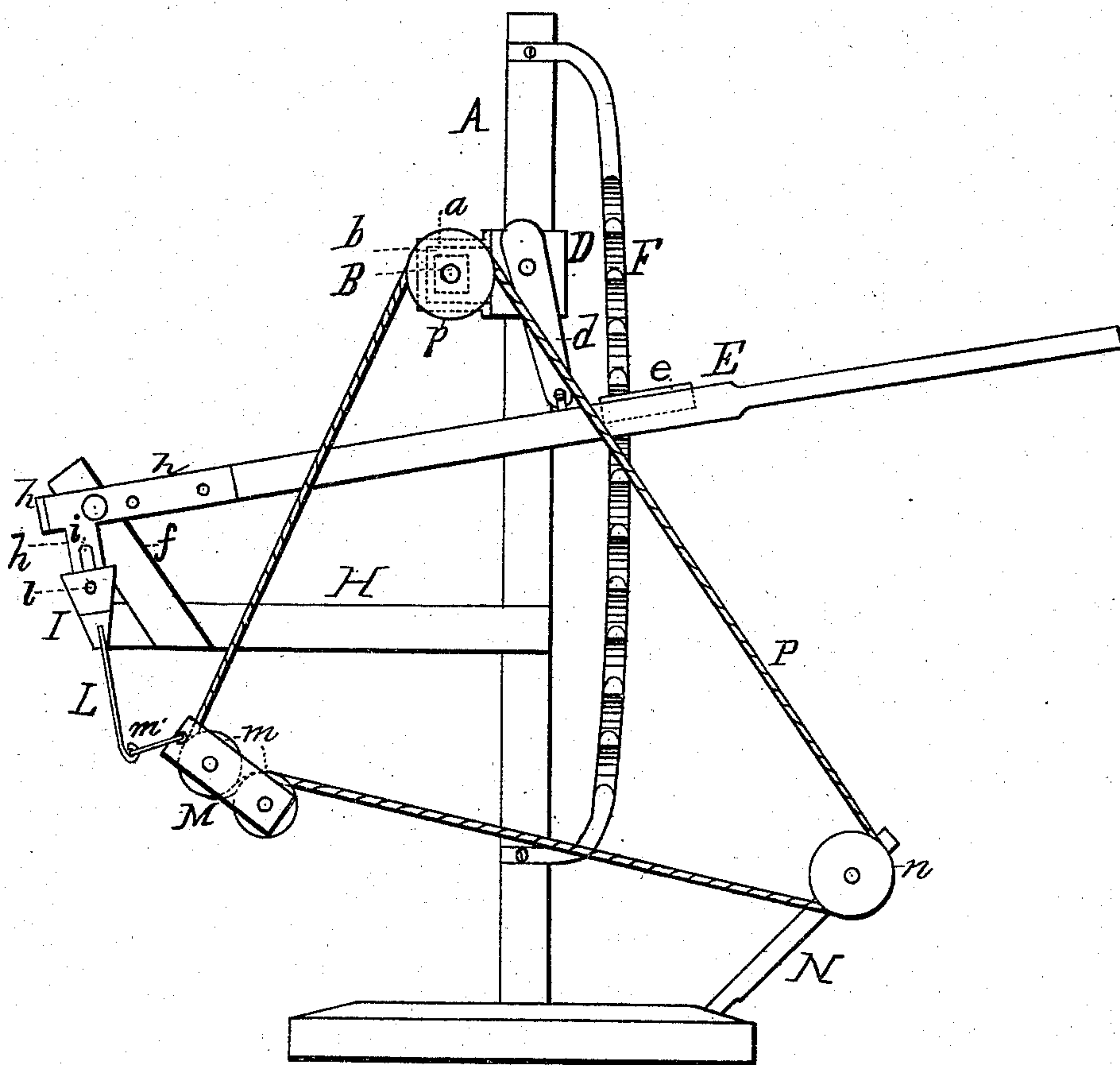


S. HAMILTON.  
REAPER-REEL.

No. 172,311.

Patented Jan. 18, 1876.



WITNESSES -

*Chas. C. Gill*

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# UNITED STATES PATENT OFFICE.

SAMUEL HAMILTON, OF MOUNT STERLING, ILLINOIS.

## IMPROVEMENT IN REAPER-REELS.

Specification forming part of Letters Patent No. 172,311, dated January 18, 1876; application filed October 16, 1875.

*To all whom it may concern:*

Be it known that I, SAMUEL HAMILTON, of Mount Sterling, Brown county, Illinois, have invented new and useful Improvements in Reaper-Reels, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to a device for preserving the tension of the belt of the reel of a reaping-machine when the reel is raised or lowered; and consists in the devices herein-after more particularly described.

Figure 1 is a front elevation of a device incorporating an embodiment of the elements of the invention.

A in the accompanying drawings represents the reel-post of a reaping-machine, to which the reel-shaft B is attached by the strap *a*, inclosing the bearing *b*, and secured to the slide D, which is movable vertically upon the post A. The bar *d* is pivoted to the slide D, and has its lower end hinged to the lever E, which extends on both sides of the post A, having on one side the pawl *e*, which engages the bowed rack F, secured in proper place on the post, and having its teeth suitably arranged to sustain the lever E, the other end of which is pivoted to the upper end of the bar *f*, which forms the terminus of the arm H, secured at its other end to the reel-post A. The end of the lever E adjacent to the bar *f* is provided with the angle-iron *h*, having the slot *i* in its downward-projecting arm, wherein is secured the bolt *l* of the head I, in the lower part whereof is fastened the upper end of the spring L, the lower end of which is looped about the upper part of the link *m'*, sustaining the pulley-case M, having the two grooved pulley-wheels *m* placed therein one above the other. Adjacent the base of the reel-post is secured, in an inclined position, the post N, having the grooved pulley-wheel *n* pivoted at its upper

end. The reel band or belt P extends over the wheel *p* at the end of the reel-shaft B, also over the upper wheel *m* and the wheel *n*.

The operation of my invention is as follows: The reel-belt P being placed as aforesaid, it is obvious that when the reel-shaft B is lowered the end of the lever E is forced outward, carrying the spring L and wheels *m*, increasing the distance between the latter and the wheel *n*, thus taking up any slack, the rack F meantime sustaining the lever E in place.

It is obvious that when the reel is elevated the end of the lever will be brought inward, and the strain upon the belt accommodated.

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

1. The lever E, sustained by the bar *d*, and pivoted to the arm *f*, and having the angle-iron *i*, in combination with the spring L and pulley-wheels *m*, *n*, and *p*, substantially as set forth.

2. The bent lever, composed of the rod E and angle-iron *h*, having the slot *i*, in combination with the arched rack F and slide D, substantially as shown and described.

3. The bent lever, composed of the rod E and slotted angle-iron *i*, in combination with the head I and spring L, as shown, and for the uses specified.

4. In a device for regulating the tension of the belt of a reaping-machine, a bent lever, slotted and constructed as described, and pivoted at its angle, in combination with a pawl and rack, substantially as set forth.

In testimony that I claim the foregoing improvements in reaper-reels, as above described, I have hereunto set my hand and seal this 25th day of September, 1875.

SAMUEL HAMILTON. [L. S.]

Witnesses:

R. S. FENN,

SAMUEL R. PATTON.