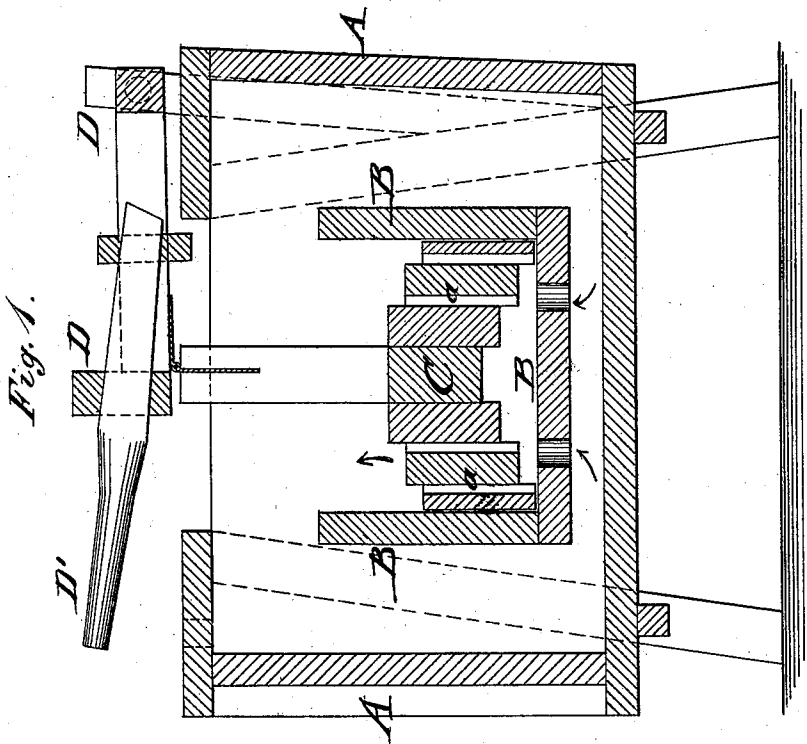
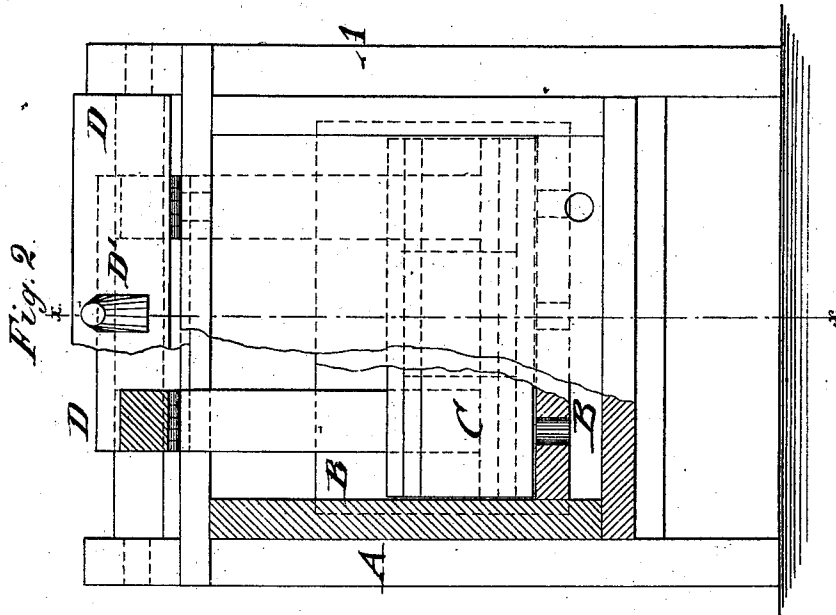


J. M. GANO.
 WASHING-MACHINE.

No. 176,855.

Patented May 2, 1876.



WITNESSES:

H. Rydquist
John Goethals

INVENTOR:

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 BY *Mumford*
 ATTORNEYS.

UNITED STATES PATENT OFFICE

JOHN M. GANO, OF NEWPORT, OHIO.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **176,855**, dated May 2, 1876; application filed March 25, 1876.

To all whom it may concern:

Be it known that I, JOHN M. GANO, of Newport, in the county of Washington and State of Ohio, have invented a new and Improved Washing-Machine, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved washing-machine on the line *x*, Fig. 2, and Fig. 2 an end view of the same with part broken off.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved washing-machine, by which the finest and coarsest fabrics may be cleaned without injury in quick and effective manner.

The invention consists in an outer wash-tub, a lateral clothes-box, and a step-shaped perforated plunger combined, as hereinafter more particularly described.

In the drawing, A represents the outer wash-tub or receptacle, and B the clothes-box, which extends laterally across the tub at some distance from the bottom of the same. The walls of the clothes-box do not extend to the top of the tub, and divide the wash-tub into chambers or compartments for the water and suds that are connected by the space below the bottom of the clothes-box B. The bottom of the clothes-box B is perforated to admit the soap-water to enter from the tub and rise in the clothes-box. A follower or plunger, C, is fitted to slide up and down in the box B, and made of step-shaped parts, so as to form an irregular cavity at the under side. Slots or holes *a* pass vertically through the plunger, and admit the water to pass up on the downward motion of the same. The plunger-rod or bar is hinged to a swinging top frame, D,

that is operated by a lever-handle, D', so as to raise and lower the plunger in the box. As soon as the plunger is raised the water is drawn in by suction through the perforated bottom of the clothes-box, the water soaking thoroughly the clothes and following with the same the motion of the plunger. The clothes are thus loosely held in the water ready for the downstroke of the plunger. The downward stroke of the plunger presses the clothes together, and forces the water up through the holes or slots of the plunger.

The continual drawing of the water and forcing it through the clothes, without rubbing the clothes, washes them perfectly clean without injury even to the finest fabrics. The machine works in the nature of a pump, and draws the water continually through the clothes, which are squeezed at each downstroke so as to expose them to the influence of the water drawn in by the next upstroke, and so on until the clothes are entirely cleaned.

As the water is forced sometimes with considerable force above the plunger, an apron or cover may be placed over the plunger to prevent the too violent ejection of the water from the confined space between the step-shaped plunger and bottom of clothes-box.

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

A washing-machine, composed of an outer wash-tub, a lateral clothes-box with perforated bottom, and a step-shaped and perforated plunger working in the clothes-box, substantially in the manner and for the purpose set forth.

Witnesses: JOHN MARTIN GANO.

J. B. CROCKER,

JNO. W. DAVIS.