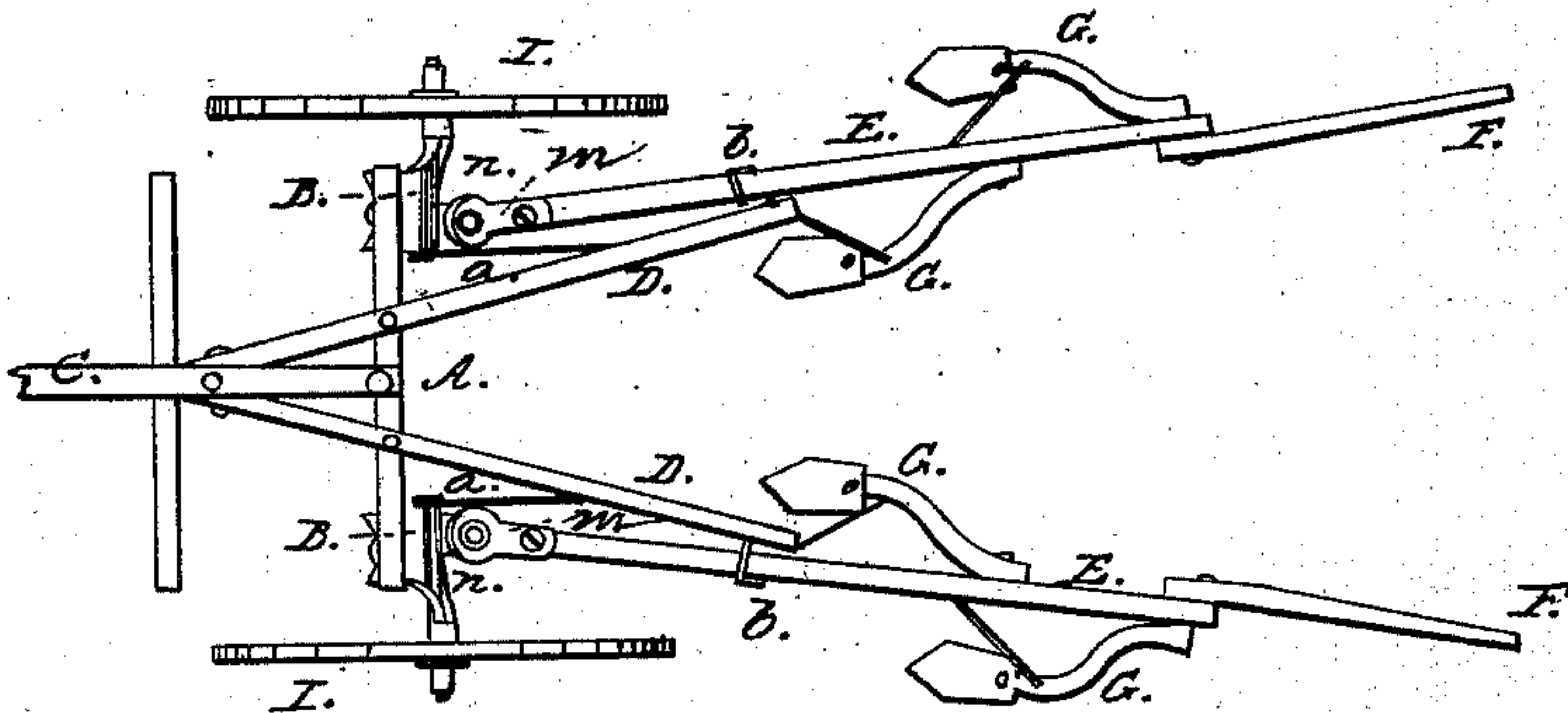


Fig. 2.

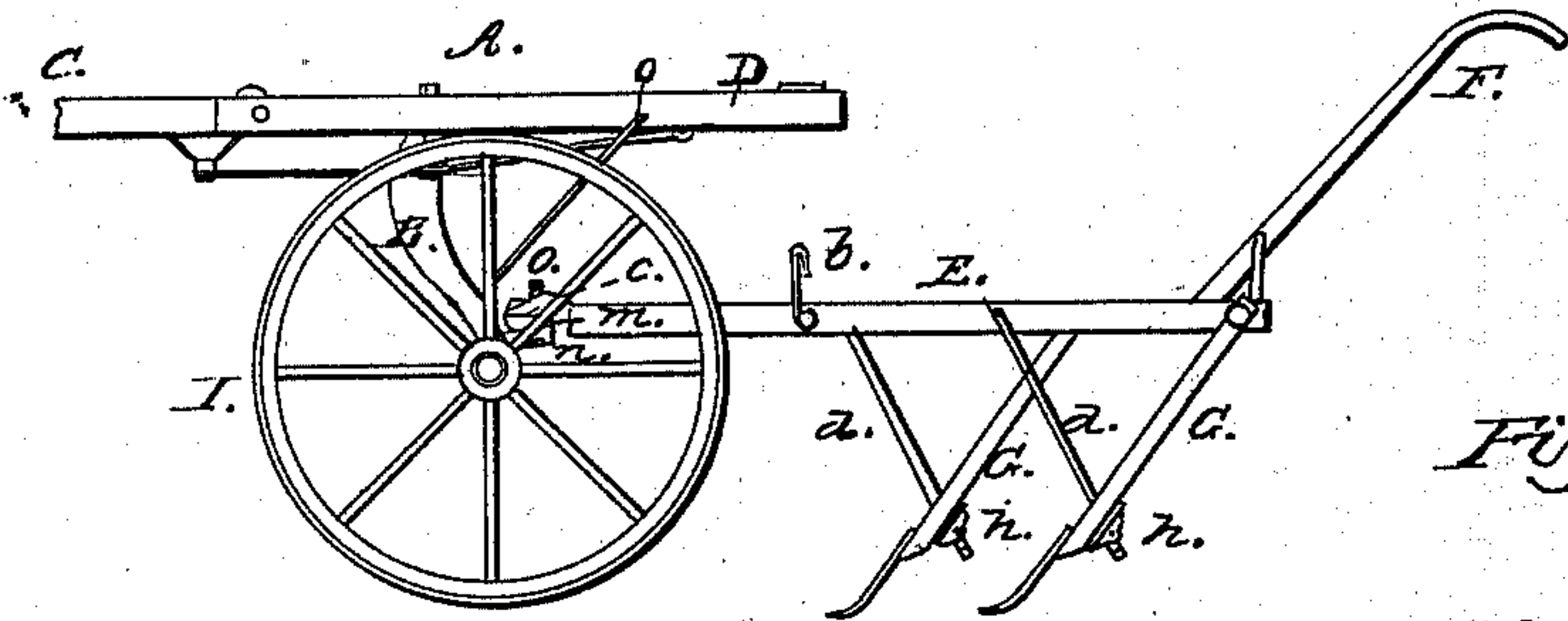


Fig. 3.

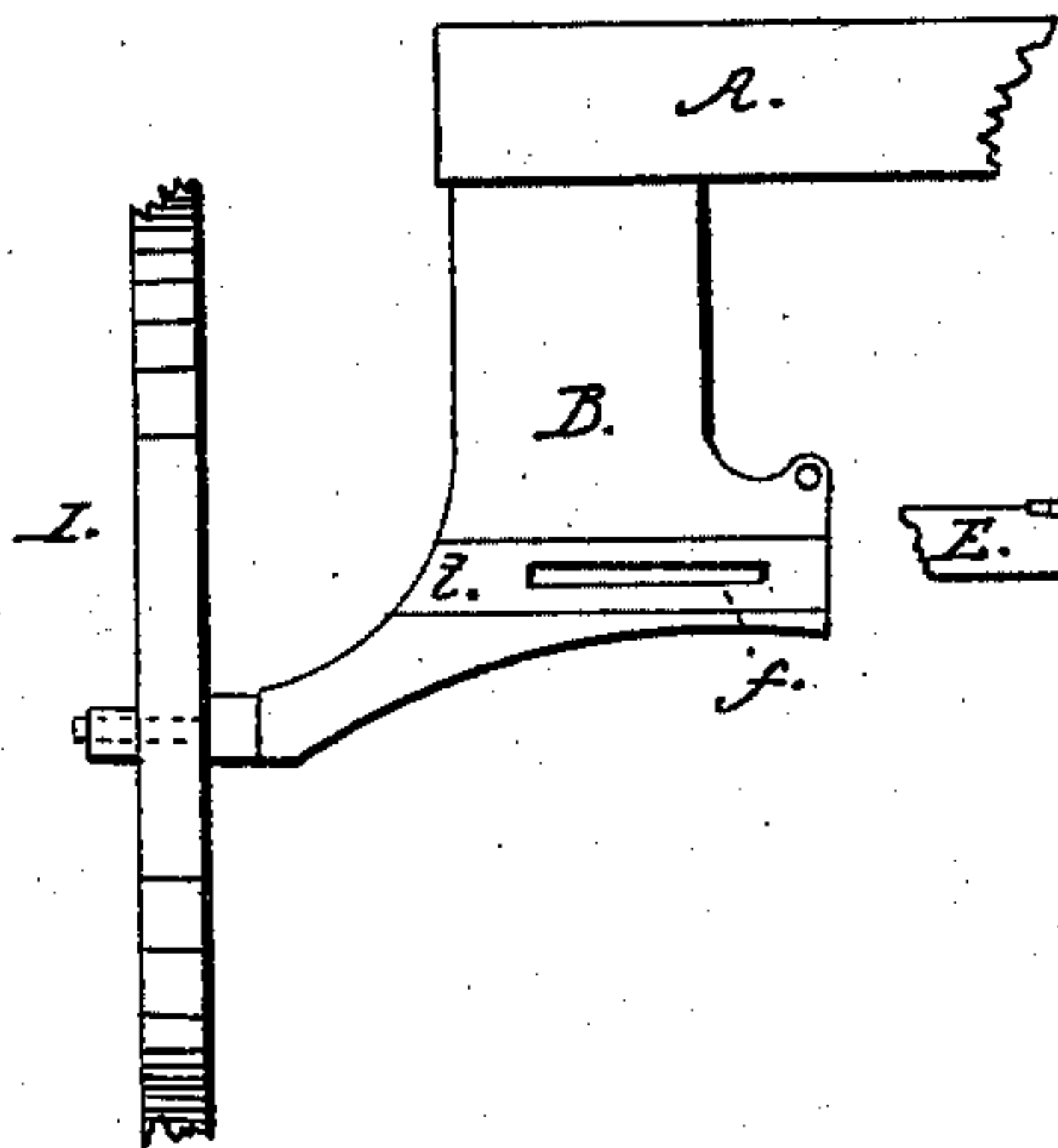


Fig. 4.

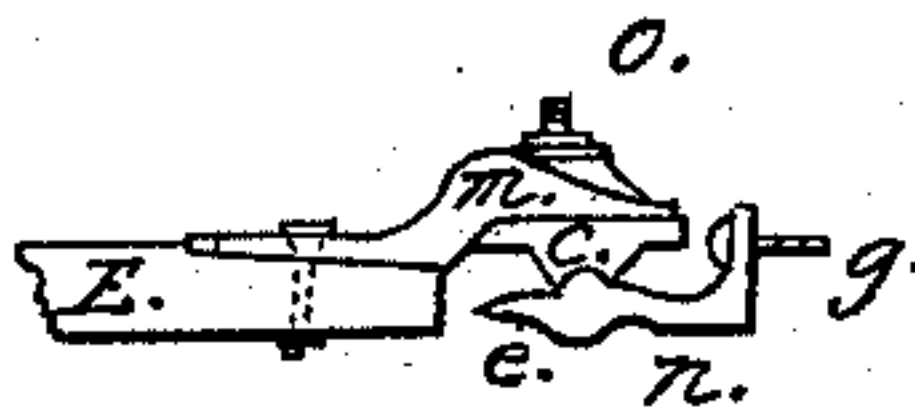


Fig. 6.

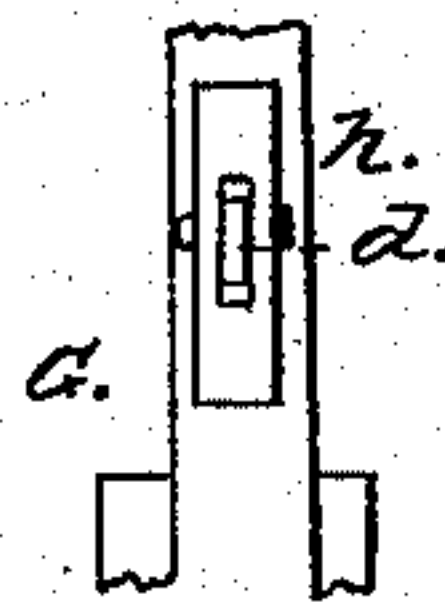
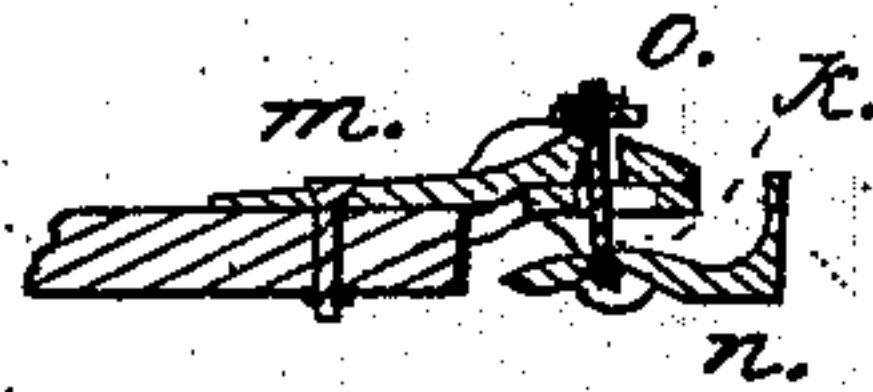


Fig. 5.



Witnesses:  
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P. J. Dady

Inventor:  
G. Moore  
By his Atty  
Dodge & Munn



# United States Patent Office.

GILPIN MOORE, OF MOLINE, ILLINOIS, ASSIGNOR TO JOHN DEERE, C. H. DEERE, S. H. VELIE, AND G. W. VINTON, OF SAME PLACE.

*Letters Patent No. 68,643, dated September 10, 1867.*

## IMPROVEMENT IN CULTIVATOR.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, GILPIN MOORE, of Moline, in the county of Rock Island, and State of Illinois, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use our invention I will proceed to describe it.

My invention relates to that class of cultivators denominated walking cultivators, or those with which the operator walks, in contradistinction to those on which the operator rides, and the invention consists in a novel construction of the several parts, as hereinafter explained.

Figure 1 is a top plan view.

Figure 2, a side elevation, and

Figures 3, 4, 5, and 6 are views of portions shown in detail.

To construct my improved cultivator I first make two cast-iron axles, of the form represented by B, of figs. 1, 2, and 3, they being provided with journals on which to mount the wheels I, and having a vertical projecting part or arm, by which they are securely bolted to the extremities of a wooden axle or cross-bar A, as represented. These axles B are each provided with a longitudinal recess on their rear face, as represented by *t* of fig. 3, and there is a slot, *f*, formed in it for the purpose of attaching and adjusting the beams as hereinafter described. I then provide two beams E, to each of which are secured two standards G, having cultivator teeth or shovels attached to them in any suitable manner. These standards are pivoted at their upper ends to the beams E, and are held in place by a brace rod, *d*, as represented in fig. 2. To the rear side of the standards, where the brace rods pass through them, is secured a metal plate, *h*, as shown in fig. 2, these plates being provided with a slot at their centre, through which the brace rod passes, and having on each side of the slot a projecting flange, with a hole passing transversely through them, to receive and hold a wooden pin, which passes through the flanges of the plate *h* and the brace-rod *d*. The rod *d* is provided with a series of holes, so that by changing the wooden pin from one to another of these holes, the standard G, with its shovel, may be adjusted as desired. To attach the beams with their standards and shovels to the axles B, and at the same time permit them to have the necessary vertical and lateral movements, and at the same time prevent their rolling or turning over, I construct the devices represented in figs. 4 and 5. These devices consist of a metal plate, *n*, having its front end provided with a vertical flange or face, of proper size to fit in the recess *t*, on the rear side of the axle B, to which it is secured by a bolt or bolts *g*, which pass through the vertical face of plate *n*, and the slot *f* in the axle B. The longitudinal arm or portion of this plate *n* is provided on its upper surface, at each side, with a projecting circular-shaped point, *e*, as represented in fig. 4, and having an opening or slot made through it, between these points to permit a bolt, *o*, to pass through it, as shown in fig. 5, this bolt having a cross or T-shaped head on its lower end, fitting in a recess formed for it on the under side of the plate *n*. This bolt may be made with an eye for a pin to pass through to form the head. I then provide a circular plate, *c*, having a slot through its centre, and having a V-shaped flange projecting downward from each edge on the opposite sides of the central slot, these flanges having a notch formed in their lower points to fit on the projecting points *e*, as represented in figs. 4 and 5, these points turning vertically on each other, like the pivot or bearing points of a pair of scales. I next provide a plate, *m*, having its front end made circular, with its under surface flat, to fit and turn horizontally on the upper surface of the plate *c*, with a hole in it to permit the bolt *o* to pass through, and thus unite the three plates *n*, *c*, and *m*, as shown in fig. 5. This plate *m* has its rear portion extended back some distance, and has a vertical flange on each side to project down over the sides of the beams E, to which it is secured by one or more bolts. It will be seen that when the parts are thus constructed and united, the beams E are permitted to move freely in a lateral or horizontal direction by the movement of plate *m* on plate *c*, and also in a vertical direction by the movement of the plate *c* on the plate *n*, as already described, and at the same time the ploughs are held upright and prevented from turning or falling over sidewise. A tongue, C, is bolted to the top of the



wooden axle or bar A, and a brace, D, is secured to each side of the tongue in a diagonal position, and having their rear ends projecting back of the axle A for some distance, as shown in figs. 1 and 2. To each beam, E, is secured a hook, b, in such a position that when the beam is raised, the hook may be hooked over the projecting end of the brace D, and thus hold the ploughs clear from the ground when desired. A handle, F, is secured to each beam, E, by which the ploughs can be guided, these handles both being curved to one side to permit the operator to walk at one side of the row which the instrument straddles. It will be seen that each beam, with its ploughs, may be moved to the right or left independent of the other, and thus adapt its movements to the sinuosities of the row of plants, and that by loosening the bolt or bolts g the beams may be so adjusted as to suit rows of various widths. By these means I construct a very simple, light, and efficient implement, especially adapted to the wants of the farmer.

Having thus described my invention, what I claim is—

1. The axles B, constructed substantially as shown and described, for the attachment of the ploughs and wheels of a cultivator, as set forth.
2. I claim the double-acting clevis or device for attaching the ploughs to the axle, said device consisting of the plates n, e, and m, and bolt o, all constructed and arranged to operate substantially as described.
3. I claim the plate h when constructed and used in connection with the standard G and brace d, substantially as described.
4. I claim the cultivator, having its several parts constructed and arranged for joint operation, substantially in the manner and for the purpose herein set forth.

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Witnesses:

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