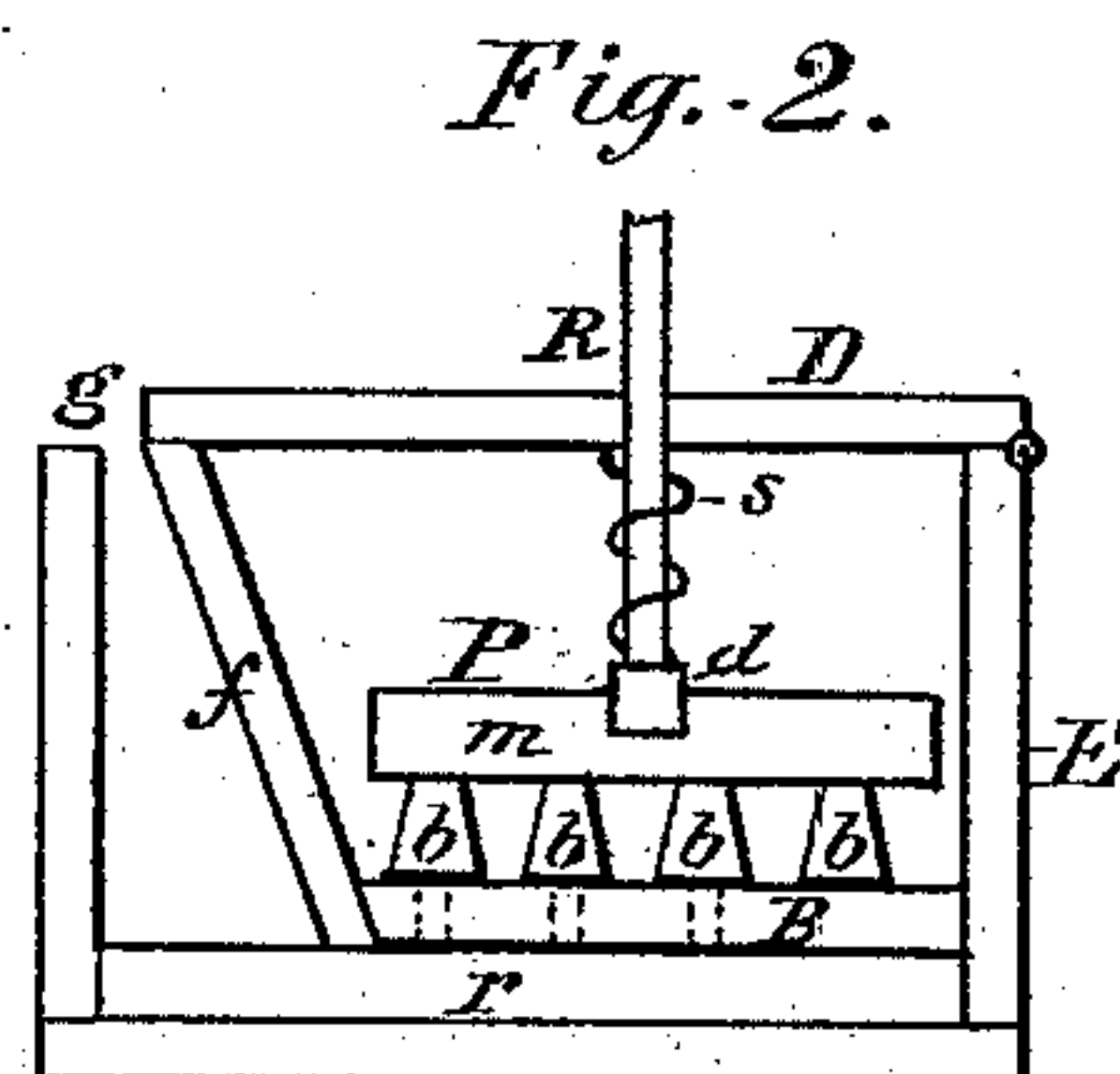
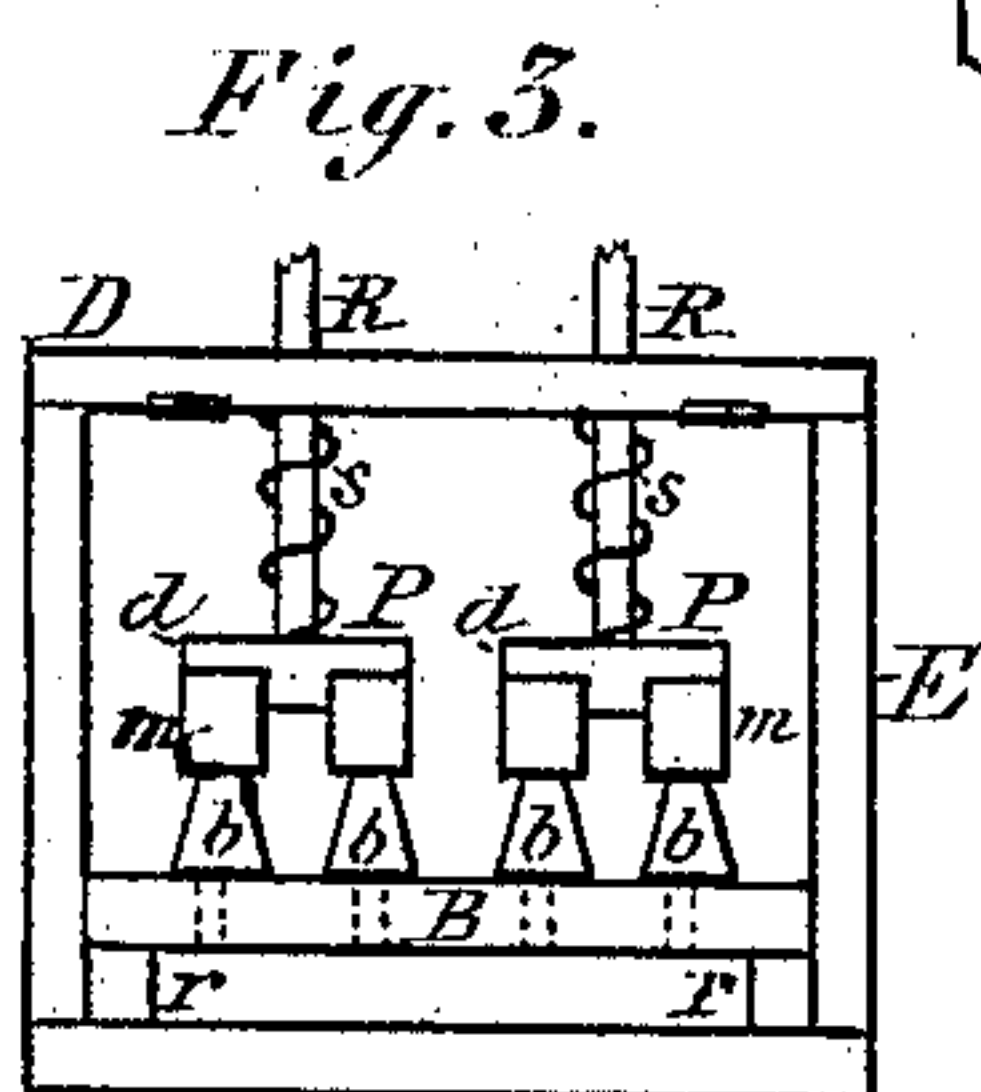
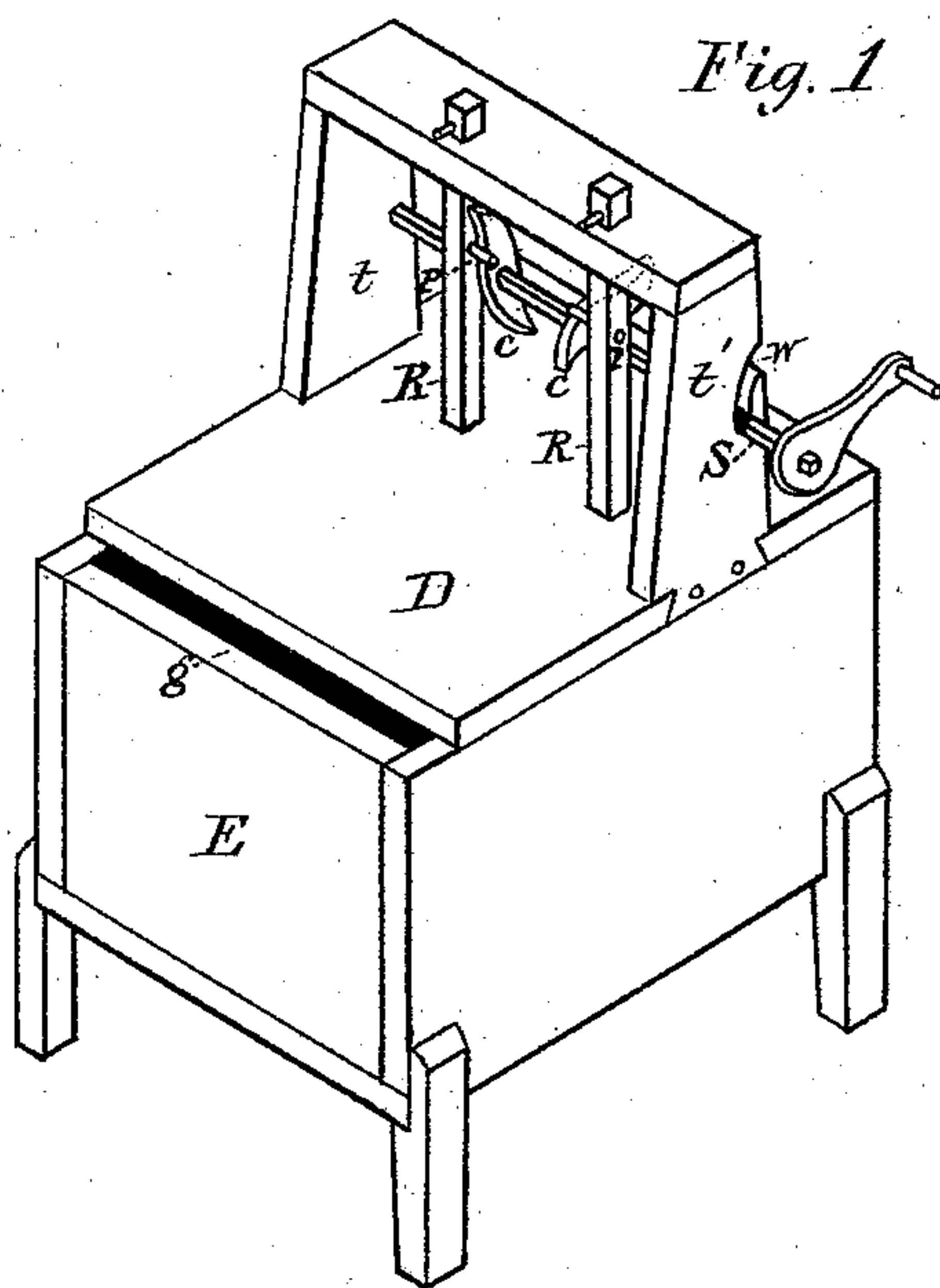


A. B. WROTH.
Washing-Machine.

No. 165,969.

Patented July 27, 1875.



Witnesses;
J. W. Beaman
L. Du Bois

Inventor
Alfred B. Wroth
By A. Du Bois Attorney

UNITED STATES PATENT OFFICE.

ALFRED B. WROTH, OF WINTERSET, 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.