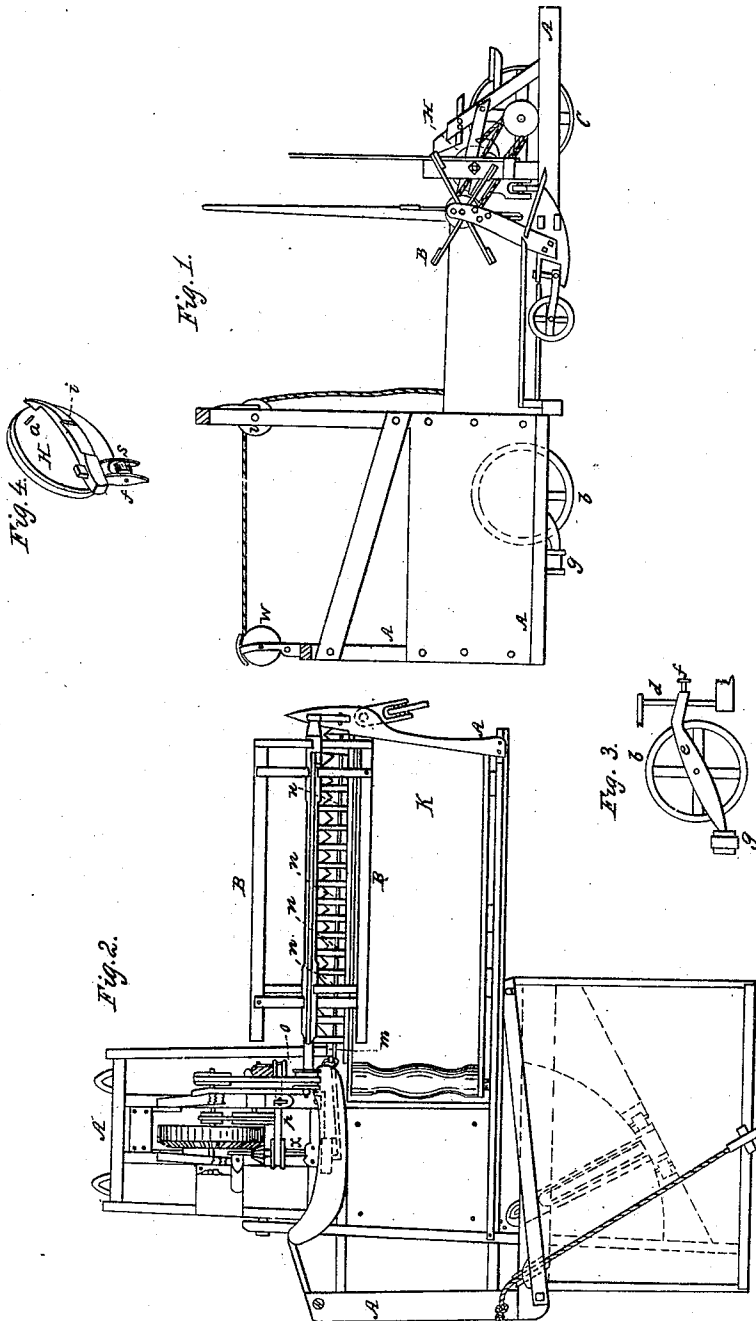


FALK, JOHNSON & ERICKSON.

Harvester Dropper.

No. 25,251.

Patented Aug. 30, 1859.



Witnesses:
S. P. Whitney
P. W. Reed

Inventors:
John Anderson Falk
Charles Johnson
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UNITED STATES PATENT OFFICE.

J. A. FALK, A. JOHNSON, AND G. A. ERICKSON, OF ALTONA, ILLINOIS.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 25,251, dated August 30, 1859.

To all whom it may concern:

Be it known that we, J. A. FALK, ANDREW JOHNSON, and G. A. ERICKSON, of Altona, Knox county, and State of Illinois, have invented certain new and useful Improvements in Reapers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters of reference marked thereon.

The nature of our invention consists in the arrangement of certain devices in connection with the harvesting-machine, the peculiarities of which will be hereinafter fully set forth.

To enable others skilled in the art to make and use our invention, we will now describe its construction and operation.

In the drawings, Figure 1 is a side elevation. Fig. 2 is a top view. Fig. 3 is a view of the swivel-wheel by which the machine is guided. Fig. 4 represents the wheel and bar by which an intermittent motion is given to the endless apron.

A represents the frame, which may either be constructed in the precise manner shown in the drawings or any other way deemed most advisable.

C is the main or driving wheel. On the shaft of the driving-wheel C are two pulleys, both being located on the same side. The one represented in Fig. 1 is for the purpose of operating the reel B in the manner fully shown in that figure. Between this pulley and the main wheel C is situated the second pulley, which connects with wheel H by a band. Said wheel H is more fully shown in Fig. 4. In the same figure, *i* represents a bar, which is pivoted to the same upright through which the shaft of wheel H passes. To the under side of said bar *i* is secured a small frame, as shown in Fig. 4. To this frame pulley *s* is attached.

On wheel H, *a* represents a pin which operates bar *i*. Said bar is so constructed that when the wheel H revolves the pin *a* will press the bar down, and thus force the pulley *s* down on band *p*, as seen in Fig. 2.

The driving-wheel C is provided with side cogs, which operate shaft *x* by means of a small cog-wheel. On the opposite end of shaft *x* is a pulley, around which belt *p* passes and connects with pulley *o*. Said pulley *o* is on the shaft which gives motion to the endless apron. The pulley on the end of shaft *x*, and around

which belt *p* passes, has a pin on its outer side, by which crank motion is imparted to the cutter-bar *m* by means of the connecting-bar. (shown in sectional lines in Fig. 2.)

b is a swivel-wheel placed in frame *e*. Said frame is in direct line from the driver's seat, as shown in Figs. 1 and 2. *d* is a perpendicular rod, on which frame *e* swings, and which allows it to be either elevated or lowered, according to the height which the grain should be cut.

f is a set-screw for the purpose of retaining the frame at any desired height. *g* is a pulley or pulleys, placed at the end of frame *e* to enable said frame to be more easily operated. A swivel-wheel is also placed at the end of finger-bar to support that portion of the machine. The hinder portion of the frame is constructed for a receptacle for the grain, with an inclined bottom immediately over the frame *e*.

T represents a sliding door or gate, which has a cord attached to its top, which then passes over the pulley *w*, and also pulley *z*, down over the platform, where the operator stands. He thus has the gate T under his control, and at any moment can elevate said gate and deposit the grain at any spot desired.

The operation of our machine is as follows: Power being attached, the main or driving wheel C revolves the shaft *x*. Band *p* connecting the pulley on said shaft to pulley *o*, motion is communicated to the endless apron K. Motion is also imparted to reel B by a band passing from a pulley on main shaft to a pulley on the end of reel B. The cutters are operated by a connecting-bar from cutter-bar to pulley on the end of the shaft *x*, and represented by sectional lines in Fig. 2. As the grain is cut and reel B throws it upon endless apron it is carried off and deposited on the platform, where the operator stands ready to receive it. He then ties it in bundles, throws it into the receptacle, and elevates the gate by means of the cord. The grain is then deposited, in a sufficient number of bundles, in one place to form a stack. The intermittent motion of endless apron *k* is caused by the pin *a* in wheel H pressing upon the band, thus creating friction enough on pulley *o* to make it operate the endless apron. It should be observed that band *p* is too loose until pressed down by pulley *s* to revolve pulley *o*. This feature is found highly desirable, as it conveys to the operator just the quantity

of grain to be bound, and gives him time to bind it in bundles before the apron again moves; but,

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The arrangement of the wheel H, which is provided with the pin *a* near its periphery, with the bar *i*, and pulley *s*, the same being con-

structed in the manner set forth, for the purpose of operating the band which drives the endless belt K, substantially as described.

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Witnesses:

S. P. WHITING,

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