

## Grain Separator.

Patented March 3, 1868.



Witnesses:

*Inventor:*

N. PETERS, Photo-Lithographer, Washington, D. C.

# United States Patent Office.

EDWARD L. DORSEY, OF WINSLOW, INDIANA.

*Letters Patent No. 75,133, dated March 3, 1868.*

## IMPROVEMENT IN GRAIN-SEPARATOR.

*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, E. L. DORSEY, of Winslow, in the county of Pike, and in the State of Indiana, have invented certain new and useful Improvements in Grain-Separators; 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.

In the annexed drawings, making part of this specification, A represents a rectangular frame, which forms the base of the machine. B represents a box, with inclined sides, or V-shaped, which is balanced upon and secured to a board, C. This board C is placed between the two sides of the frame A, and pivoted to these sides, as seen at *a*. By this arrangement I am enabled to give the box B a longitudinally oscillating motion. *xx* represent pins, which are driven in the ends of the frame A, and which act as stops for the box, to keep it from moving too far as it oscillates. The pivots *a* pass through holes in plates D, which are secured to the sides of the frame, and as these plates have graduated holes, the box can be pivoted higher or lower, and thus given greater or less vibration, as may be desirable. E represents a grain-screen, the periphery of which is octagon-shaped. This screen is composed of two heads, G G, of ribs F F, which pass from one head to the other, of screen-wire, between these ribs, and of a shaft, I, which runs centrally through it. The shaft I has its bearings upon the ends of the box B, and is provided with a crank-handle, *o*, by means of which the screen is revolved. I propose to vary the wires between each of the ribs on the screen, making the meshes of different sizes, some square and some elongated, so as to make this screen answer as nearly as possible the purpose of several screens. Projecting from the shaft I, and also from the inner sides of the ribs F, is the series of arms *ee* and *bb*. R represents a door-way in one head of the screen, through which grain is placed in said screen, and through which it is also removed after it has been cleaned of its impurities. A slide, H, closes or discloses this door-way. L represents a spout, at one end of the box B, which passes in and connects with the door-way R, when the screen is turned in such a manner that the door-way is at its lowest point. K is a slide, which allows or cuts off a flow of grain to the spout L.

When grain is to be cleaned by this machine, a hopper, P, which is detachable, is connected with the door-way R, said door-way being in the position seen in fig. 1, and the grain is poured into said hopper, and passes through a screen in its bottom to the screen. The screen in the hopper is coarse, and takes out or catches a great deal of loose straw and grain-heads. When a sufficient quantity of grain has been poured into the screen, the operator takes hold of handle *o*, and revolves said screen, but in doing this he also gives an endwise oscillating motion to the entire box and screen. The arms *ee* and *bb*, on the inside of the screen, serve to break up straws and other impurities, so that they will, with the cockle, and smut, and chaff, &c., pass out through the meshes of the screen, and fall upon the bottom of the box, and then pass out, beneath the machine, through the pipe J, which connects with the bottom of the box. When the screen has been revolved sufficiently, and the grain has been cleaned, the slide K is removed, the door-way R disclosed and turned down, and the grain allowed to pass out through the spout L. The hopper is removed from the screen when it is being revolved, and is only used with it when it is stationary, and for supplying it with grain.

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

1. The box B, made in V-shape, and balanced upon the pivoted support C, so that it will oscillate as and for the purpose set forth.

2. The screen E, provided with arms *ee* and *bb*, door-way R, and slide H, when used in combination with the oscillating-box B, as and for the purpose set forth.

3. Spout L and slide K, when used in combination with the box and screen, as and for the purpose specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this      day of      , 1867.

EDWARD L. DORSEY.

Witnesses:

ANDREW J. WELLS,  
ERASTUS WILDER.