

J. W. BREESE.
Grain-Separators.

No. 142,672.

Patented September 9, 1873.

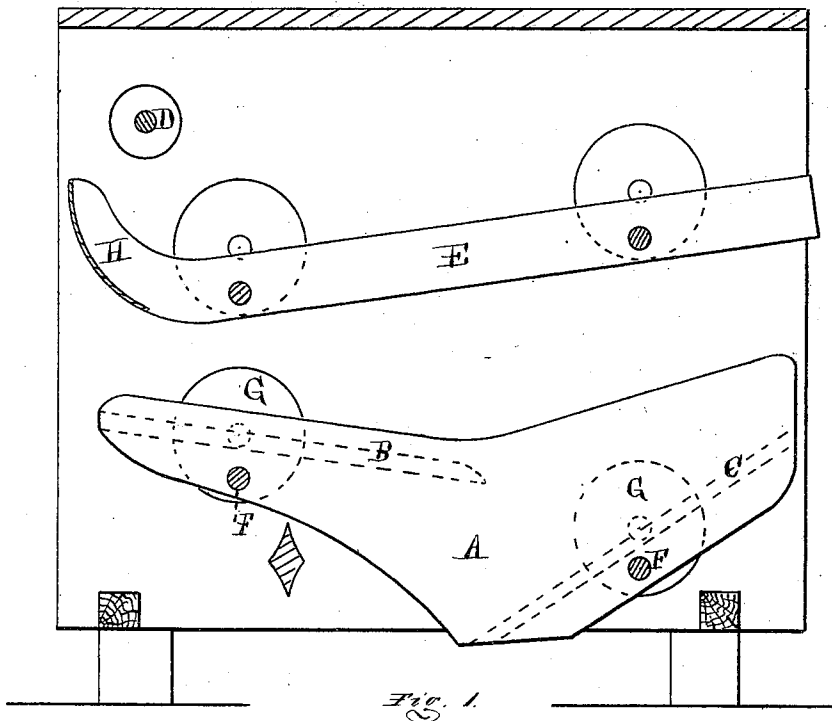


Fig. 1.

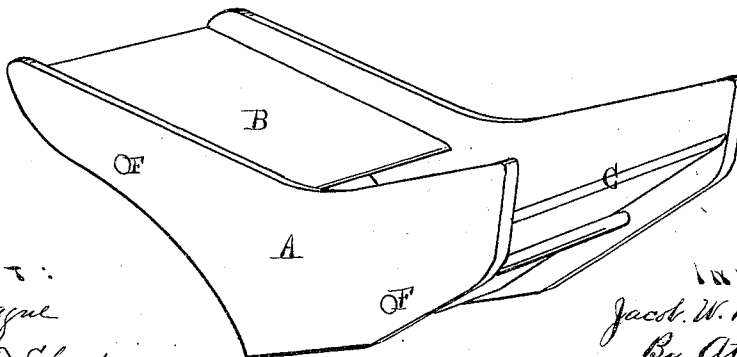


Fig. 2.

ATTEST:
H. Sprague
H. F. Eberts

INVENTOR:
Jacob W. Breese
By Atty—
Wm. S. Sprague

UNITED STATES PATENT OFFICE.

JACOB W. BREESE, OF CANANDAIGUA, MICHIGAN.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. **142,672**, dated September 9, 1873; application filed February 18, 1873.

To all whom it may concern:

Be it known that I, JACOB W. BREESE, of Canandaigua, in the county of Lenawee and State of Michigan, have invented a new and useful Improvement in Grain-Separators; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a side elevation with the side frame removed. Fig. 2 is a perspective view of my attachment detached.

Like letters refer to like parts in each figure.

The nature of this invention relates to the peculiar construction and operation of the shoe of a grain-separator, and the peculiar motion given thereto the more effectually to deliver the grain to the fan, and is more especially designed as an improvement upon the grain-separator described in patent No. 126,670, and dated May 14, 1872. The invention consists in the peculiar construction and operation of the shoe, and in the combination of the same with the other necessary appliances of a grain-separator, as more fully hereinafter described.

In the accompanying drawings, A represents the shoe, provided with two shelves, B C, each inclining to the other, as shown in Fig. 2, and the former so arranged as to drop the grain falling upon it onto the latter. The shelf B extends forward sufficiently far to catch all the grain from the cylinder D which may accidentally not be carried onto the riddle E, while the shelf C extends to the opposite end of the machine, or at least far enough

to catch all the grain that may pass through the riddle. This shoe is suspended on two shafts, F, and the ends of these shafts are secured in the wheels G, one of which is suitably situated near each corner of the machine, and properly secured in or to its sides; the object of this arrangement being to make said shafts double cranks, to which motion may be communicated by suitable belts from the main driving-shaft, or otherwise.

The whole is so arranged that the shoe has a rearward, upward, forward, and downward motion at each revolution of said shafts, thereby giving the grain a rapid motion in these various motions, and preventing clogging.

In grain-separators, the concave H is generally rigidly secured to the sides of the machine beneath the cylinder D. In this invention this concave is merely an attachment to the end of the riddle, and projecting under the cylinder. This riddle is hung and moved as described in said Letters Patent, and, being attached to the concave, gives it the same motion, thereby facilitating the passage of the grain onto the shelf B of the shoe, and preventing any clogging of the concave.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. Shoe A, constructed substantially as described, and hung upon shafts F, to operate as and for the purposes set forth.
2. The combination of shoe A with the cylinder D and riddle E, as described.

JACOB W. BREESE.

Witnesses:

W. J. CASSELMAN,
HARRIS P. GRAHAM.