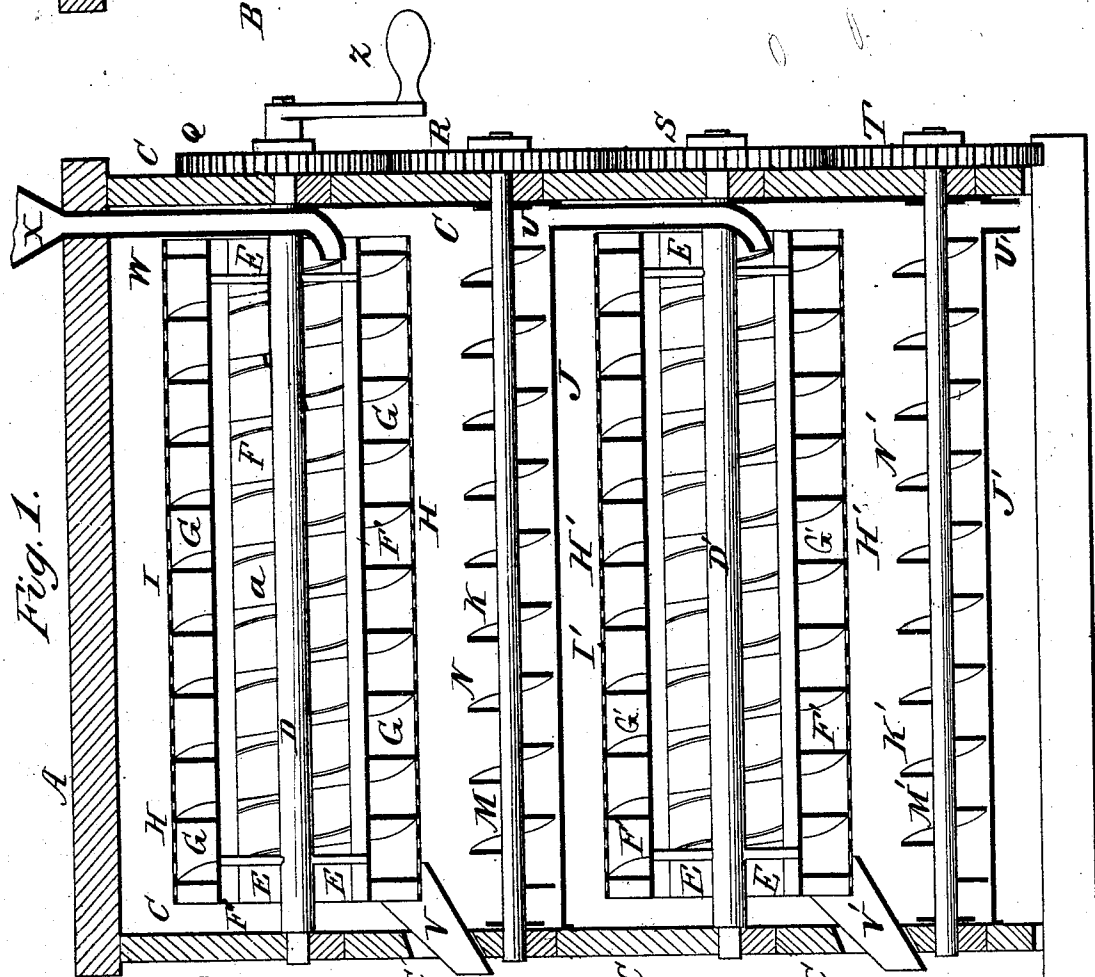
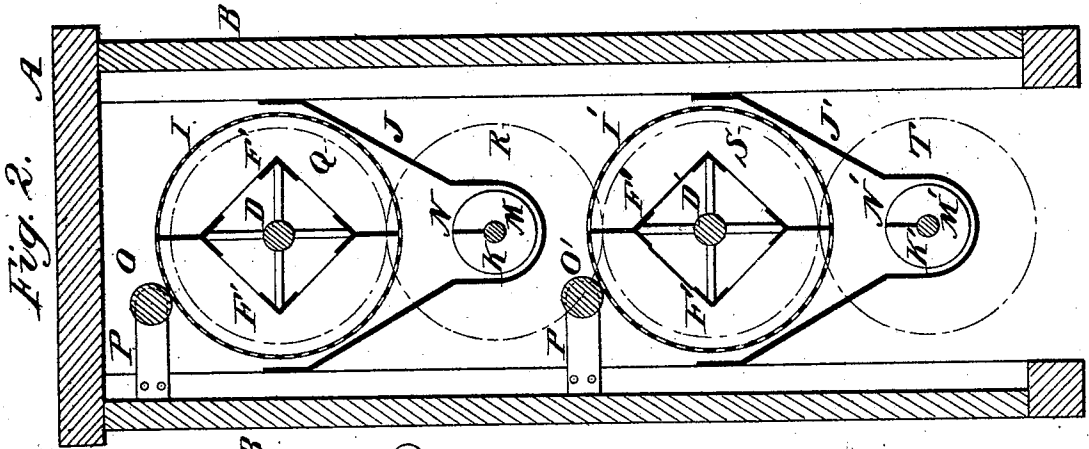


F. W. MASE.
Seed-Separators.

No. 145,668.

Patented Dec. 16, 1873.



Witnesses.
Benjamin N. Meeds
Alexander Lynch

Inventor.
Frederick W. Mase
By J. Ferriss
att'y.

UNITED STATES PATENT OFFICE.

FREDERICK W. MASE, OF OSHKOSH, WISCONSIN.

IMPROVEMENT IN SEED-SEPARATORS.

Specification forming part of Letters Patent No. **145,668**, dated December 16, 1873; application filed August 16, 1873.

To all whom it may concern:

Be it known that I, FREDERICK W. MASE, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Cockle-Machines; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a vertical longitudinal sectional view, and Fig. 2 is a vertical transverse sectional view, of a machine embodying my improvements.

This invention relates to an improvement in cockle-machines; and consists of a rotary cylinder supported in bearings in a position permitting it to contact with the exterior of a hollow perforated cylinder, for the purpose of clearing the perforations or meshes when they become clogged.

In the accompanying drawing, A represents the frame of the machine; B B, the doors at its sides, which may be thrown open to expose the internal mechanism, and also to permit the dust to be carried off when the machine is operated, if desired. C C are removable panels in the ends of the frame, which may be removed to expose the internal mechanism from these points. The shaft D is provided with radial arms E E, to which are fixed strips F' F'. To the strips F' F' are secured flanges G G, running spirally the entire length of the strips. The flanges G G form a rectangular opening around the shaft D, but their outer edges form a circle. (Fig. 2.) A perforated metal sheet, H, is secured to the outer edges of the flanges G G, to form the hollow perforated cylinder I. A trough, V, leads from one end of the cylinder I to the outside of the frame. The ends of the shaft D D form the bearings for the cylinder I, and support it over the trough J. A shaft, K, provided with spiral flanges M, forms the conveyer N, which is supported in bearings in the bottom of the trough J. A rotary cylinder, O, supported in bearings in the arms P, contacts with the periphery of the hollow cylinder I. A pipe, W, having a funnel, X, opens communication between the exterior of the machine and the in-

terior of the hollow cylinder I. Gear-wheels Q R mesh one with the other, and revolve the cylinder I and the conveyer N in opposite directions. A metal sheet, H', having smaller perforations than the sheet H, is secured to the outer edges of the flanges G' G', forms the hollow cylinder I'. With the exception of the smaller perforations, the hollow cylinder I' is in all respects similar to the hollow cylinder I, hereinbefore described. The conveyer N' consists of a shaft, K', provided with spiral flanges M', placed in the bottom of the trough J', and is in all respects precisely similar to the conveyer N, already described. A pipe, U, leads from the bottom of the trough J to the interior of the lower hollow cylinder I'. A pipe, U', leads from the bottom of the trough J' to the waste-box. Gear-wheels S T are connected with each other, and the former with the gear-wheel R.

Power is applied at the crank Z, and, being communicated, through the spur-wheels Q R S T, to the operating parts of the machine, has the effect to operate the hollow cylinders I I' in one direction, and the conveyers N N' in the opposite direction.

The grain is poured into the funnel X, and passes through the pipe W to the interior of the hollow cylinder I. The internal conveyer, consisting of the spiral flanges G G, conveys the large grain the entire length of the cylinder I, and discharges it at V. The rotary cylinder O, contacting with the exterior of the cylinder I, clears the perforations of the wheat that may have become fastened in them, and keeps the perforations open for the small grain and cockle to pass through into the bottom of the trough J. The conveyer N carries the small grain and cockle to the pipe U, through which it falls to the interior of the hollow cylinder I', having the smaller perforations. Here the spiral flanges G' G', forming the internal conveyer, carry the wheat to the spout V', where it is discharged. The rotary cylinder O' clears the perforations of the hollow cylinder I', and the cockle falls, through these perforations, into the bottom of the trough J', whence it is conveyed, by the conveyer N', through the pipe U', to the waste-box.

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

The cylinder O, made to rotate by frictional contact with the hollow perforated cylinder I, constructed and operating as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of July, 1873.

FREDERICK W. MASE.

Witnesses:

THOMAS DALY,
G. W. ROYS.