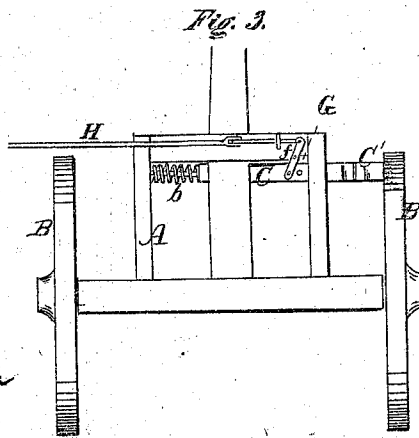
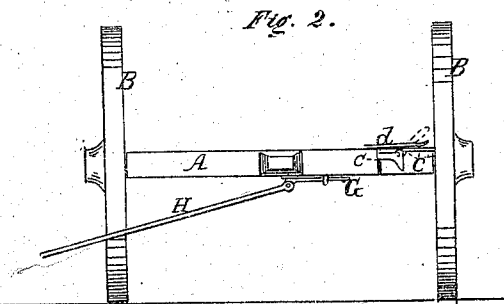
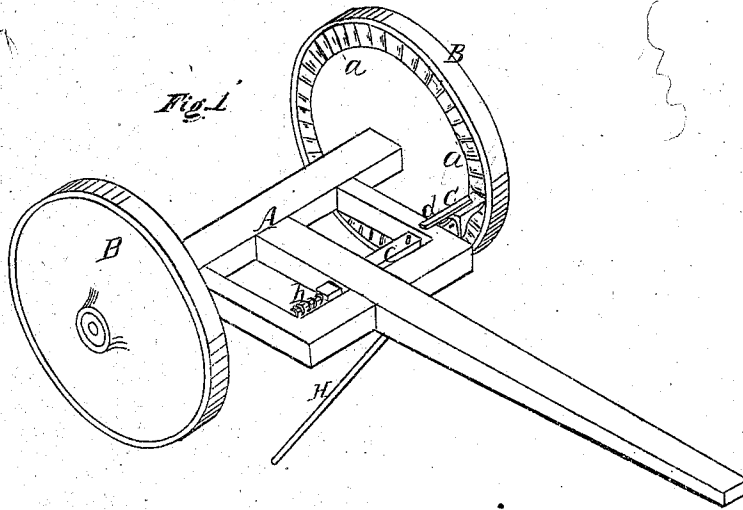


P. A. Tobey,
Mower.

No. 100,817.

Patented Mar. 15, 1870.



Witnesses
Chas. F. Spuman
Geo. W. Miatt

Preston A. Tobey
By J. Fraser, Esq.
Atty

United States Patent Office.

PRESTON A. TOBEY, OF CATON, NEW YORK. ASSIGNOR FOR ONE-HALF
TO STEPHEN TOBEY, OF SAME PLACE.

Letters Patent No. 100,817, dated March 15, 1870.

IMPROVEMENT IN HARVESTERS.

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, PRESTON A. TOBEY, of Caton, in the county of Steuben, and State of New York, have invented a certain new and useful Improvement in Harvesters; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view.

Figure 2, a front elevation.

Figure 3, a bottom view.

Like letters of reference indicate corresponding parts.

Nature of the Invention.

This improvement is in the method of transmitting power from the driving-wheel to the knives, and is of that class where gearing is dispensed with, and the action produced by a spring slide which connects with cam-teeth on the wheel.

The invention consists essentially in providing the slide with a toggle or toggles, which engage with said teeth in the forward motion of the wheel, but are thrown up automatically by the back motion, as hereinafter described.

General Description.

In the drawings—

A represents the main frame, and B B the driving-wheels of an ordinary mower or harvester.

One or both of these wheels are provided with ordinary cam-teeth *a a* on the inside.

In any suitable manner in the frame is set the ordinary slide C, which engages at one end with the cam-teeth, while at the other it is pressed back by a reacting spring, *b*.

The end which engages with the teeth has a toggle, C', which turns up freely, but stiffens when turned down in a horizontal position. By this means, when the driving-wheel goes forward the slide reciprocates or vibrates in and out, but when the wheel goes backward the toggle turns up, as indicated in dotted lines, thus disengaging the action. This arrangement of

the toggle-slide enables me to dispense with the ordinary expensive ratchet-device in the hubs of the wheels of ordinary harvesters, and also enables me to dispense with the ordinary cog-gears that are used. I, therefore, greatly reduce cost and friction, while at the same time I produce a more rapid action of the knives.

If desired, both driving-wheels may have the cam-teeth, and the slide may be extended, and have a toggle at both ends to connect with both wheels, but in this case the wheels would have to be fixed to a revolving axle. The operating end of the slide might also have a fork or double bearing connecting with the teeth above and below. Furthermore, the cam-teeth might be on both sides of one drive-wheel, and two toggles be used acting on one slide.

The toggle may be made to fall by its own weight, or a spring, *d*, may be used on top to hold it down.

On the under side of the machine is pivoted, at *f*, a rock-arm, G, which connects at one end with the slide C and at the other with pitman-rod H, by which means the motion is conveyed to the knives.

The use of the toggle, as before described, greatly facilitates the action of the machine, by obviating the employment of any disconnecting device attached to the wheels. The toggle acts instantly and automatically.

I am aware that cam-teeth have been used to give motion to a slide in other relations, and such, broadly, I do not claim; but

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

The arrangement of the slide C, toggle C', spring *b*, and the connections with the cutter-bar and the driving-wheel, in the manner and for the purpose described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.
PRESTON A. TOBEY.

Witnesses:

ALONZO TUCKER,
J. S. BUCHANAN.