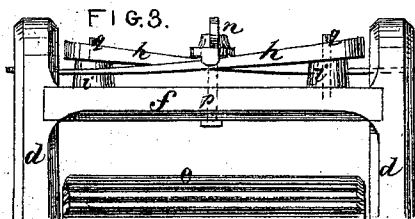
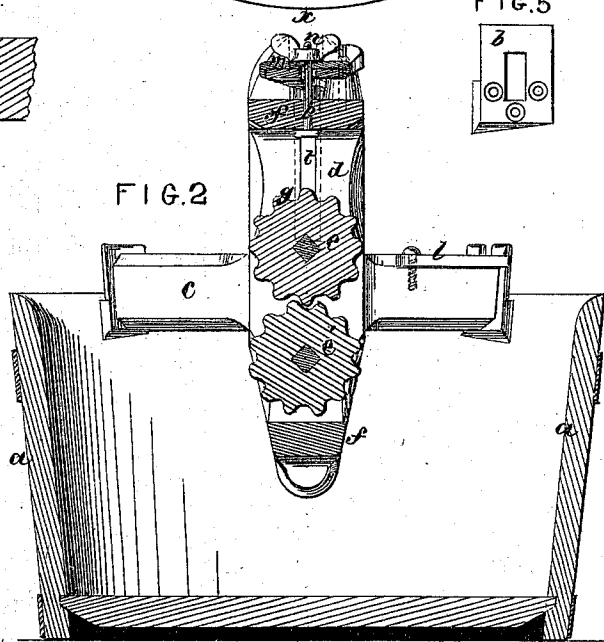
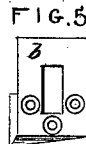
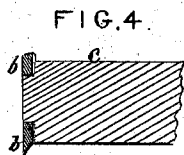
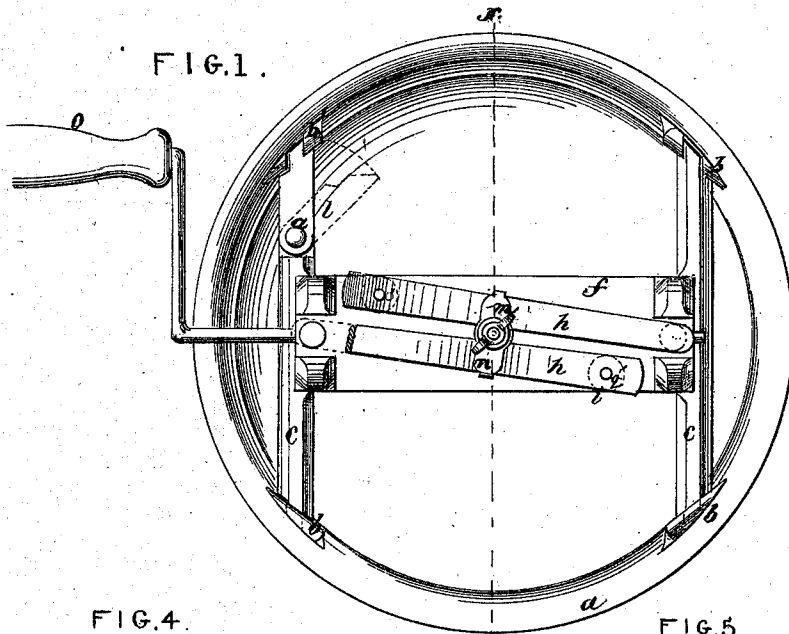


J. SEAMAN.

Improvement in Washing-Machines.

No. 131,711.

Patented Sep. 24, 1872.



Witnesses.
Geo. L. Ewin
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UNITED STATES PATENT OFFICE.

JOHN SEAMAN, OF ANDOVER, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 131,711, dated September 24, 1872.

To all whom it may concern:

Be it known that I, JOHN SEAMAN, of Andover, in the county of Allegany and State of New York, have invented certain Improvements in Washing-Machines, of which the following is a specification:

Nature and Objects of my Invention.

My invention consists in the employment of horizontal springs, made of wood or other material, which bear, through the medium of vertical tongues, on the journal of the upper roller of the machine. The inner ends of the horizontal springs bear on rubber or other yielding springs or seats situated on the horizontal cross-bar of the frame of the machine, and the outer ends of the horizontal springs rest on vertical tongues, sliding in grooves in the uprights of the frame, which tongues rest on the journal of the upper roller of the washing-machine. The pressure of the springs is adjusted by means of a bolt and thumb-screw, as hereinafter more fully set forth.

Description of the Drawing.

Figure 1 is a top view of a washing-machine, and the tub in which it operates, embodying my invention. Fig. 2 is a cross-section of the same in the line *x x*, Fig. 1. Fig. 3 is an elevation of the upper part of a washing-machine embodying my invention. Fig. 4 is an elevation of a part of one of the horizontal bars of the frame of the machine, showing also the socketed bracket in which its end is inserted. Fig. 5 is a front elevation of one of the socketed brackets attached to the inside of the tub. Fig. 6 is a similar view of the socketed bracket provided with a keeper which receives the latch, by means of which the washing-machine may be securely attached to the tub.

General Description.

a represents a tub, to the inner sides of which and at equal distances from its bottom are securely fastened the socketed brackets *b b b'*. *d d* are the uprights of the frame, in which are journaled the corrugated rollers *e e'* of the washing-machine. In the drawing I have represented but two such corrugated rollers, but it is obvious that I may use three or more, if deemed necessary or expedient.

f f are horizontal bars, securely attached to the uprights *d d*, forming thus a frame, in which the corrugated rollers are journaled, and which are operated by a crank, *o*, or otherwise. *c c* are horizontal cross-bars, attached to the uprights *d d*, and having tenons at their ends, which fit in the sockets of the brackets *b b b'*, thus suspending the washing-machine in the tub. *l* is a latch, pivoted at *r* near one end of one of the horizontal cross-bars *c*, which preferably engages with a keeper, *s*, in the bracket *b'*, or the latch may be made to engage with an indentation in the side of the tub.

By this construction it will be seen that I am enabled to suspend the washing-machine and its supporting-frame in the tub, thereby displacing less water than when the machine is attached to the bottom of the tub, and that a free space is thus left between the lower part of the machine and the bottom of the tub for the water and clothes to be washed, and that I thereby am enabled to increase the capacity of the tub over those machines in which the washing apparatus is attached to the bottom of the tub. By my construction also I am enabled readily to secure the washing-machine to the tub, and readily to unlatch and remove the washing-machine from the tub, when the latter can be used, if necessary, for other purposes than washing.

g g, indicated by dotted lines, are grooves in the uprights *d d*, in which are the bearings of the journal of the upper roller *e* of the washing-machine. In the grooves *g g* operate the tongues *t t*, (one in each upright,) which bear on the journal of the upper roller *e*. *h h* are horizontal springs, made of wood or any other proper material, the inner ends of which rest on the rubber or other springs, *i i*, to which they are loosely attached by the pins *q q*, fastened to the yielding spring-seats *i i*, said pins passing through perforations in the inner ends of the horizontal springs *h h*. The outer ends of the horizontal springs *h h* bear upon the vertical tongues *t t*, which slide in the grooves *g g*, and the tongues *t t* bear upon the journal of the upper corrugated roller *e*. *m* is a horizontal plate, bent at its ends to embrace the horizontal springs *h h*, and perforated at its middle to receive the bolt *p*, the lower end of

which is securely attached to the horizontal cross-bar *f*, its upper end being screw-threaded to receive a thumb-screw, *n*, by means of which the pressure on the journal of the upper corrugated roller is adjusted. The lower roller *e'* receives a rotary motion by frictional contact with the upper roller, which is rotated by the crank *o*. By the employment of the rubber springs *i i* or coiled-springs, or their equivalent, which form rests or seats for the inner ends of the horizontal springs *h h*, I obtain yielding supports or seats and prevent too sudden or violent action of the horizontal springs as well as extending their resilience.

Claim.

I claim as new and of my invention—

The horizontal springs *h h*, resting at their inner ends on the yielding seats *i i*, plate *m*, bolt *p*, and thumb-screw *n*, in combination with the tongues *t t* sliding in the grooves *g g* and bearing upon the journal of the upper corrugated roller *e*, as and for the purpose set forth.

JOHN SEAMAN.

Witnesses:

EDWARD BUNDY,
HARVEY HINCHER.