J. BAHRUTH.

Dropper for Harvesters.

No. 167,149. Patented Aug. 31, 1875.

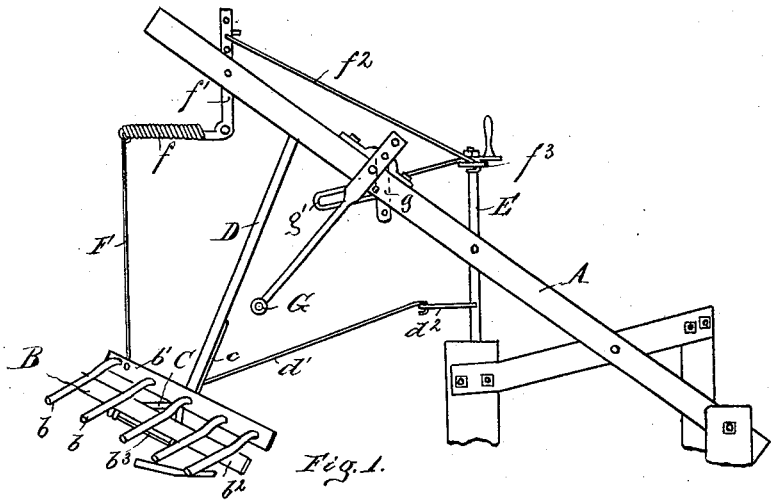

Fig. 1.

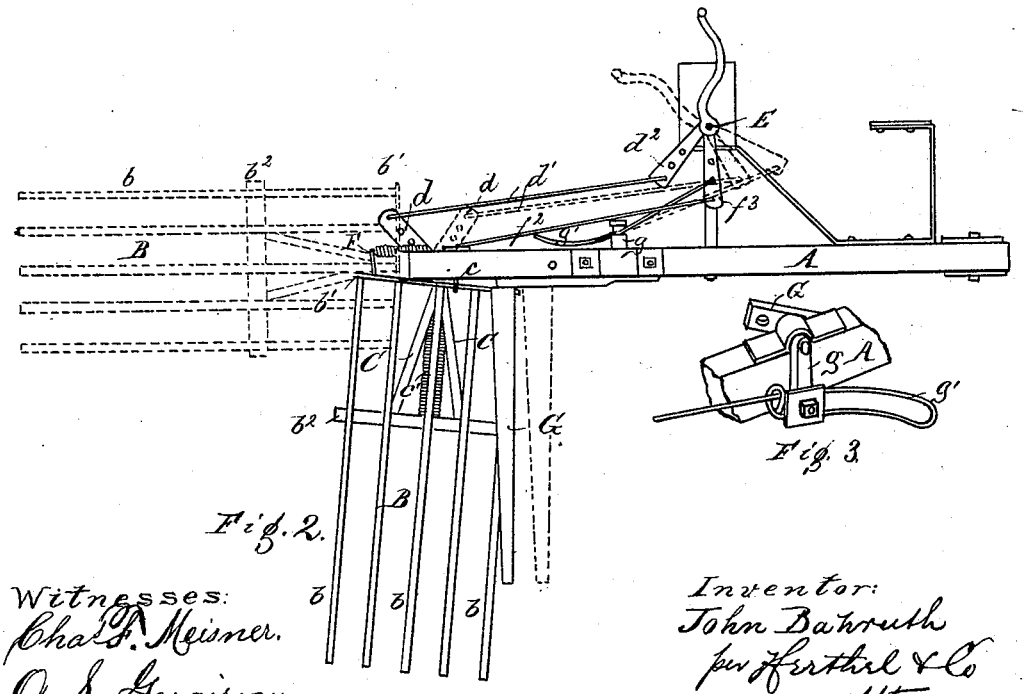

Fig. 2.

Fig. 3.

Witnesses:
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JOHN BAHRUTH, OF LIBERTY PRAIRIE, ILLINOIS.

IMPROVEMENT IN DROPPERS FOR HARVESTERS.

Specification forming part of Letters Patent No. **167,149**, dated August 31, 1875; application filed April 15, 1875.

To all whom it may concern:

Be it known that I, JOHN BAHRUTH, of Liberty Prairie, Madison county, and State of Illinois, have invented an Improved Dropper Attachment for Reapers, &c., of which the following is a specification:

The ordinary dropper attachments, used after receiving the cut grain, drop it in the track or rear of the reaper. It is, therefore, necessary that the grain be bound and cleared from the track; otherwise the reaper returning will pass over the gavels and scatter, damage, and render said grain more difficult for bundling.

To bundle the grain immediately after it has been cut, so as to insure uninterrupted operation of the reaper, is the object of this invention, and to do so with less time, labor, and expense.

My invention is further designed to drop the grain in a manner with less waste and scattering, and in a position favorable to the operation of binding.

Of the drawing, Figure 1 is a side elevation; Fig. 2, a top plan; Fig. 3, a perspective view of a detail part.

The operating parts constituting my dropper are mounted on a supporting-beam, A. This I support in inclined position by bolting its lower end to the reaper. B is the platform on which the grain falls. The platform consists of the slats b, secured to cross-bars b^1 b^2. (See figures.) Thus, as here shown, the slats run crosswise of the grain. The platform B I hinge to a supporting-brace, C, more clearly shown in Fig. 2. Hence, the under side of cross-bar b^2 has journals similar to the journal ends of the brace C, so that a connecting-bolt, b^3, passed through said journals (see Fig. 1) hinges the platform to said brace, the object of this hinge feature being to permit the platform to be tilted, as will hereinafter appear. By means of the brace C the platform is connected to a turn-shaft, D. This shaft, by its upper end, turns in the beam A. By its lower end it turns in the frame part of the reaper, as indicated in Fig. 1. On the shaft D is a detent-spring, c, Fig. 1, which holds the platform in proper position to receive the grain, and until the side motion of the platform has been made. c' is a suitable spring connected to under side of the brace and platform, (see Fig. 2,) for the purpose of returning said platform in engagement with the detent-spring by the time said platform has returned to original position. The shaft D is operated by its connection to power-shaft E, so as to swing the platform to one side of the reaper. Hence, attached to shaft D is an arm, d, Fig. 2. This, by connecting-rod d^1, connects to a farther arm, d^2, which, when operated, turns the power-shaft E. (See figures.) The power-shaft E is properly supported to turn in the frame of the reaper, and can be operated not only by the arm d^2, which serves as a foot-lever, but by a suitable hand-crank at top, as shown in the figures.

In case, therefore, the operator, either by hand, foot, or both, turns the power-shaft, this, by its connections operates the shaft that carries the platform, and the latter can be swung from its original crosswise position to a horizontal position, and vice versa. This motion of the platform is of sufficient sweep to reach to one side of the reaper, and deposit the grain out of the way of the reaper. After the platform has been thus operated to one side it is tilted to facilitate depositing its grain. Hence it is further connected to power-shaft as follows: The lower end of a connecting-rod, F, is secured to one corner of the platform, the upper end of said rod connecting to a coil-spring, f, which, further, is secured to one end of a lever-arm, f^1. (See Fig. 1.) The arm f^1 is pivoted to beam A, and connects, by rod f^2, to an arm, f^3, which forms part of top of power-shaft. (See figures.) By means of this latter connection of power-shaft and platform the latter, after completing its lateral movement, can be further operated to tilt or assume an inclined position, to more readily deposit the grain.

G is the ordinary grain-pole, which acts as a cut-off when the platform or dropper is being swung around. I connect the pole G to a crank-arm, g, which is journaled top of the beam A. (See Figs. 1, 2, and 3.) This connection is further adjustable to suit the grain-pole to different heights of grain. The crank g engages a slotted connecting-bar, g', (see Fig. 3,) which further connects to the arm f^3 of power-shaft E.

The operation of my improved dropper is,

therefore, as follows: The platform, having received the grain, is operated to swing to one side until the dropper is in a horizontal position ready to drop its grain. The full sweep of the platform having been made, it is next tilted, and doing so deposits the grain. It will be noted that as the platform is first in crosswise position it receives the grain from grain-pole lengthwise—that is, the head of the grain faces the operator approaching the rear of the machine, and that when the platform is swung to a horizontal position and tilted its grain is dropped crosswise, a position facilitating its bundling. On the platform returning to original position the grain-pole is swung backward, drops its grain on platform, and this, being operated as before, permits the grain-pole, by the weight of its crank, to be restored to original position to again receive the cut grain.

What I claim is—

1. An improved dropper, consisting of the platform B, its slats *b* arranged crosswise to the cut grain, supporting brace C on a turn-shaft, D, connected by arm *d*, connecting rod d^1 to a power-shaft, E, all arranged in combination, by means whereof the dropper can be moved to one side out of the track of the reaper, substantially as and for the purpose set forth.

2. The dropper attachment consisting of the platform B, hinged to its supporting-brace C, the turn-shaft B, springs *c c'*, connecting-rod F, spring *f*, pivoted arm f^1, connecting-rod f^2, and power-shaft E, in combination, by means whereof the said platform after receiving the grain is tilted to facilitate dropping its grain, as herein set forth.

3. The grain-pole G, its crank attachment *g*, slotted bar *g'*, and connection to power-shaft E to operate as and for the purpose set forth.

In testimony of said invention I have hereunto set my hand.

JOHN BAHRUTH.

Witnesses:

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