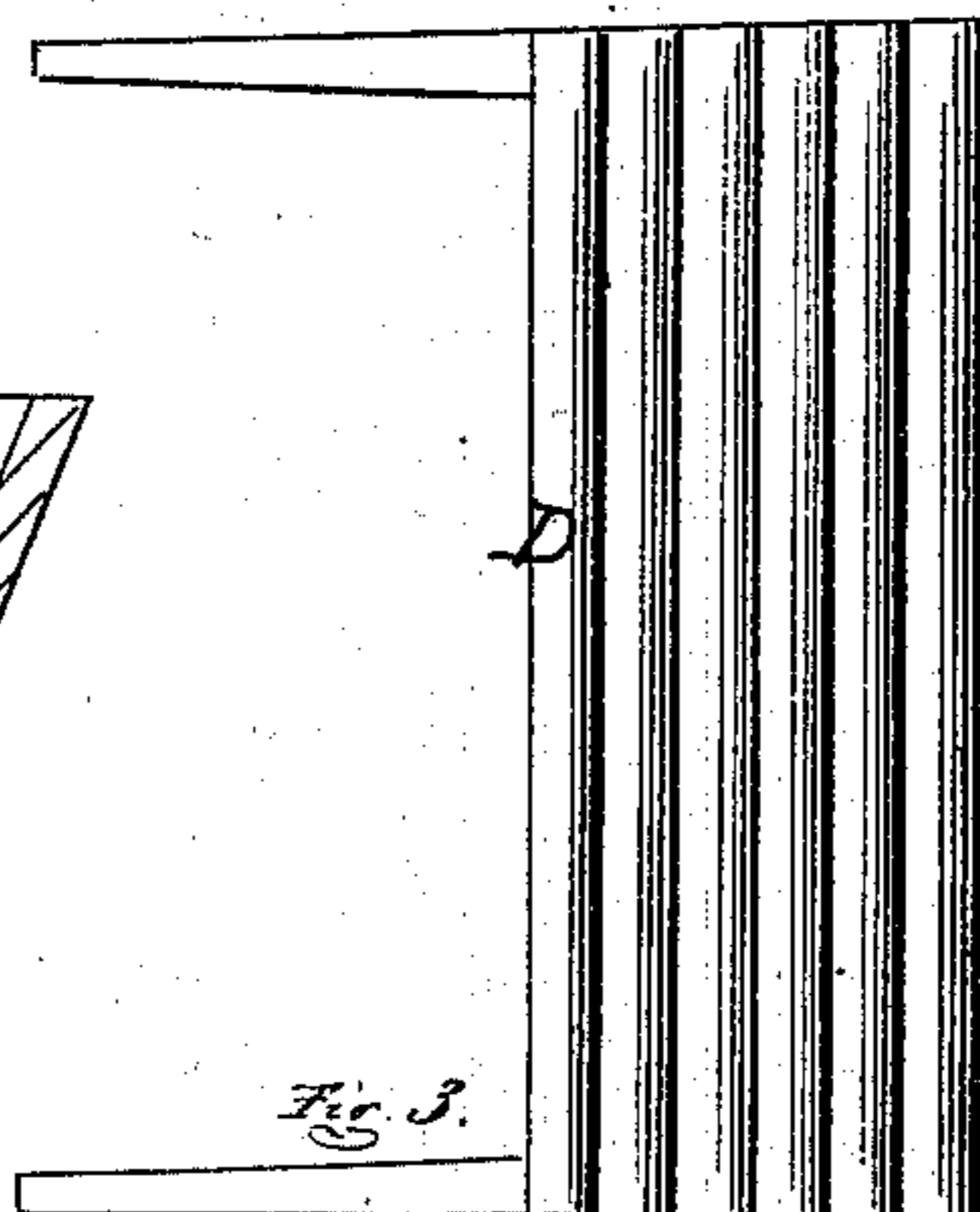
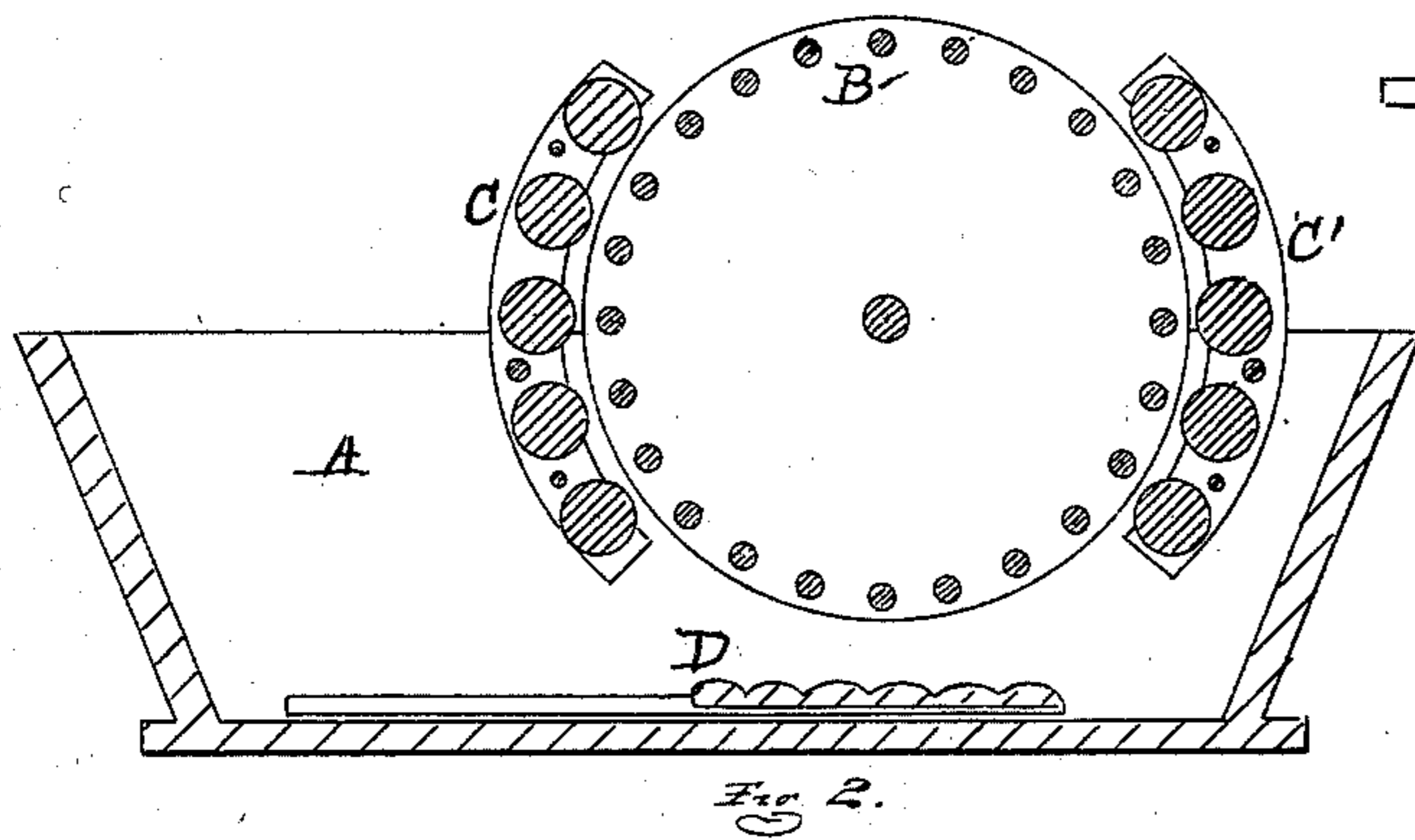
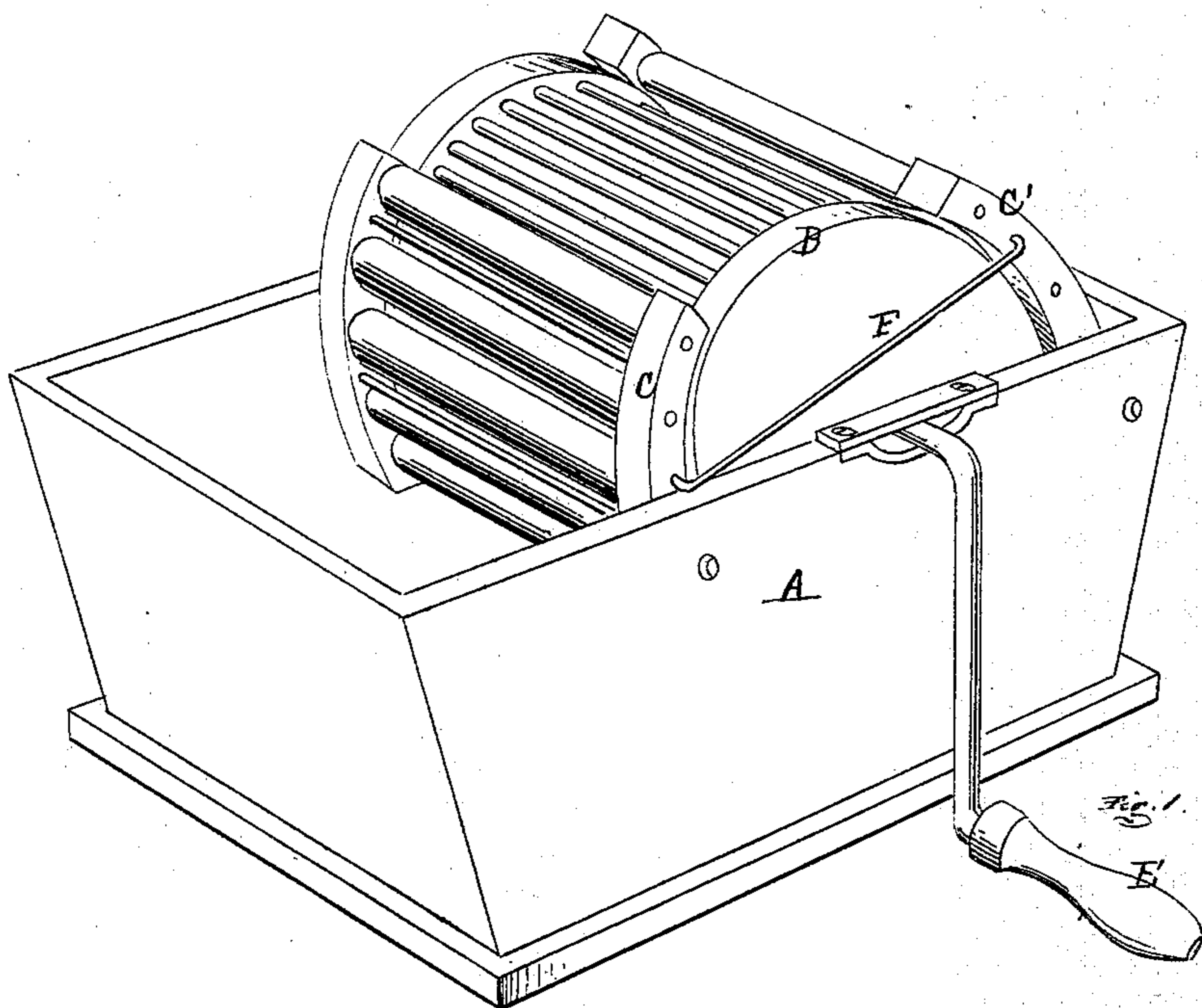


A. FILKINS.
Washing-Machines.

No. 139,135.

Patented May 20, 1873.



ATTEST:
Chas. S. Day.
Chas. J. Hunt

INVENTOR:
Abraham Filkins
by Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

ABRAHAM FILKINS, OF YPSILANTI, MICHIGAN.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **139,135**, dated May 20, 1873; application filed November 13, 1872.

To all whom it may concern :

Be it known that I, ABRAHAM FILKINS, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Improvement in Washing-Machines; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of my improved machine. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a plan view of the floating rubbing-board.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improved machine for washing textile fabrics, so arranged that quick and effective results may be obtained without any injury to the fabric or danger of breaking or tearing off buttons. The invention consists in the combination of the various parts, as more fully hereinafter described.

In the accompanying drawing, A represents a suitable water-tight box or body of the machine. B is a slatted cylinder or drum, journaled, in elongated bearings *a*, to the top of the body. C C' are curved roller-frames, to conform to the circumference of the drum B, and these frames are so pivoted to the sides of the box or body that their upper ends will rest upon or against the upper portions of the drum. D is a floating friction or rubbing board. E is the crank, by means of which motion is given to the operating parts of the machine. F are connecting-rods, which may be

employed, if desired, to connect the roller-frames together.

The box being partially filled with water, until the friction-board D will float against the lower side of the drum B, one end of the garment to be cleansed is secured to one of the slats of the drum. The drum is then rotated in one direction, the roller-frames compelling the garment to hug the cylinder, and also, by the rollers pressing against the garment, forcing the water through the fabric. The drum, in its rotation, carries the garment over the floating board D, the buoyant properties of which creates sufficient friction to loosen the dirt. The motion of the drum is then reversed, and the opposite side of the garment is submitted to a similar operation, the floating friction-board changing its position with each change in the direction of the revolution of the drum, so as to present the greatest friction to the garment. Should buttons present themselves the floating board will give way to them and allow them to pass; or the drum will give way in the elongated bearings and allow the buttons to pass.

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

The arrangement of the box A, slatted drum B, curved roller-frames C C', floating rubbing-board D, and crank E, when the parts are arranged to operate substantially as and for the purposes set forth.

ABRAHAM FILKINS.

Witnesses:

THOS. S. SPRAGUE,
ED. JOHNSTON.