# J. P. Manny,

## Mower.

No. 112,362. Patented. Mar. 7. 1871.

*Fig. 1*

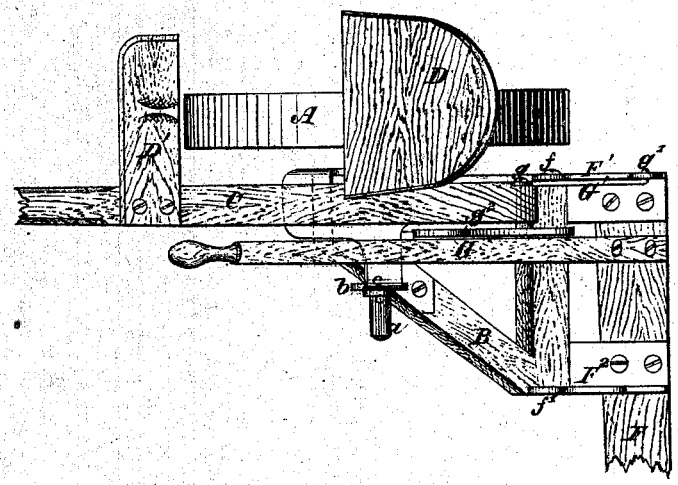
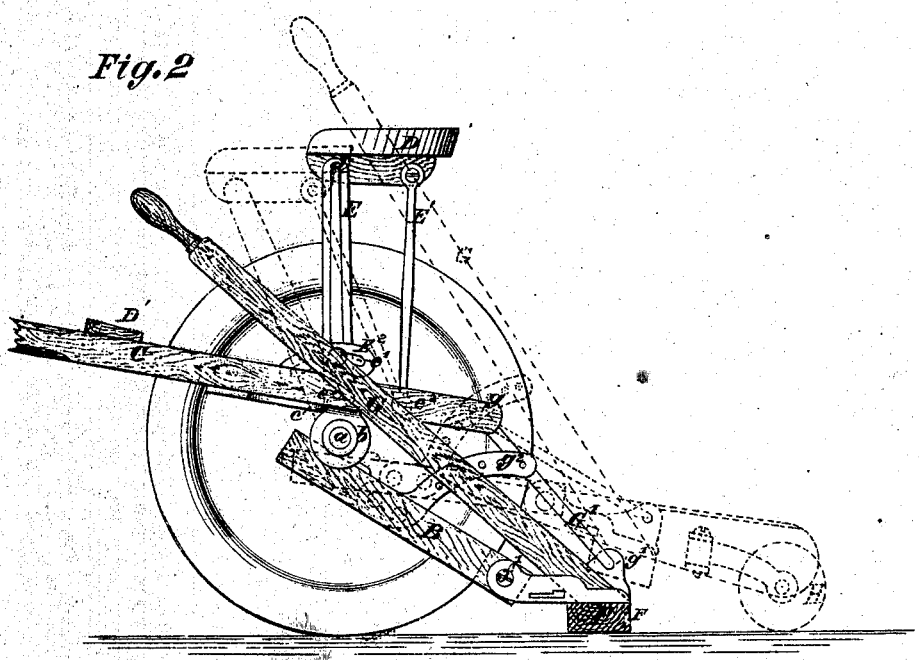



*Fig. 2*

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# UNITED STATES PATENT OFFICE.

JOHN PELLS MANNY, OF ROCKFORD, ILLINOIS.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **112,362**, dated March 7, 1871.

*To all whom it may concern:*

Be it known that I, JOHN PELLS MANNY, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Harvesters, of which the following is a specification:

My invention relates more especially to the adaptation of the machine to use as a mower; and consists in certain improvements on the machine for which Letters Patent of the United States were granted to me, respectively numbered and dated 15,8I0, October 27, 1857, 34,703, March 25, 1862.

In the accompanying drawing, Figure 1 is a plan view of my improved machine; Fig. 2, a side elevation of the same.

The object of the invention herein claimed is to enable the machine to conform freely to undulations of the ground, and also to enable the driver simultaneously to rock the finfinger-beam and to lift it parallel with the ground.

In this instance a driving-wheel, A, is shown as arranged outside the frame, and fixed on a shaft, *a*, turning in a long bearing or pipe-box, *b*, fixed on a triangular frame, B, which carries suitable gearing.

The box *b* forms trunnions, on which a bracket, *c*, turns freely. The tongue C is firmly secured to this bracket, and is free to vibrate up and down around the box *b*.

A seat, D, for the driver, is pivoted to arms E $E^1$, and can be adjusted laterally by being made to slide on its forward pivot, *d*, and be held by a set-screw, or it may be adjusted laterally by a slot and set-screw. The front arm, E, is pivoted at *e* to a standard, $E^2$, secured to the pipe-box *b*, and can be inclined backward or forward, and held in the position desired by a slot, $e^1$, and a set-screw. The rear arm, $E^1$, is pivoted at $e^2$ to the tongue.

By this mode of construction the driver's seat is rocked backward and forward as the finger-beam is raised or lowered, being connected rigidly with the gear-frame B through the box *b*.

The finger-beam F has lugs $F^2$ $F^1$ projecting in front of its heel end, and pivoted to the rear end of the gear-frame by joints *f f'*.

A lever, G, rigidly secured to the finger-beam, extends forward over the frame within easy reach of the driver, and passes over the axle *a*.

A pivoted link, G', connects the rear end of the tongue with the heel of the finger-beam.

A caster-wheel, H, supports the divider end of the finger-beam.

The operation of the apparatus above described is as follows: As the machine advances, the cutting apparatus glides along the ground, its joints *f f'* permitting it freely to rise and fall to pass over undulating ground. The lever G, while permitting the cutting apparatus freely to rise, prevents its descent into ditches or other sudden depressions by abutting against the axle *a*. When the driver from his seat lifts this lever G, the cutting apparatus is tilted so that the guards incline upward, and, at the same time, the finger-beam is raised parallel with the ground on the caster-wheel H, which serves as a fulcrum. This parallel movement of the bar is due to the double pivots *f f'* and the link G', while the tilting movement is due to the relative arrangement of the gear-frame and link G', the former oscillating on the main axle and its pivots *f f'*, while the latter oscillates on its pivots *g* $g^1$. As the finger-beam rises, the driver's seat moves forward in front of the axle *a*, and thus counterbalances the weight of the finger-beam.

Another advantage of this arrangement is, that in boggy ground the driver can, by hooking his feet under the foot-board D', draw his seat forward, and thus diminish the pressure of the cutting apparatus on the ground, or, by pushing backward, he can temporarily increase the pressure of the cutting apparatus upon the ground. The seat also possesses the capacity of being adjustable either longitudinally or laterally relatively to the line of draft.

The finger-beam may be fixed at any desired point by pins inserted in a sector-detent, $g^2$.

My machine is, of course, to be used with all the appliances of a fully-organized mowing-machine, which are too well known to require description.

The driver's seat might be fixed on the tongue, and yet the lifting devices would still operate well; but I prefer the construction I have shown.

I claim as my invention—

The combination of the driving-wheel, tongue, gear-frame, movable driver's seat, hinged finger-beam, grain-wheel, the link G′, and the lever secured to the finger-beam, and crossing both its joint and the main axle, all these parts being constructed as set forth for joint operation.

In testimony whereof I have hereunto subscribed my name.

JOHN PELLS MANNY.

Witnesses:

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