

T. B. KIRKWOOD.  
Washing-Machine.

No. 167,907.

Patented Sept. 21, 1875.

Fig. 2

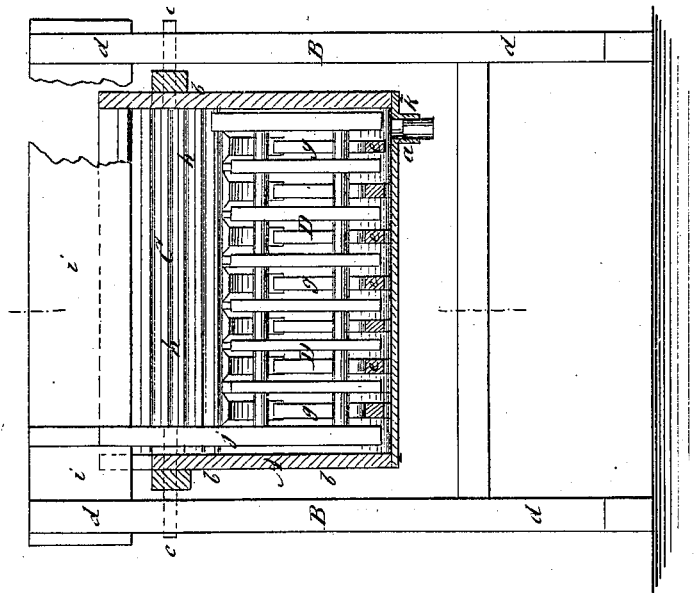
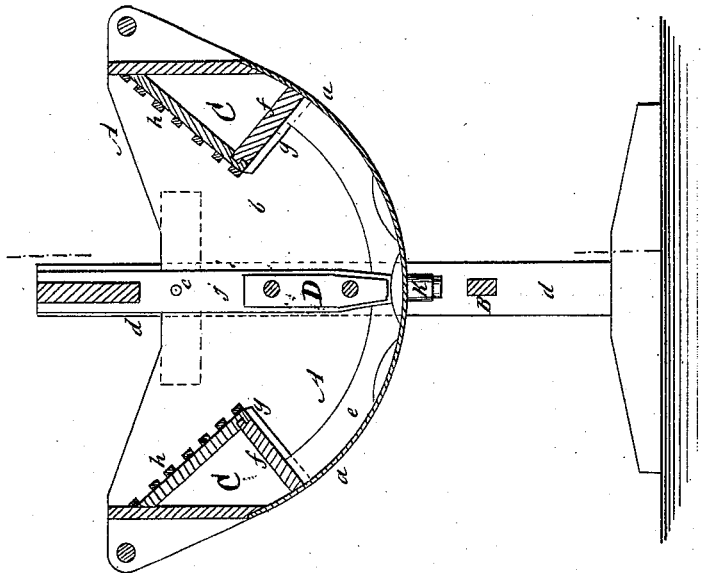


Fig. 1



WITNESSES:  
*A. J. Terry*  
*Alex. F. Roberts*

INVENTOR:  
*T. B. Kirkwood*  
BY *Munnell*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

THOMAS B. KIRKWOOD, OF DUBLIN, INDIANA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **167,907**, dated September 21, 1875; application filed July 31, 1875.

*To all whom it may concern:*

Be it known that I, THOS. B. KIRKWOOD, of Dublin, in the county of Wayne and State of Indiana, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical longitudinal section of my improved washing-machine. Fig. 2 is a vertical transverse section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new washing-machine, which is so arranged that it is capable to clean double the amount of clothes with the same power which is required on an ordinary machine.

The invention is an improvement in a well-known class of washing-machines, in which the box or body is hung on trunnions, to adapt it to oscillate, and thus press or squeeze the clothes between the vertical stationary dasher and fixed abutments of the box. The improvement relates to the construction and combination of parts, as hereinafter described.

The suds-box A is in shape similar to a part of a cylinder whose side *a* measures about two hundred and twenty-five degrees, and which has its ends *b* pivoted by pins *c* to two posts, *d*, of a stationary frame, B. The inner side of the suds-box is longitudinally grooved by having projecting ribs *e e*, which reach to chambers C C, formed at the ends within the box. The inclined inner faces *f* of these chambers are grooved vertically, by having ribs *g*, which stand between the ribs *e*. The upper faces *h* of the chambers C are grooved transversely or otherwise, to form wash-boards. Above the

suds-box is arranged a stationary cross-bar, *i*, which connects the posts *d*, and from which, on two vertical bars, *j*, a stationary transverse rack, D, is suspended in the middle of the box. The rack consists of a series of vertical bars, which are connected by suitable cross-bars, and which are so disposed that their lower ends fit between the ribs *e* on the bottom of the box A. The ribs *e* have slots in their outer parts, to let the water pass through them.

When the suds-box is balanced, as in Fig. 1, garments can be put into it on both sides of the rack D, together with suds. By then rocking the box on its pivots the garments will be compressed on alternate sides between the rack and the faces *f*, and will be squeezed between the same, and moved and rubbed on the ribs *e*, to be thoroughly cleansed. Each side of the box works independent of the other side, and can be independently operated. The return stroke, usually lost on ordinary machines, is utilized in this by working the garments in the second compartment. The vertical bars of the rack fitting between the ribs *e* prevent the garments from being caught under and by the rack.

The wash-boards may be used as occasion requires. The suds and water can be withdrawn through a suitable faucet, *k*.

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

The combination, with oscillating suds-box, having the parallel lengthwise ribs *e*, and terminal ribs *g*, attached to the under face of chambers C, of the stationary vertical rack, formed of a series of bars, whose ends project into the grooves between the aforesaid ribs, all as shown and described.

THOMAS B. KIRKWOOD.

Witnesses:

J. M. CARVER,  
J. M. COLE.