J. JACKMAN.

Corn-Dropper.

No. 161,685. Patented April 6, 1875.

Fig. 1.

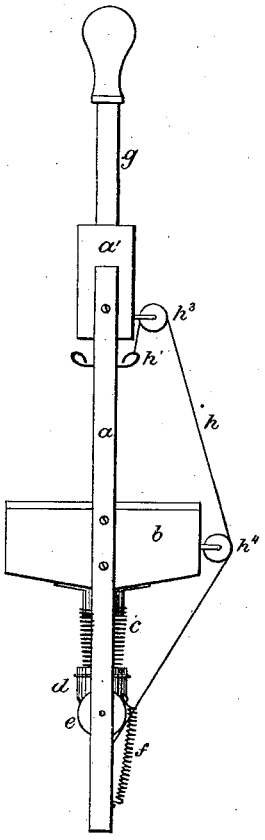


Fig. 2.

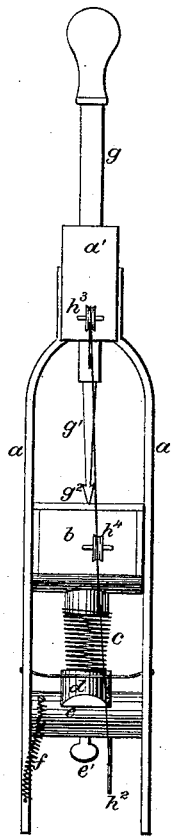
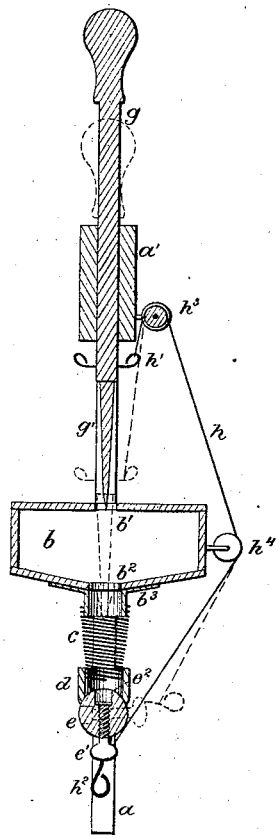


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH JACKMAN, OF RICHMOND, OHIO.

IMPROVEMENT IN CORN-DROPPERS.

Specification forming part of Letters Patent No. **161,685**, dated April 6, 1875; application filed March 5, 1875.

To all whom it may concern:

Be it known that I, JOSEPH JACKMAN, of Richmond, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Corn-Droppers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in devices for dropping corn by hand; and it consists in the construction, arrangement, and combination of the several parts, hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a side view, Fig. 2 is an end view, and Fig. 3 is a vertical section of Fig. 1 of my invention.

a a are two vertical arms, and *a'* a head-block secured between the upper ends of the arms. To these arms and head-block are secured the several parts of my invention. A vertical mortise is cut through the center of the head-block to receive the shaft hereinafter described. *b* is the grain-box. It is provided with the small central opening or mortise b^1 in its top, and with the opening b^2, through which the corn passes, on its under side. b^3 is a short spout secured to the under side and about the opening b^2. *c* is a channel or spout for conducting the grain from the box *b* to the dropping-cylinder. It is formed of wire made into a coil. The wire is wound close enough to prevent the escape of grain, and yet have elasticity or spring sufficient to admit of the proper adjustment of the devices, hereinafter described. *d* is the feeding tube or cup. It is secured to the lower end of the spout *c*. Its lower or under rim is hollowed or made concave, so as to fit neatly on the periphery of the dropping-cylinder and over the recess hereinafter described. *e* is the dropping-cylinder. It is journaled in the arms *a*, and is provided with a central vertical mortise, in which is formed a screw-thread for the reception of the regulating-bolt e^1. The bolt e^1 is turned into the mortise, so as to leave the upper part of the latter open, or so as to form the recess e^2. This recess e^2 may be enlarged or diminished in capacity by turning the bolt e^1 out or in, as desired. The recess e^2 receives the number of grains to be dropped in each hill, and the number is regulated, as above indicated, by the bolt e^1. *f* is a spring fastened to one of the arms *a* and to the cylinder *e*. It holds the dropping mechanism in proper position to receive the corn preparatory to being dropped, and, after the grain has been placed in the hill will throw back the several parts into their primary position. *g* is the operating-shaft. It fits neatly in the vertical mortise in the head-block *a'*. Its lower end is tapered to the long point g^1, and has constructed thereon the spear-shaped head g^2. Its length is such, and it is constructed and arranged so, that when pressed down in the act of dropping corn the spear-head g^2 will pass through the opening b^1 and through the box *b* into the spout b^3. *h* is an operating cord. It is attached to the staple h^1 on the shaft *g* and to the staple h^2 on the dropping-cylinder *e*. It passes over the pulley h^3 secured to the head-block *a'* and over the friction-wheel h^4 on the grain-box *b*. The staples, pulleys, and cord are so arranged that when the shaft *g* is pressed down the recess e^2 on the cylinder *e* is turned outward from within the feeding-tube sufficiently to drop the grain into the furrow.

In the operation of the device in dropping corn the spear-head g^2 passes readily down through the corn in the box *b*, and as it passes back upward it stirs the corn and prevents the latter from becoming packed within or above the opening b^2, and thus is secured the constant and equal flow of the grain to the cylinder.

The wire passage *c* will, in the operation of the device, have a slight vibratory or springing motion, caused by the rapid movement of the shaft *g* and the passage of the grains of corn under the rim of the tube or cup *d*, which motion causes the grain to flow readily, and prevents choking in the passage. This wire passage or spout is sufficiently flexible to permit of adjustment to larger grains of corn in the recess e^2, when the required number have a bulk that slightly more than fills the said recess.

The device may be carried in the hands, or may be supported by a suitable strap secured

to the arms *a* and passing over the shoulders of the operator.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the shaft g g^2 and seed-cylinder *e*, of the spring *f*, cord *h*, and pulley h^3, as and for the purpose specified.

2. The combination, with the box *b* and seed-cylinder *e*, of the wire spout *c* and shaft g g^1 g^2, for the purposes set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

JOSEPH JACKMAN.

Witnesses:

JOSEPH MCCAREL,

JAMES HARTUP.