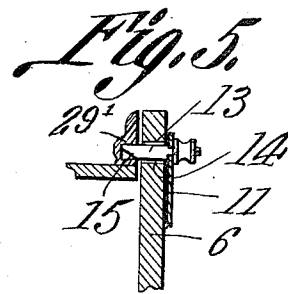
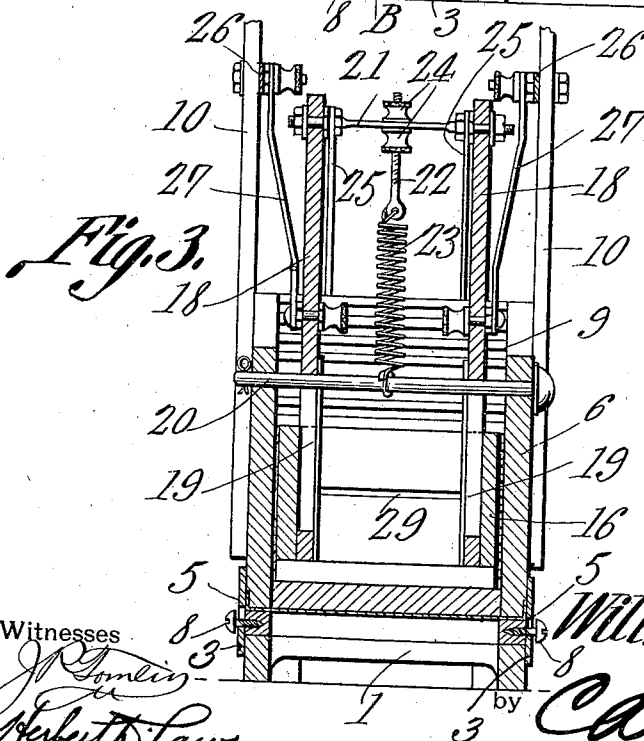
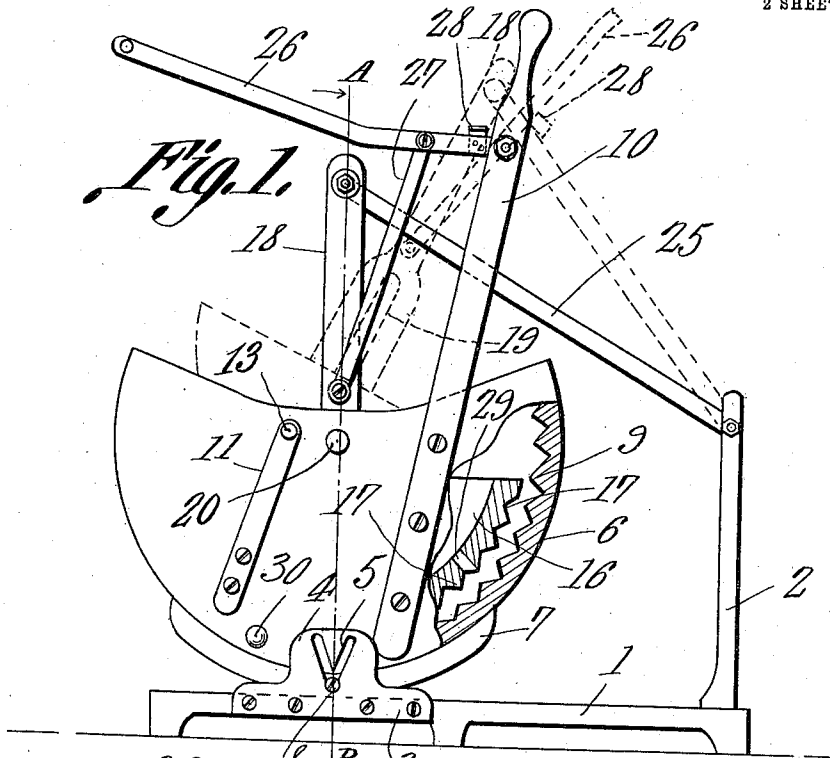


W. J. THOMPSON.
WASHING MACHINE.
APPLICATION FILED SEPT. 9, 1910.

995,737.

Patented June 20, 1911.

2 SHEETS—SHEET 1.



Witnesses

Herbert D. Lawson

William J. Thompson,
Inventor

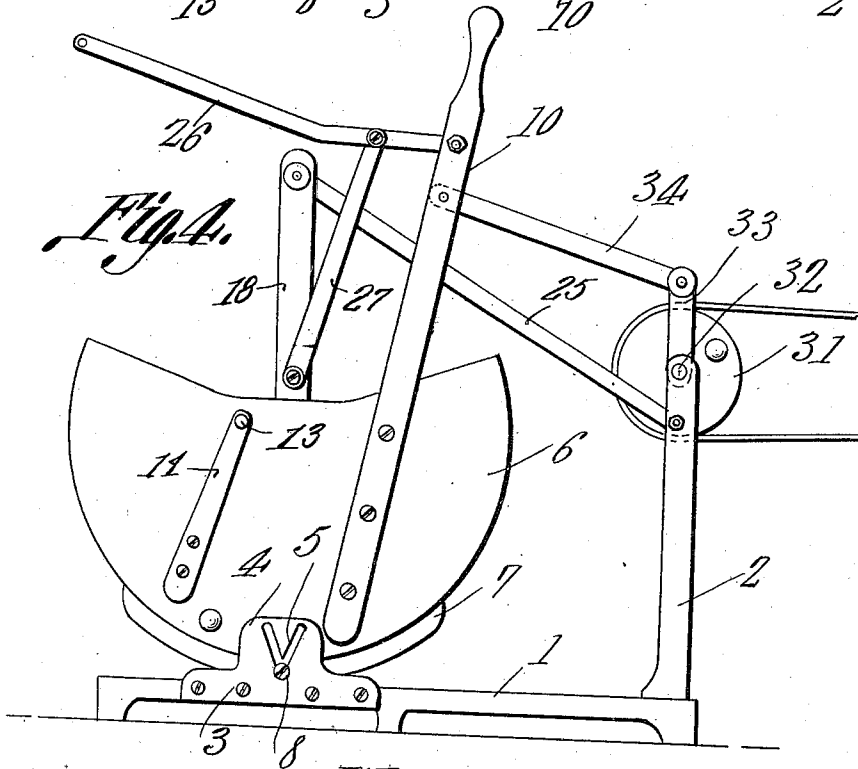
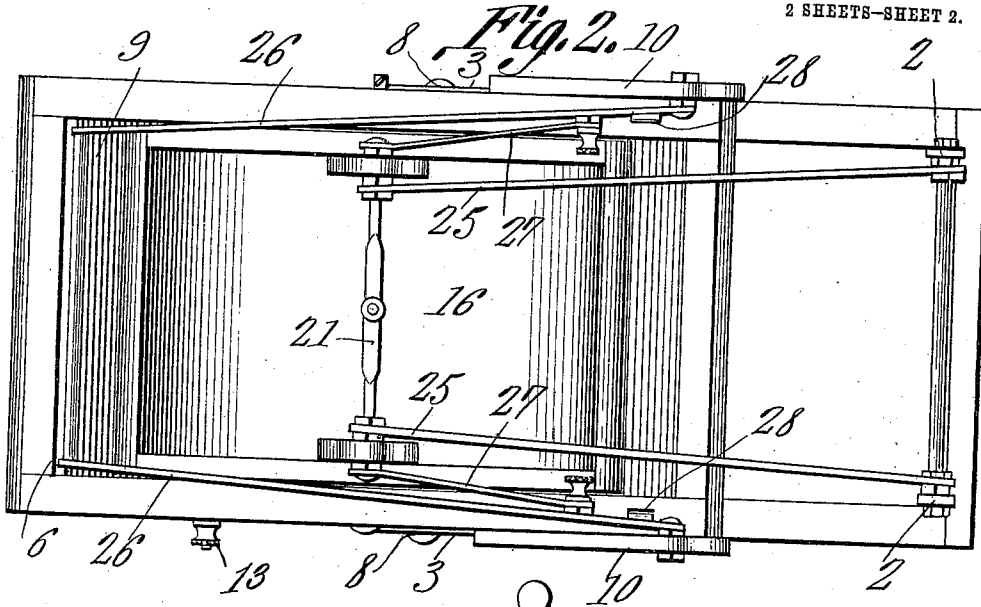
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UNITED STATES PATENT OFFICE.

WILLIAM J. THOMPSON, OF BURLINGTON, NORTH CAROLINA.

WASHING-MACHINE.

995,737.

Specification of Letters Patent. Patented June 20, 1911.

Application filed September 9, 1910. Serial No. 581,252.

To all whom it may concern:

Be it known that I, WILLIAM J. THOMPSON, a citizen of the United States, residing at Burlington, in the county of Alamance and State of North Carolina, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to machines for washing fabrics and one of its objects is to provide a tub mounted for oscillation and having a rubber yieldingly supported therein and adapted to oscillate within the tub, said rubber and tub moving simultaneously in opposite directions.

A further object is to provide improved means for yieldingly pressing the rubber upon the contents of the tub.

A further object is to provide means for automatically locking the rubber when elevated to a predetermined position relative to the tub so as to permit the fabric to be readily placed in or removed from the machine.

Another object is to provide a machine having a base on which the tub is adapted to rock, novel means being employed for connecting the tub to the base without, however, interfering with the movement of the tub.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of the claim without departing from the spirit of the invention.

In the accompanying drawings the preferred forms of the invention have been shown.

In said drawings:—Figure 1 is a view partly in side elevation and partly in section of a washing machine constructed in accordance with the present invention one of the positions of the parts of said machine being indicated by dotted lines. Fig. 2 is a plan view of the machine. Fig. 3 is a section on line A—B Fig. 1. Fig. 4 is a side elevation of a slightly modified form of machine. Fig. 5 is a section through a portion of the

tub and of the rubber and showing the locking pin in elevation and in engagement with the rubber.

Referring to the figures by characters of reference 1 designates a base frame having standards 2 upon the corner portions of one end thereof, and secured to the sides of this frame adjacent its other end, are guide plates 3, each of which has an upstanding ear 4 provided with a V-shaped slot 5 located entirely above the frame 1. A substantially semi-cylindrical tub 6 is interposed between the plates 3 and has rockers 7 secured to the bottom portions thereof and bearing downwardly on the frame 1. Trunnions 8 extend laterally from the middle portions of the rockers and are movably mounted within the slots 5. These trunnions constitute means for preventing the tub from being removed from the base frame 1 but the slots 5 are so shaped and positioned that, when the tub is rocked upon the base, the trunnions will travel back and forth within the slots.

The curved bottom of the tub 6 is provided, on its upper or inner face, with transversely extending ribs or corrugations 9. Handles 10 are secured to the sides of the tub and extend upwardly thereabove and a spring 11 is secured to one side of said tub and carries a locking pin 13 which projects through an opening 14 in one side of the tub 6 adjacent the top thereof and has its inner end beveled, as shown at 15. A substantially semi-cylindrical rubber 16 is mounted within the tub 6 and has ribs or corrugations 17 upon its outer convex surface, these ribs cooperating with the ribs 9. Arms 18 are secured to the sides of the rubber and extend upwardly therebeyond, each of these arms being formed with a longitudinal slot 19 through which extends a pivot rod 20 removably mounted within the sides of the tub 6 and close to the top of the tub. Arms 18 are connected at their upper ends by a cross rod 21 in which a threaded stem 22 is slidably mounted. This stem is connected to the upper end of a coiled spring 23, the lower end of said spring being attached to the pivot rod 20. Adjusting nuts 24 or the like engage the stem 22 at opposite sides of the rod 21 and

by means thereof said stem can be shifted longitudinally and held so as to maintain the spring 23 under stress. This spring serves to press the rubber downwardly into the tub and to hold the upper ends of the slot 19 normally in contact with the pivot rod 20.

Links 25 connect the rods 21 with the standards 2. A bail 26 is pivotally connected to the handles 10 and links 27 connect this bail with the arms 18. Bail 26 has stop lugs 28 extending into the path of the links 27.

As shown in Figs. 1 and 2, the rubber 16 has slots 29 at desired intervals within the convex working face thereof, these slots permitting water to pass freely into the rubber.

In using the machine, the handles 10 are swung away from the standards 2, thus causing the tub 6 to rock upon the base frame 1 and the trunnions 8 to move upwardly within the slots 5 and against those ends of the slots nearest the standards 2. At the same time, the rubber 16 will be swung in the opposite direction because the upper ends of the arms 18 are held by the links 25 while the pivot rod 20 moves with the tub 6. Upon the completion of the movement described, the bail 26 is swung upwardly and causes links 27 to pull upwardly on the arms 18. The rubber 16 is thus elevated and a recess 29' formed in one side of the rubber is brought into register with the spring pressed block 13. This pin promptly springs into the recess and thus locks the rubber against movement relative to the tub. The fabrics to be cleaned can then be placed between the rubber and the tub together with a sufficient amount of cleansing fluid. By then withdrawing pin 13 from recess 29', spring 23 will be caused to move the rubber downwardly into the tub so as to clamp the fabrics onto the bottom of said tub. Handles 10 can then be oscillated and as the tub 6 rocks backward and forward on the base frame, the rubber 16 will be correspondingly oscillated in the opposite direction, fabrics being thus subjected to the combined rubbing action of the two parts. As the rubber is pressed downwardly by the spring 23, it will be apparent that it can yield whenever necessary to prevent injury to the fabrics.

The rubber can be quickly elevated at any time simply by lifting the bail 26.

The liquid contents of the tub can be withdrawn at any time by removing a plug 30 from a drain opening in one side of the tub.

It has been found that, by constructing a machine in the manner shown and described, the operation of washing clothes is greatly simplified and the power required to actuate the mechanism is reduced to the minimum.

While the machine is shown and described especially to be operated by means of oscillating handles, a revoluble drive wheel 31 may be employed, as indicated in Fig. 4. This wheel is mounted on a shaft 32 journaled on standards 2 and having crank arms 33 to which links 34 are connected. These links constitute means for transmitting motion from the crank arms to the handles 10'. Wheel 31 may be rotated by hand or by means of a suitable motor. In other respects the machine shown in Fig. 4 is similar to that disclosed in the other figures of the drawings.

What is claimed is:—

In a washing machine, the combination with a base, of a tub mounted to rock thereon, standards fixed relative to the base and extending above the tub, handles fixedly connected to and extending upwardly from the tub, a rubber mounted for oscillation within the tub, the working faces of the tub and rubber being concentric, arms fixedly connected to and extending upwardly from the rubber, adjustable yielding means for forcing the rubber downwardly into the tub, a bail pivotally connected to the handles on the tub, link connections between the bail and the arms of the rubber, the bail being shiftable relative to the tub arm to elevate the rubber against the stress of said yielding means, and means on the bail and movable against the links on the arms of the rubber to hold the rubber in raised position.

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

WILLIAM J. THOMPSON.

Witnesses:

J. M. MAY,
U. A. NEESE.