

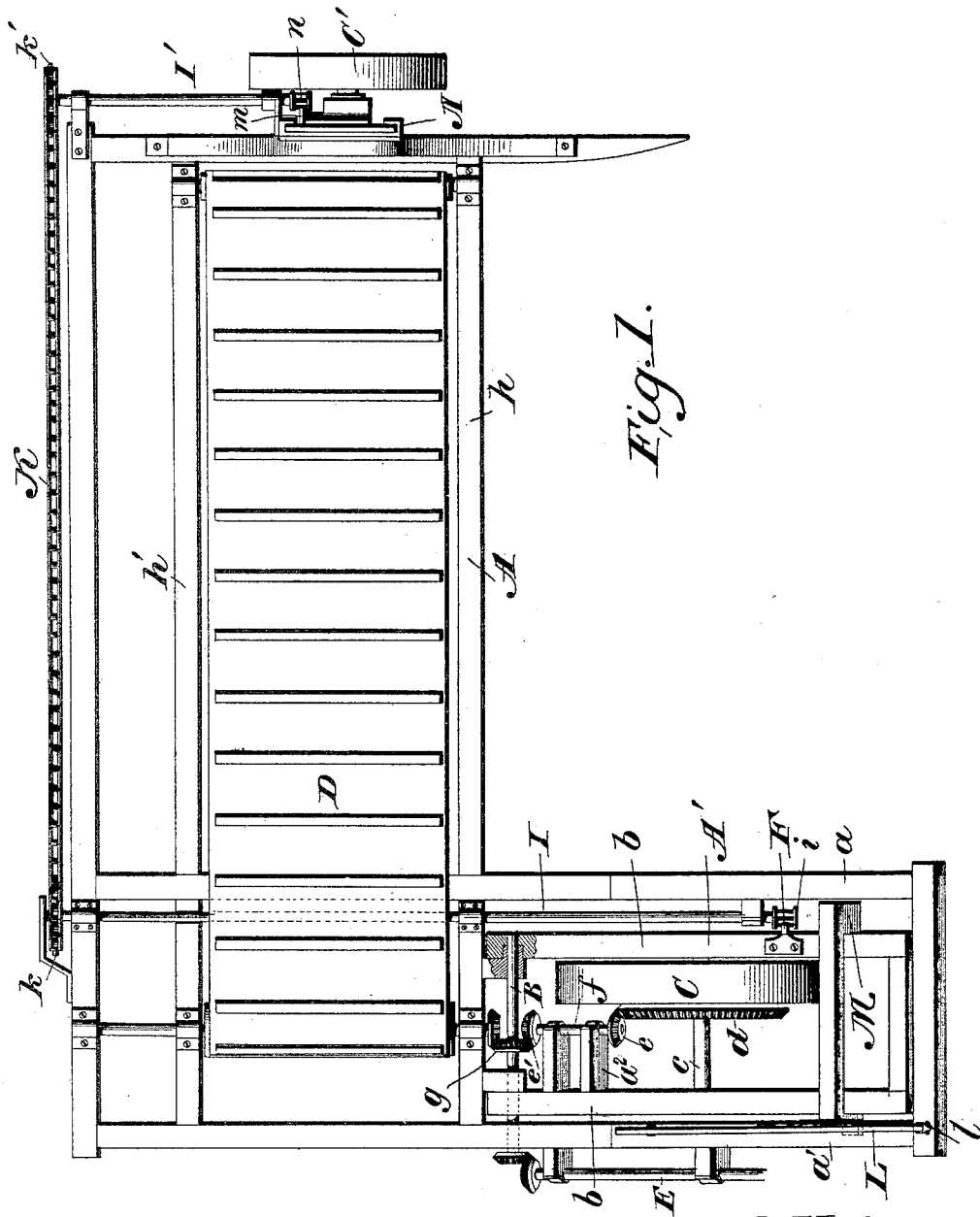
(No Model.)

2 Sheets—Sheet 1.

J. F. R. HOLMES.
PLATFORM ADJUSTMENT.

No. 460,824.

Patented Oct. 6, 1891.



Joseph F. R. Holmes.

Inventor

by

[Signature]

Attorney

Witnesses
L. S. Elliott
E. W. Johnson

(No Model.)

2 Sheets—Sheet 2.

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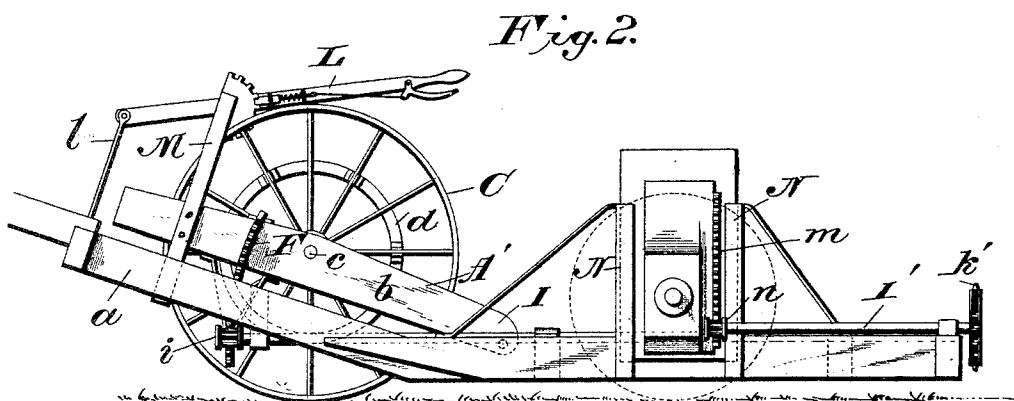


Fig. 3.

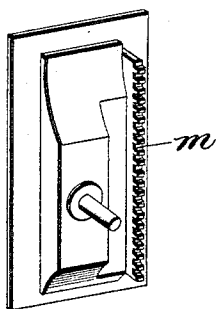
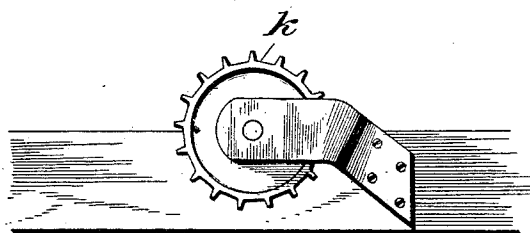


Fig. 4.



Joseph F. R. Holmes.

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UNITED STATES PATENT OFFICE.

JOSEPH F. R. HOLMES, OF HILLSBOROUGH, OHIO.

PLATFORM-ADJUSTMENT.

SPECIFICATION forming part of Letters Patent No. 460,824, dated October 6, 1891.

Application filed June 18, 1891. Serial No. 396,748. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. R. HOLMES, a citizen of the United States of America, residing at Hillsborough, in the county of Highland and State of Ohio, have invented certain new and useful Improvements in Harvesters; and I do hereby 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in harvester-frames and means for adjusting the same; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a part of a harvester-frame constructed in accordance with my invention, showing the raising and lowering mechanism applied thereto. Fig. 2 is a side elevation. Figs. 3 and 4 are detail views.

A and A' designate two different parts of the harvester-frame, the frame A, having the parts thereof rigidly connected to each other, while the frame A' is pivoted, by means of the shaft B, to the forwardly-projecting portion of the frame A between the beams *a* and *a'* thereof and carries the drive-wheel.

A shaft or axle *c* is journaled in the pivoted frame and carries one of the supporting-wheels C, which is rigidly mounted thereon and carries a gear-wheel *d*, which meshes with a beveled pinion *e* on one end of a shaft *f*, journaled in the pieces *a*² of the frame, said shaft having a pinion *e'* at its opposite end, which meshes with a pinion *g* on the shaft B, to impart a rotary motion to said shaft irrespective of the position the frame A' may occupy with respect to the frame A.

The shaft B drives the endless apron D, and also the shaft E, which imparts the proper motion to the binding mechanism of the harvester. The apron D passes over rollers between the beams *h* and *h'* of the frame A, and

in front of the beam *h*, or immediately above the same, is located the cutter-bar.

The frames A and A' are supported by the wheels C and C', and are adjusted thereon from the driver's seat by means of racks and gearing, as will be hereinafter described.

The frame A', mounted on the axle of the drive-wheel, has rigidly secured to one of its longitudinal beams *b* a depending curved rack-bar F, which meshes with a pinion or crown-wheel *i* on the end of a shaft I, journaled in the frame A, the opposite end of said shaft carrying a sprocket-wheel *k*, over which passes a sprocket-chain K to a sprocket-wheel *k'* on the end of a shaft I', carrying a pinion in mesh with a rack-plate *m*, mounted on the axle of the supporting-wheel C'. The frame A is adjusted vertically on the rack-plate *m* by means of the pinion *n*, said frame having rigidly secured thereto guide-plate N, which embraces the rack-plate and slide thereon.

The frames are adjusted by the lever L, which is fulcrumed on a standard M, rigidly secured to near the forward end of the frame A', said lever being connected to the forward end of the frame A by means of a link *l*, and when this lever is depressed it will rock the frame A' to elevate the rear end thereof and with it the main frame of the harvester, the forward end in lowering operates the shaft I by means of the rack and pinion, and said shaft, being connected to the shaft I' by the sprocket-chain, will operate the latter shaft to elevate the end of the frame adjacent to the supporting-wheel C'. The lever L is held in its adjusted position by means of the ordinary spring-pawl and rack shown.

I am aware that prior to my invention it has been proposed to provide harvester-frames with means for raising and lowering the same, so as to properly position the cutter-bars; and I therefore do not claim such devices, broadly; but

What I claim as new, and desire to secure by Letters Patent, is—

1. In a harvester-frame, a frame A, having parallel beams *a* and *a'*, inclining upwardly and forwardly from the main portion of the frame, a frame A', pivotally secured between said beams, shafts I and I', having sprocket-

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wheels and connecting-chain, and supporting-wheels C and C', carrying rack-plates, with which pinions on the shafts I and I' engage to adjust the main frame, substantially as set forth.

2. In a harvester-machine, the combination of the frame A, having a frame A', pivotally connected thereto by a driving-shaft B, gearing connecting said shaft with the main driving-wheel C, supporting the frame A', the forward end of said frame having a rack-bar, with which a pinion on the end of the shaft I engages, said shaft being connected to the shaft I' to turn the pinion in gear with the rack-plate carried by the supporting-wheel C', substantially as set forth.

3. In a harvester-machine, a frame A, constructed substantially as shown and provided with an apron D, a rack-plate *m*, supported

by the wheel C' and upon which the frame A slides, a pinion *n* in mesh with said rack-plate, mounted on the end of a shaft journaled in the main frame, said shaft being operated from a shaft I at the opposite end of the main frame, the latter shaft carrying a pinion in gear with a rack-bar on the rock-frame A', said rock-frame being mounted on the drive-wheel, pivoted to the main frame, and rocked by a lever fulcrumed thereon, and connected to the main frame by a link, substantially as set forth.

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

JOSEPH F. R. HOLMES.

Witnesses:

F. W. KELLY,
LE ROY KELLY.