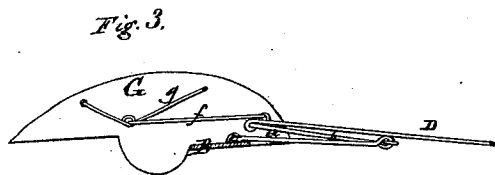
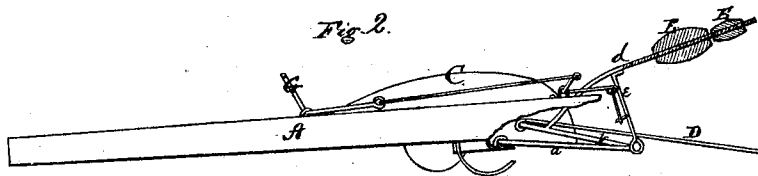
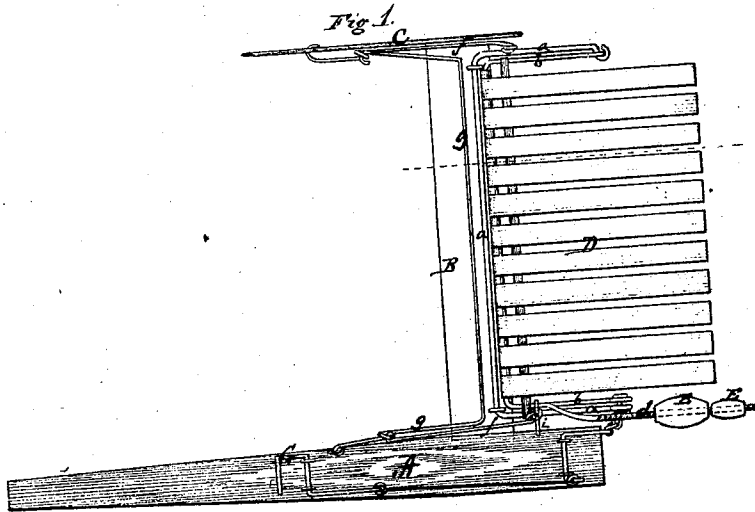


E. Myers.
Harvester Dropper.

Patented Feb. 22, 1870.

No. 100,181.



Witnesses.

Harry King
C. L. Cress

Inventor,

Ephraim Myers
per
Alexander Mason

Atty.

United States Patent Office.

EPHRAIM MYERS, OF CREAGERSTOWN, MARYLAND.

Letters Patent No. 100,181, dated February 22, 1870.

IMPROVEMENT IN HARVESTER-DROPPERS.

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, EPHRAIM MYERS, of Creagerstown, in the county of Frederick, and in the State of Maryland, have invented certain new and useful Improvements in Harvester-Droppers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "harvester-dropper" in which the dropper platform has three distinct motions quickly following each other for discharging the grain, namely: First, falling; second, front end rising; and third, front end falling, and these motions of the platform acting in connection with a quick upward and backward motion of the cut-off, so as to quickly and effectually discharge the grain.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of my device;

Figure 2 is a side view; and

Figure 3 is a view of the inner side of the dividing board.

In the drawings I have not deemed it necessary to show more of a harvester than what is actually necessary to fully represent my invention and the manner of attaching the same to the harvester.

A represents the tongue of a harvester;

B, the cutter-bar; and

C, the dividing board.

Near the rear edge of the cutter-bar B is hinged or pivoted a rod, *a*, extending nearly the whole length of the same, and its ends bent at right angles toward the rear.

In the rear ends of the rod *a* are hinged or pivoted the ends of another similarly bent rod, *b*, of such size that it can be folded within the rod *a*.

Upon the rod *b* is hinged a slatted platform, D, the slats of which are made of any suitable material, but I prefer making them of wood and metal combined; that is, the inner hinged ends of metal and the balance of wood.

From the arms of the rod *b* another rod, *d*, extends upward and toward the rear, and on said rod are placed one or more adjustable balls or weights, E E, for the purpose of properly balancing the platform D. These balls or weights may be made adjustable upon the rod *d* in various ways, but I prefer to provide the rod with screw-threads, and screw the balls on the same so that they can readily be brought closer to or farther from the outer end of the rod, as may be desired.

The rod *d* is further, by another rod, *e*, connected with or near the inner joint of the rods *a* and *b*, and rods *d* and *e*, or their equivalents, may be so bent or changed as to be out of the way of the sheaf, and if necessary outside of the drive-wheels or other parts of the harvester.

The arms or ends of the rod *a* are, by means of connecting-rods *f f*, connected with a bent rod, *g*, which extends along and on top of the cutter-bar B, in front of the rod *a*, and the ends of which are pivoted or hinged to the tongue A and dividing-board C, as shown in fig. 1.

The dropper device thus constructed is operated by means of a foot-lever, G, connected by suitable connecting-rods and levers with the rod *e* near the inner joint of the rods *a* and *b*, or may be connected with and raised by the drive-wheel or other machinery.

The rods *f f* play a very important part, for, by using one on each side, a much lighter rod can be used for the cut-off *g*, since, if only one were used, the cut-off would swag downward.

Its operation is as follows:

When the harvester commences to cut, the operator will bear down upon the foot-lever G, which raises the ends of the rods *a* and *b*, so as to bring the slat platform D in a position inclined toward the rear and upward from near the rear edge of the cutter-bar B, and the rod *g* is brought so as to rest upon the cutter-bar B.

As the grain is cut it falls upon and is carried along with the platform D until enough has been collected to form a sheaf, when the operator removes his foot from the lever G. This allows the platform D to drop at once, at the same time raising the rod *g*. The balls or weights E acting upon the rod *b*, throws the inner end of the slatted platform D upward and backward, and the rebound of said weights and platform tilts the platform forward again, throwing the front end downward. This rocking or bouncing motion of the platform D, in connection with the upward motion of the cut-off *g*, effectually discharges the grain. The operator then, by placing his foot again upon the lever G, raises the platform and lowers the cut-off ready for the next sheaf.

This device may be adapted to any harvester, and I do not confine myself to any particular form or shape of the different rods, &c., as it is obvious they must in some manner be modified to suit the machine on which the dropper is attached.

The parts I have mentioned as being attached to the tongue A are to be attached to the most suitable part of the harvester, generally to the part nearest to the inner end of the cutter-bar B, depending upon the construction of the machine to which it is attached.

The cut-off *g* is so constructed at the connecting point of the rods *f f*, as to produce an upward and backward motion of the cut-off when the platform falls. And the platform itself being hinged, as before mentioned, to the rod *b*, will, in falling, have its rear edge resting upon the ground or stubble, and allow its front edge to rise up, as already described, without removing the rear edge from the ground.

It will readily be seen that the rod or cut-off *g* as it rises, assists in discharging the grain, and while in this elevated position it acts as a cut-off to separate the falling and standing grain until the platform has been raised again.

In the dividing board *C* is another hole, which is intended to change the position of the cut-off *g*, *i. e.*, in tall grain to move the cut-off back into the hindmost hole. This will throw it further back when raised, so as to hold the tall grain, it not being intended to raise it higher than level with the hole in which it is hinged. This is a great advantage, for if the cut-off *g* is raised higher than this, it will come in contact with the overhanging reel—an indispensable part of every harvester. There must of course be a corresponding hole on the inside next the tongue or main frame.

Having thus fully described my invention,

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

1. The combination of the bent rods *a b*, rod *d*, and weights *E E*, all constructed and arranged as described, so as to give the platform the bouncing motion, substantially as and for the purposes herein set forth.
2. The combination of the slatted platform *D*, hinged to the rod *b*, the weight *E*, and cut-off *g*, all substantially as and for the purposes herein set forth.
3. The combination of the platform *D*, cut-off *g*, rods *a b d e*, weights *E*, and foot-lever *G*, with a suitable connecting device, all constructed and arranged as described, and operating substantially in the manner and for the purposes herein set forth.
4. The combination of the bent rods *a b*, rods *f f*, and cut-off *g*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 4th day of December, 1869.

EPHRAIM MYERS.

Witnesses:

C. L. EVERT,
HARRY KING.