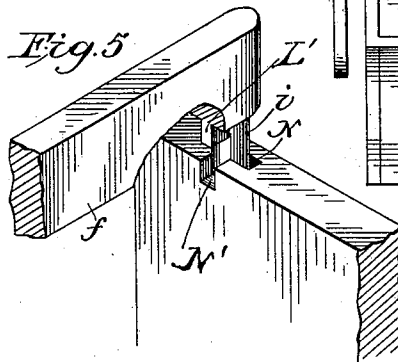
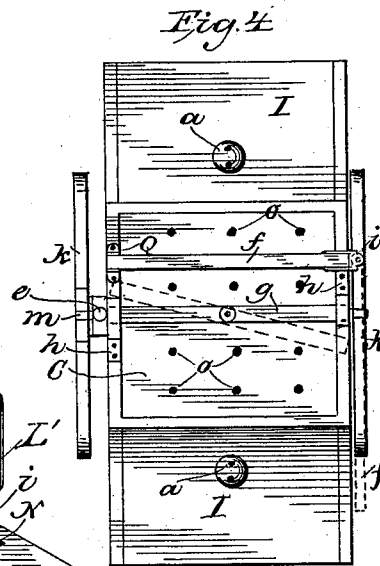
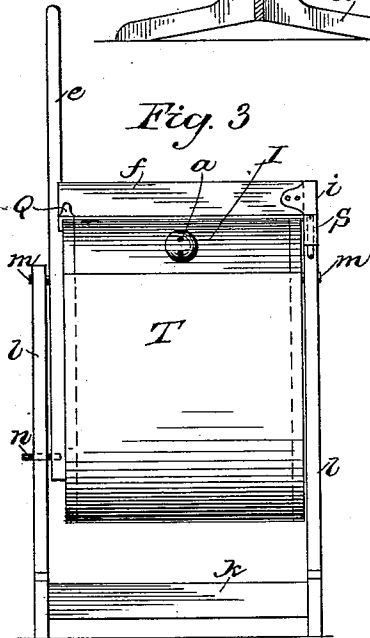
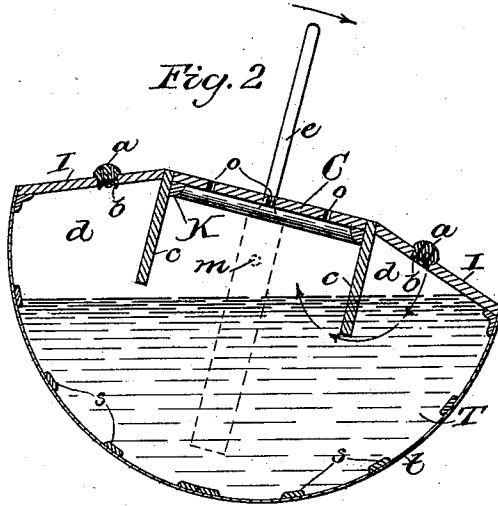
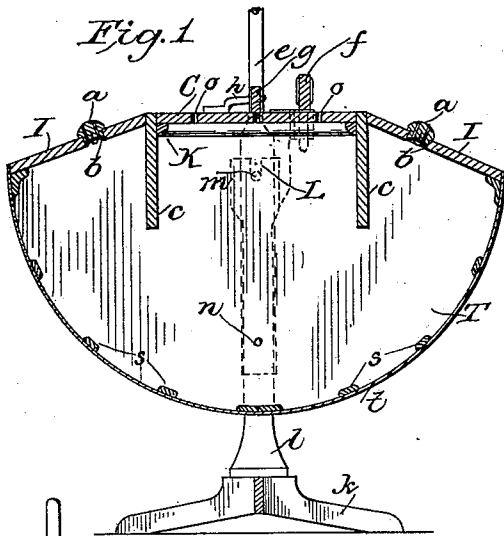


(No Model.)

J. DOWLING.  
WASHING MACHINE.

No. 465,168.

Patented Dec. 15, 1891.



Witnesses

L. M. Hallahan.

N. J. Gollamer.

By his Attorneys,

C. A. Snow & Co.

Inventor  
Jno. Dowling

# UNITED STATES PATENT OFFICE.

JOHN DOWLING, OF WILKES-BARRÉ, PENNSYLVANIA.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 465,168, dated December 15, 1891.

Application filed January 17, 1891. Serial No. 378,116. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DOWLING, a citizen of the United States, residing at Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing-machines; and the object of the same is to effect certain improvements therein.

To this end the invention consists in the details of construction hereinafter more fully described and claimed, and as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is a central longitudinal section of this improved machine. Fig. 2 is a similar section of the tub alone, showing it tilted and illustrating the action of water therein. Fig. 3 is an end elevation. Fig. 4 is a plan view. Fig. 5 is a perspective detail of the socket and the pin which fits therein slightly separated.

Referring to the said drawings, the letter *k* designates the foot or standard upon which the machine rests, and rising from this standard are uprights *l*, in half-bearings *L* in whose upper ends are seated the bearing-pins *m*, which project from the sides of the tub *T*. This tub is of semi-cylindrical shape and is adapted to be rocked on its bearings *m* by means of a handle *e*. The bottom of the tub *t* is curved, and transverse strips *s* are arranged within the same to give it strength and rigidity, while the top of the tub comprises a cover *C*, having a number of openings *o*, and two slightly-inclined sides *I*, which connect the ends of the bottom *t* with the sides of the cover. To the inner edges of these inclined sides *I* are secured cross-pieces *c*, which connect the ends of the tub and are rigidly held in place thereby. The cover rests upon cleats *K* on the cross-pieces *c* and is normally held in position by a cross-bar *g*, centrally pivoted to the top of the cover and its ends adapted to take under fingers or hooks *h*, mounted upon the upper edges of the ends of the tub, all as will be clearly understood by a person familiar with this class of devices.

*S* is a socket mounted upon one of the ends of the tub and having notches *N* in its upper end at right angles to each other, and pivot-

ally mounted in this socket is a pin *i*, having a lug *L'* adapted to enter said notches when the pin is raised in the socket and turned axially. To the upper end of the pin is secured a wringer-board *f*, which is of sufficient length to extend across the machine and to rest in a bracket *Q*, secured to the upper edge of the other end piece of the tub. When this board is in the position shown in Figs. 3 and 4, a wringer may be applied thereto and the clothes wrung out as they are taken from the tub; but under other circumstances the wringer-board is raised so as to lift its pin *i* within the socket *S* and disengage the lug *L'* from one of the notches *N*, turned at right angles, as shown in dotted lines in Fig. 4, and again depressed, so as to be seated in the other notch *N'*, and in this position the wringer will be out of the way and the oscillation of the tub will be uninterrupted.

In each of the inclined sides *I* is a perforated wooden plug *a*, secured to the bottom of which is a flap-valve *b*, adapted to close the openings in the plug *a*. When the device is at rest and the wringer is being used, a retaining-plug *n* is inserted through one of the uprights *l* and preferably into the handle *e*, as shown in Fig. 3; but when it is desired to oscillate the tub on its bearings *m* this retaining-plug is withdrawn and the handle *e* is oscillated with the following result: As the handle is moving in the direction of the arrow, Fig. 2, the left side of the tub is rising and air is entering through the left-hand valve *b*. At the same time the air in the chamber *d*, which was caught by the rising water at the other side of the tub when it reached the lower edge of the cross-piece *c*, is being compressed because the valve *b* at that point is closed. When the weight of the water and clothes in the tub becomes sufficient and this pressure great enough, the air in this chamber *d* will force its way downwardly through the water under the cross-piece *c*, as shown by the arrows, and, passing into the central portion of the tub beneath the cover *C*, will escape through the openings *o*. This operation is repeated each time the tub is rocked, and the result is that the water is thoroughly agitated and aerated and the dirt that is in the clothes is washed out.

I do not limit myself to any particular materials or dimensions, nor to the precise details of construction, as considerable change may be made therein without departing from the spirit of my invention.

What is claimed as new is—

1. The herein-described washing-machine, the same comprising a body oscillating upon pivots, the sides of the top of the body being provided with flap-valves, each closing automatically as the water rises in that end of the body, and the center of the top of the body being provided with openings, and cross-pieces within said body across the same, depending from the top at points between said sides and center, as and for the purpose set forth.

2. In a washing-machine, the combination,

with the oscillating body, a socket on one of the ends thereof having notches in its upper end at right angles to each other, and a bracket on the other end thereof having a notch in transverse alignment with one of those in the socket, of a pin seated in said socket and having a lug adapted to engage the notches therein and a wringer-board secured to the upper end of said pin, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN DOWLING.

Witnesses:

GEORGE COOPER,

H. P. CARTER.