

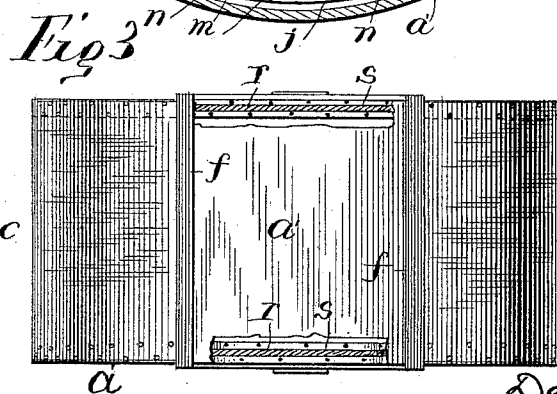
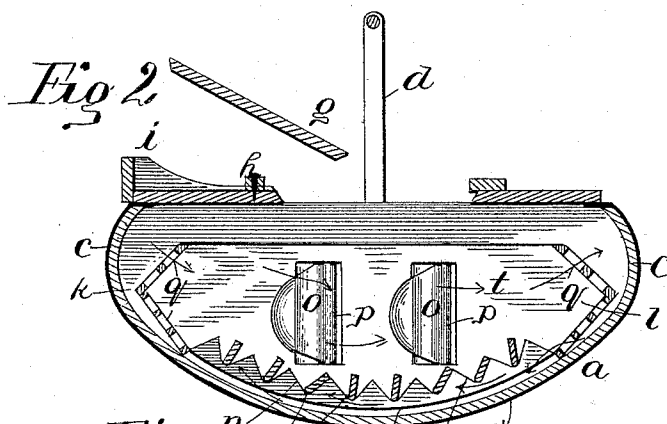
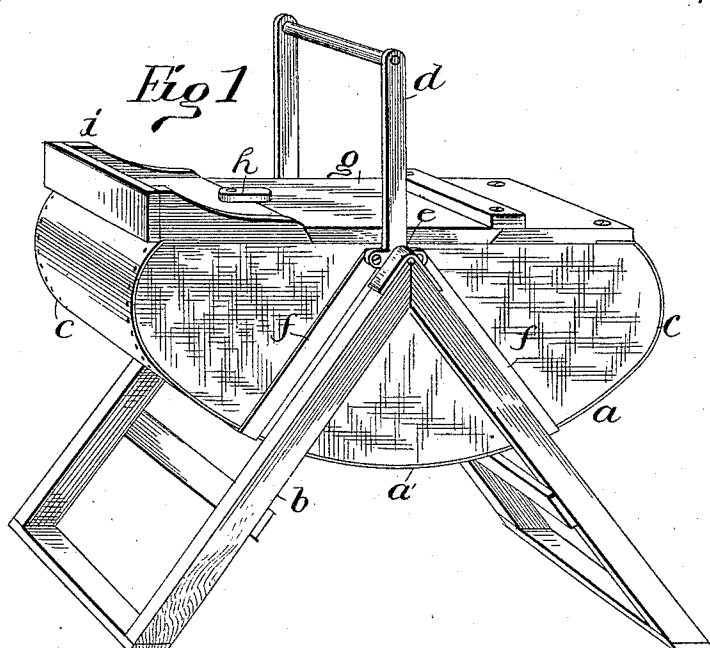
(No Model.)

2 Sheets—Sheet 1.

D. UPDEGRAFF.
WASHING MACHINE.

No. 468,849.

Patented Feb. 16, 1892.



Witnesses
C. Burdine
D. B. Owens

Inventor
Daniel Updegraff
per *R. H. Davis*
his Attorney.

(No Model.)

2 Sheets—Sheet 2.

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Fig 4

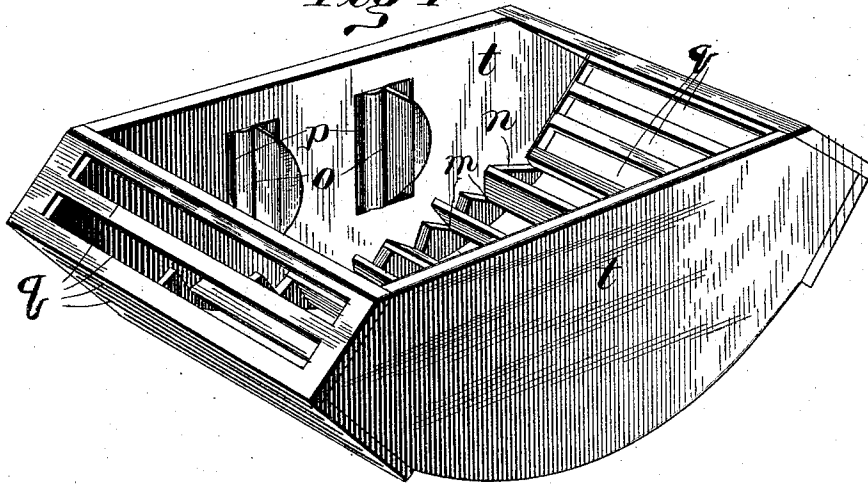


Fig 5



Fig 6



Witnesses

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Daniel Updegraff
per R. H. D. Boies
his Attorney

UNITED STATES PATENT OFFICE.

DANIEL UPDEGRAFF, OF STAFFORD, KANSAS, ASSIGNOR OF ONE-HALF TO
CHARLES N. SHELTON, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 468,849, dated February 16, 1892.

Application filed August 20, 1891. Serial No. 403,168. (No model.)

To all whom it may concern:

Be it known that I, DANIEL UPDEGRAFF, a citizen of the United States, residing at Stafford, in the county of Stafford and State of Kansas, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in washing-machines; and the objects are, first, to produce a more simple, cheap, and effective machine than has heretofore been in use, and, second, to avoid the usual tearing and mangling that the clothes are exposed to when being washed.

With these ends in view my invention consists in certain novel features and combination of parts more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of my invention; Fig. 2, a longitudinal section thereof; and Fig. 3 is a bottom view of the body, showing my improved packing for the prevention of leakage. Fig. 4 is an enlarged perspective view of the tray; Fig. 5, an enlarged detail view of one of the pivoted slats; Fig. 6, an enlarged detail view of one of the wings.

The reference-letter *a* represents the body of my machine, which is mounted on a frame *b* and provided with curved galvanized iron bottom *a'* and ends *c*. A handle *d* is rigidly secured to the body at *e*, and straps *f* are provided to further insure the strength of the machine. A lid *g* is fitted in the top of the body in the usual manner, and when the machine is in use is securely fastened by means of the button *h*. The usual soap-receptacle *i* is located on the body.

A tray *t* is snugly fitted and secured within the body *a*, leaving a space *j* and spaces *k* and *l* for the passage of the water. This tray is provided with a slatted bottom, which con-

sists of the eccentrically-pivoted slats *m*, having limited oscillations in the V-shaped recesses *n* in which they are located. Wings *o* are pivoted in recesses *p* in the sides of the tray and elongated slots *q* are formed in each end to allow free circulation of the water, which will be more fully described hereinafter.

To avoid the usual leaking in machines of this class, I suitably pack the same, preferably with rope.

r represents the rope packing, which is laid in a groove *s* and the galvanized-iron bottom and ends securely nailed over the same.

The preferred construction of my device having been set forth, I will now proceed to describe its operation. The body having been filled with water and suds the lid *g* is raised and the clothes placed in the tray. The lid is then closed and locked by means of the button *h*. Through the medium of the handle *d* the body is oscillated in its bearings in the frame *b*. As the body is rocked in one direction, the water passes up and around the opposite side of the same and enters the tray through the slots *q*, where it agitates the clothes, and passes out at the other end, when the operation is reversed. The general direction of the water may be seen by the line of arrows in Fig. 2. As the water circulates about in the body of the machine, the wings *o* swing on their pivots and serve to further beat and agitate the clothes and water.

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

1. In a washing-machine, an oscillating body portion having a covered top, in combination with a tray situated and secured therein and provided with side recesses containing pivoted wings, as and for the purpose specified.

2. In a washing-machine, the combination of an oscillating body portion having a cover and a curved bottom, a tray secured within the body portion and provided with a series

of recesses in its sides, wings pivoted therein, and transverse openings in its ends, as and for the purpose set forth.

3. In a washing-machine, the combination
5 of an oscillating body portion having a curved bottom, in combination with a tray secured within said body portion, said tray being provided with side recesses containing pivoted

wings and oscillating slats located in its bottom, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL UPDEGRAFF.

Witnesses:

C. F. MAGILL,

H. L. WEBBER.