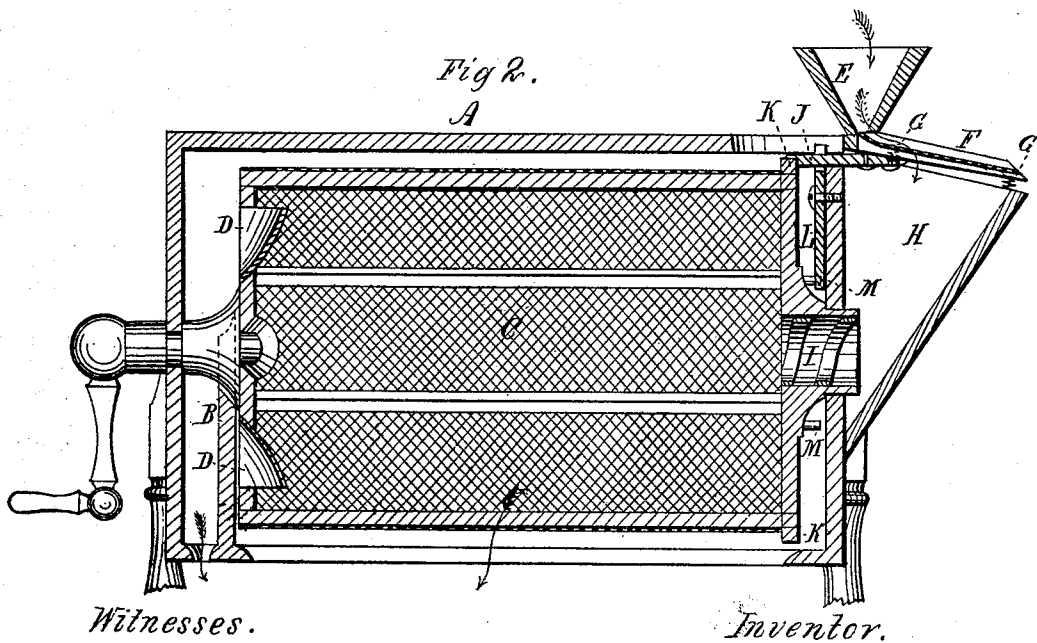
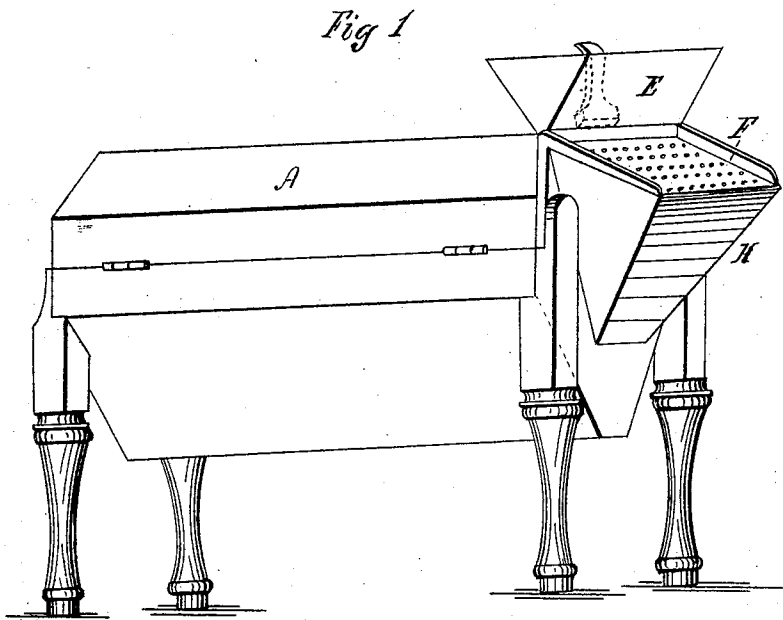


T. H. DRURY.
Rotary Winnowers.

No. 146,993.

Patented Feb. 3, 1874.



H. P. Talbot,
Charles B. Talbot.

Thos H Drury.

UNITED STATES PATENT OFFICE.

THOMAS H. DRURY, OF WHEATLAND, OREGON.

IMPROVEMENT IN ROTARY WINNOWERS.

Specification forming part of Letters Patent No. **146,993**, dated February 3, 1874; application filed June 11, 1873.

To all whom it may concern:

Be it known that I, THOMAS H. DRURY, of Wheatland, Yamhill county, Oregon, have invented certain Improvements in Grain-Separators, of which the following is a specification:

Figure 1 is a perspective view, and Fig. 2 a vertical longitudinal section, of a machine embodying my improvement.

The object of my invention is the complete separation of wheat from other grains admixed with it by growth from the field or otherwise. The machine consists, in a general manner, of an octagon-shaped box, the two lower inclining sides of which are continued in such manner that they almost reach each other, forming a hopper for the grain falling from the screen inside. This box A is so constructed as to open in the middle; and in the lower half, opposite the end where the grain is introduced into the screen, is a partition, B, whose upper edge is beveled, to allow the impurities which may have still followed the wheat into the revolving screen C, to drop out from the small projecting interior hopper in that end of the screen C; as by revolving the screen C, such impurities, being lighter than the grain, rise to the top, when the screen is partially filled, and are caught by the hoppers D and thrown over the partition B. The grain is first introduced into the high hopper E at the opposite end to the one just described. Under the hopper E is an inclined perforated metal screen, F, which, with the hopper E, rests on four spiral springs, G. Under the screen F a receptacle or second hopper, H, is placed.

Into this the hollow end of the revolving screen C is introduced. This hollow part also forms the bearing for this end of the screen C. Inside of this hollow part a worm, I, is placed, to feed from H into C. To the under side of the high hopper E is attached a projecting pin, J, against which the cams or lifters K strike in succession as they are revolved, lifting E and F with a kind of jarring motion. Just between the strokes of K a lateral motion is given to E and F by the lever L impinging against the pins M in the end of screen C. The upper end of this lever L is made into a kind of fork, in which the pin J rests, this being acted upon by the cams K and the pins M alternately, thereby giving a double motion to the hopper E and the screen F, which is most conducive to turn the grain through the holes in the screen F. The opposite end of C is merely furnished with a crank and the small conical-shaped hoppers D, before described.

The parts claimed in the improvement consist of the high hopper E and metal screen F, to which a jarring motion is given, as before described, by the pins M and cams K, by the action of the lever L and its spring N, which pushes its lower ends against the pins M.

I claim—

The hopper E, screen F, and pin J, in combination with lifters K, lever L, and pins M, arranged to operate substantially as and for the purpose specified.

THOMAS H. DRURY.

Witnesses:

H. P. TALBOT,
CHARLES B. TALBOT.