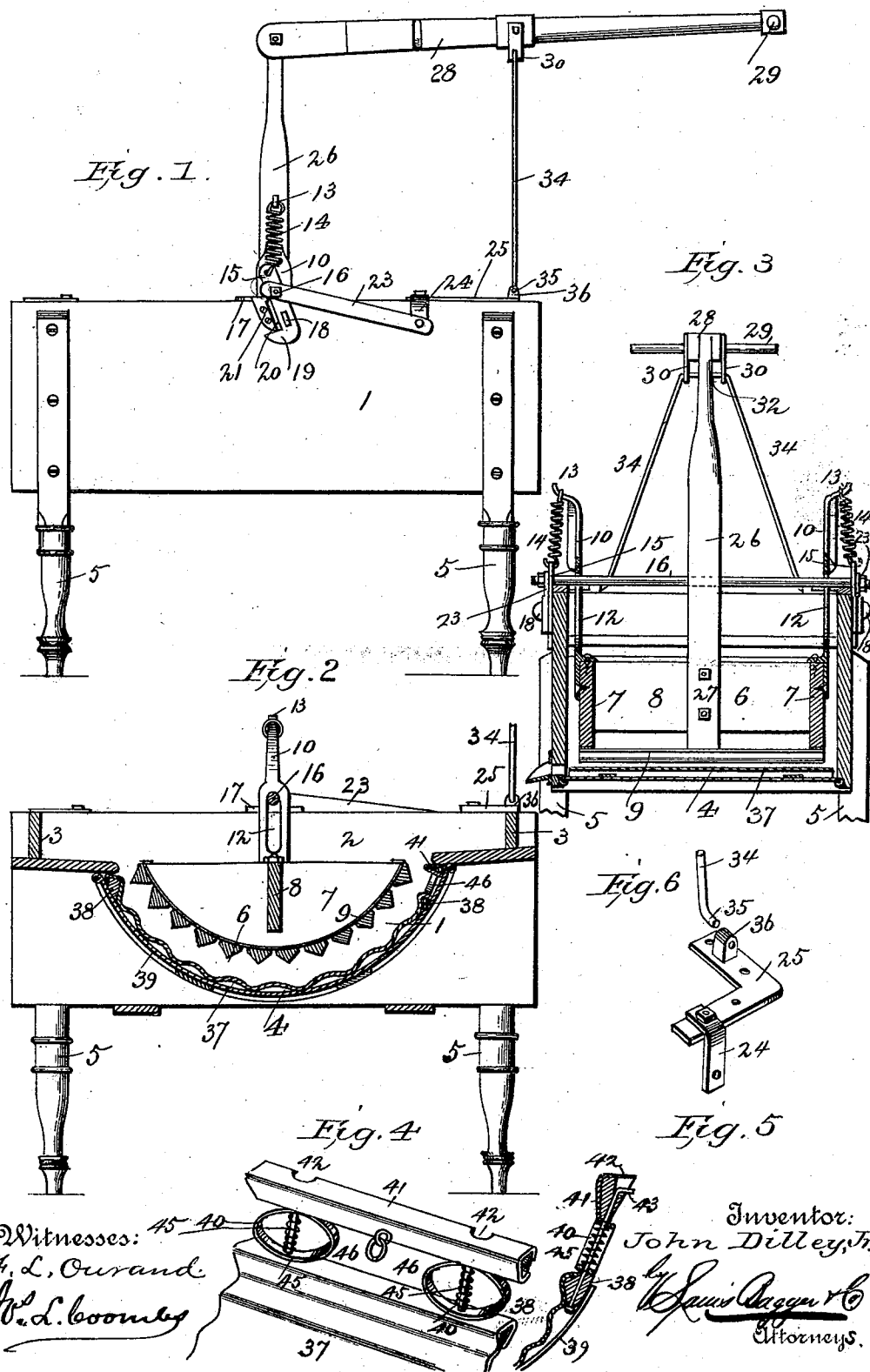


(No Model.)

J. DILLEY, Jr.
WASHING MACHINE.

No. 548,971.

Patented Oct. 29, 1895.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN DILLEY, JR., OF MUIR, MICHIGAN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 548,971, dated October 29, 1895.

Application filed May 20, 1895. Serial No. 549,967. (No model.)

To all whom it may concern:

Be it known that I, JOHN DILLEY, Jr., a citizen of the United States, and a resident of Muir, in the county of Ionia and State of Michigan, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to washing-machines of that class or description comprising a suds-box having a corrugated semicircular bottom and an oscillating or rocking segment rubber; and its object is to provide an improved yielding connection between the rubber and the sides of the suds-box to admit of articles of different bulk passing between the rubber and the corrugated bottom.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a washing-machine constructed in accordance with my invention. Fig. 2 is a central longitudinal section. Fig. 3 is a central cross-section. Fig. 4 is a detail perspective view of one end of the rub-board. Fig. 5 is a detail sectional view of the same. Fig. 6 is a detail perspective view of the corner-plates.

In the said drawings the reference-numeral 1 designates the suds-box, comprising the sides 2, ends 3, corrugated semicircular bottom 4, and legs 5, which may be of any ordinary or suitable construction.

The numeral 6 designates the rubber, comprising the segment-shaped ends or sides 7, connected together by a central cross-bar 8 and provided with a series of slats 9. Secured to each of said brackets is an upwardly-extending bracket 10, provided with a slot 12, and curved outwardly at its upper end. Said curved ends are formed with lugs 13, with which engage the upper ends of coiled springs 14, the lower ends of which are connected with plates 15, which are pivoted on the ends of a transverse shaft 16, having its bearings in half-round boxes 17, secured to the sides of

the suds-box. These pivoted plates are formed with finger-holds 18, and their lower ends are formed into hooks 19, which are adapted to engage with inclined flanges 20 on plates 21, secured to the sides of the suds-box; also pivoted to said shaft 16 are links 23, which extend to near one end of the suds-box, where they are pivoted to brackets 24, secured to angular corner-plates 25, which in turn are secured to the edges of the sides and ends of the suds-box.

The numeral 26 designates an oscillating bar or lever, the lower end 27 of which is secured to the cross-bar 8. The transverse rod or shaft 16 passes between said arms above the cross-bar 8. The upper end of this standard is pivoted to the slotted end of a horizontal lever 28, provided at its outer end with handles 29. The lever intermediate its ends is provided with two downwardly-extending brackets 30, each formed with a series of opposite apertures 31, with which engages a bail 32. This bail consists of a metal rod bent over near the center, forming downwardly-extending inclined arms 34, the lower ends of which are bent at an angle, forming studs 35, which are journaled in loops 36, formed on the corner-plates.

The numeral 37 designates the rub-board, consisting of a plate of corrugated galvanized iron adapted to seat in the suds-box. Each end of this rub-board is secured to a transverse bar 38, to which are also secured a number of metal strips 39. One of these bars 38, near each end, is provided with a rod or pin 40, which passes loosely through an aperture in a similar box 41, formed with a notch 42. The upper ends of these rods or pins are bent outwardly at an angle, forming lugs 43. Embracing the said rods are coiled springs 45, and between said bar 38 and bar 41 are oval springs 46, through which the rods pass. When in place in the suds-box, these compound springs serve to hold the rub-board in proper position.

The operation is as follows: The pivoted hooks 19 are thrown out of engagement with the inclined plates 20 by turning the plates 15 on their pivots by means of the finger-holds. By now bearing down upon the outer end of the lever 28 the rubber, the shaft 16, and the brackets and connections can be elevated and

swung outwardly, the links 23 serving as hinges. The suds and the articles to be washed are then placed in the suds-box and the rubber swung back, when the ends of the hooks will strike against the flanges 19. This will cause the said hooks to be pressed back until they pass the lower ends of the plates 15, when they will spring forward through the tension of the coiled springs connected therewith and causing the hooks to engage under the lower ends of the inclined plates and lock the parts in position. By now moving the lever 28 back and forth the rubber will be oscillated. Through the medium of the slots 12 of the brackets the rubber is movable upwardly or downwardly to accommodate articles of varying thicknesses between the rubber and corrugated bottom.

Having thus fully described my invention, what I claim is—

1. The combination with the suds-box having semi-circular corrugated bottom and the transverse shaft having its bearings in boxes secured to the sides of the suds-box, of the segment-shaped rubber, the slotted brackets secured thereto, the coiled springs secured to

said brackets, the plates formed with hooks, pivoted to said shaft, the inclined plates with which said hooks engage, and the pivoted links; substantially as described.

2. The combination with the suds-box having semi-circular corrugated bottom, the transverse shaft having its bearings in half round boxes secured to the suds-box, the segment-shaped rubber, the bifurcated standard and the cross bar connected therewith, and with the rubber, of the upwardly extending slotted brackets having their upper ends turned outwardly, and formed with lugs, the coiled springs connected therewith, the plates pivoted to said shaft and provided with hooks, the inclined flanged plates with which said hooks engage, the links pivoted to said shaft and the brackets to which said links are also pivoted; substantially as described.

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

JOHN DILLEY, JR.

Witnesses:

DANIEL L. TARBELL,
REUBEN D. SMITH.