

A. B. WROTH.  
Washing-Machine.

No. 165,969.

Patented July 27, 1875.

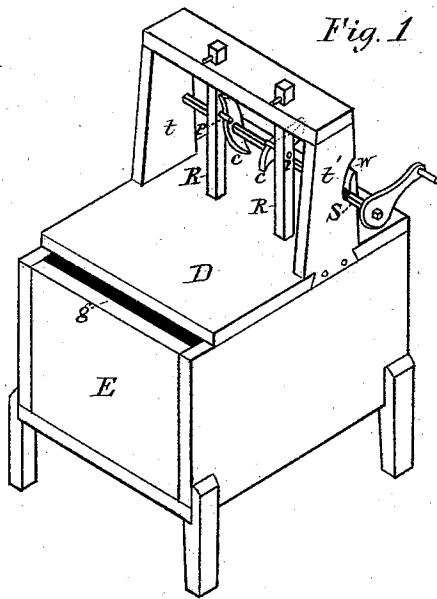


Fig. 1

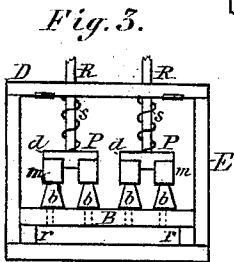


Fig. 3.

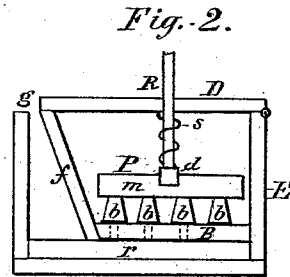


Fig. 2.

Witnesses;  
J. W. Beaman  
L. Du Bois

Inventor  
Alfred B. Wroth  
By A. Du Bois Attorney

# UNITED STATES PATENT OFFICE.

ALFRED B. WROTH, OF WINTERSSET, IOWA, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO GEORGE A. ATKESON.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **165,969**, dated July 27, 1875; application filed  
March 24, 1875.

*To all whom it may concern:*

Be it known that I, ALFRED B. WROTH, of Winterset, Madison county, Iowa, have invented a Washing-Machine, of which the following is a specification:

My invention relates to a series of vertically-moving beaters or plungers, operated by S-shaped cams placed upon a horizontal crank-shaft, the whole being attached to the hinged cover of the suds-box.

In the accompanying drawings, Figure 1 is a perspective view of the whole machine. Fig. 2 is a side view, with the sides of the suds-box removed. Fig. 3 is an end view, with end of the suds-box removed.

*c c* are the S-shaped cams, so placed upon the crank-shaft S as to be in close proximity to the vertical shafts R R of the plungers P P, upon which are placed the projecting pins *p p*, so that during the rotation of the crank-shaft S the cams (being placed at right angles to each other) will alternately operate the plungers *p p* by raising them till the pins escape from the cams and allow the plungers to descend. To give still greater force to the downward stroke of the plungers I provide the coiled springs *s s*, placed around the vertical shafts R R, immediately beneath the cover D of the suds-box E. The plungers P P consist of the two pieces *m m* provided with the beaters *b b*, and placed near each other, and attached by the cross-pieces *d d*, which are dove-

tailed into each, and receives the upright shafts R R. The crank-shaft S is supported by the posts *t t*, dovetailed into the cover D of the suds-box, one end of the shaft being pivoted to the post *t*, and the other resting in the slot *w*, made in the post *t*, so that the crank-shaft can be easily removed. The cover D being hinged at one end to the suds-box E, the crank-shaft, plunger, and all are raised up out of the suds-box when the cover is thrown back. The clothes to be washed are placed upon the perforated false bottom B, which, together with the slanting board *f*, rests upon the slats *r r*, placed upon the bottom of the suds-box. The cover D, being made a little shorter than the suds-box E, leaves the space at *g* for attaching the wringer.

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

The plungers P P, constructed of two pieces, *m m*, attached to the cross-pieces *d d*, and provided with the beaters *b b*, and having the vertical shafts R R, in combination with the perforated bottom B, resting on the slats *r r*, the pins *p p*, and crank-shaft S, provided with the cams *c c*, all constructed to operate substantially as and for the purpose set forth.

ALFRED B. WROTH.

Witnesses:

E. D. SMITH,  
W. C. NEWLEN.