

F. W. YOUNG.
Seed-Droppers.

No. 142,320

Patented August 26, 1873.

Fig. 1.

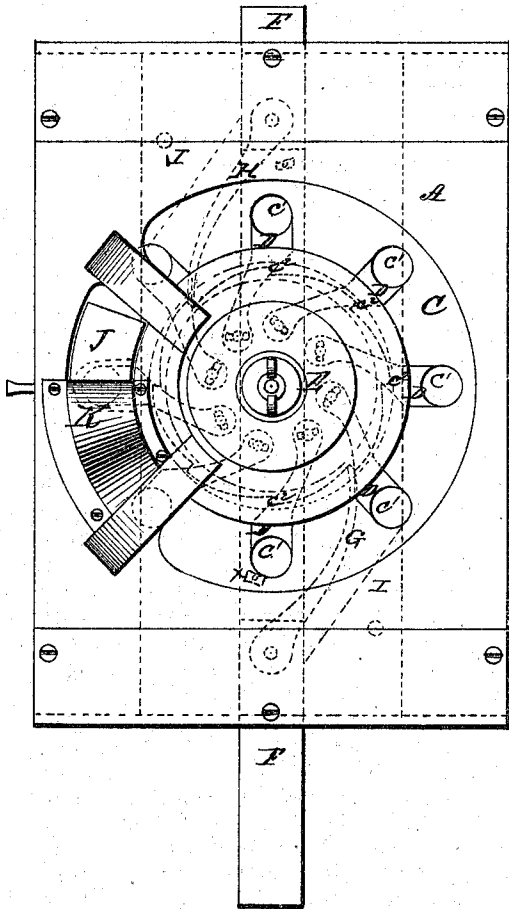


Fig. 2.

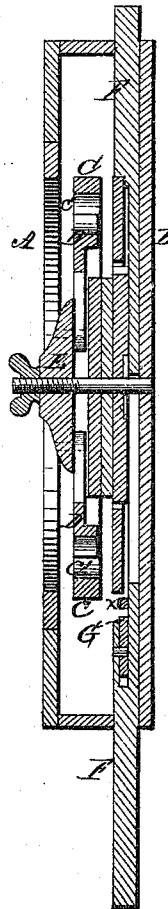


Fig. 3.

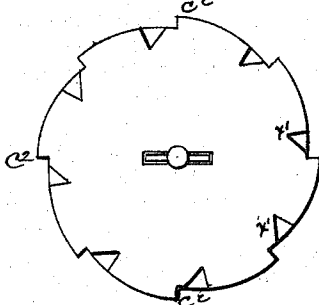
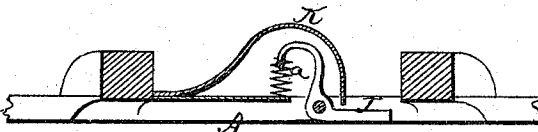


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK W. YOUNG, OF HOLDEN, MISSOURI.

IMPROVEMENT IN SEED-DROPPERS.

Specification forming part of Letters Patent No. **142,320**, dated August 26, 1873; application filed July 10, 1873.

To all whom it may concern:

Be it known that I, FRANK W. YOUNG, of Holden, in the county of Johnson and State of Missouri, have invented certain new and useful Improvements in Seed-Droppers; and I 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, which form a part of this specification.

My present invention is intended as an improvement on the seed-dropper for which Letters Patent No. 135,743 were granted to me February 11, 1873; and it consists, first, in the construction and arrangement of the reciprocating slide for rotating the dropping-wheel; and, second, in the construction and arrangement of a stationary cut-off with the rotating dropping-wheel, all of which will be hereinafter more fully set forth.

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 drawing, in which—

Figure 1 represents a plan view; Fig. 2, a longitudinal section; and Figs. 3 and 4, detached views.

A B represent the two boards that form the bottom of a seed-hopper. C represents the pivoted wheel, provided with seed-holes c^1 and adjustable arms D D for regulating the size of said holes, said arms being pivoted to a disk, E, on top of said wheel, by means of which they are adjusted. These parts are all constructed and arranged in the same manner as described in my patent above referred to. F represents the reciprocating slide with pawls G H for operating the rotating dropping-wheel. This slide moves in a groove in the bottom board B, and the shaft upon which the wheel C is placed passes through a longitudinal slot in the slide. The pawls G H are pivoted to the slide—one on each side of the center, point-

ing toward each other—and operate one on each side against teeth c^2 , formed on the under side of the wheel C, or upon a separate disk attached to the under side thereof. In the board B, on each side, is an inclined or curved block, I, which throws the pawls inward to engage with the teeth c^2 . When the slide F moves in one direction so that the pawl G turns the wheel C, the other pawl H is, by its block I, thrown inward, so that at the return stroke the pawl will turn the wheel, while the pawl G is, by its block I, thrown inward to be ready for the next forward movement again. By this means I dispense with the use of springs, which are always liable to get out of order. In the top board A is hinged or pivoted a cut-off, J, the inner end of which is inclosed in a casing, K, and pressed upward by a spring, a , which throws the outer end downward directly over the hole in the dropping-wheel C that is over the dropping-hole in the bottom board B. The cut-off being thus yielding will prevent any injury to the grain, and also prevent more than the desired amount to be dropped at a time. On the slide F are formed check-blocks or keys $x x$, which enter key-seats $x' x'$ in the periphery of the ratchet-wheel, thereby preventing the wheel from rotating past the dropping-port.

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

The pawls G H, arranged on the reciprocating slide F, as described, in combination with wheel C, blocks I I, and keys $x x$, substantially as and for the purpose herein set forth.

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

FRANK W. YOUNG.

Witnesses:

J. L. BOWER,
JAS. H. ROGERS.