

(No Model.)

2 Sheets—Sheet 1.

T. TAYLOR & C. H. LAMBKIN.  
WASHING MACHINE.

No. 417,955.

Patented Dec. 24, 1889.

Fig. 1.

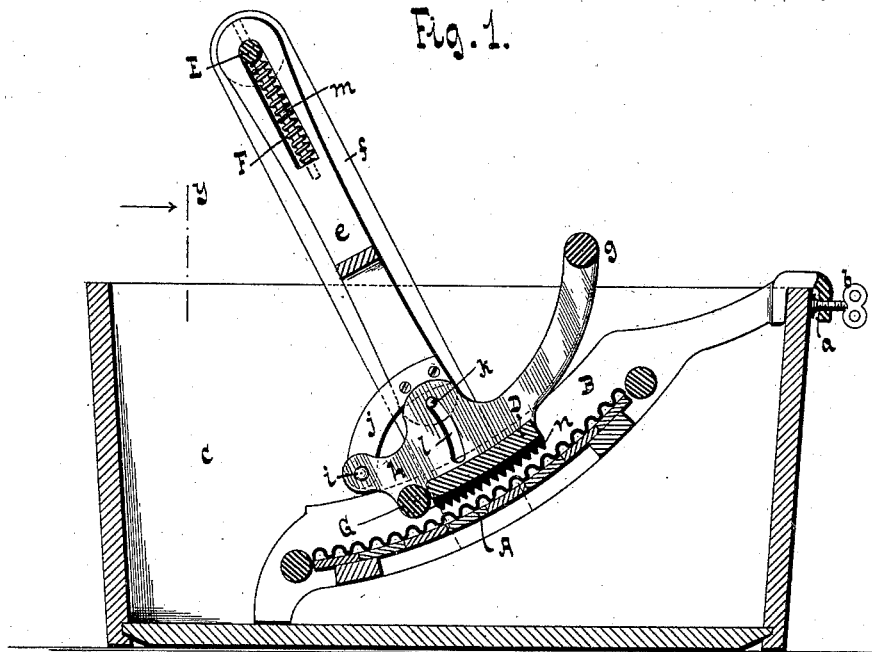
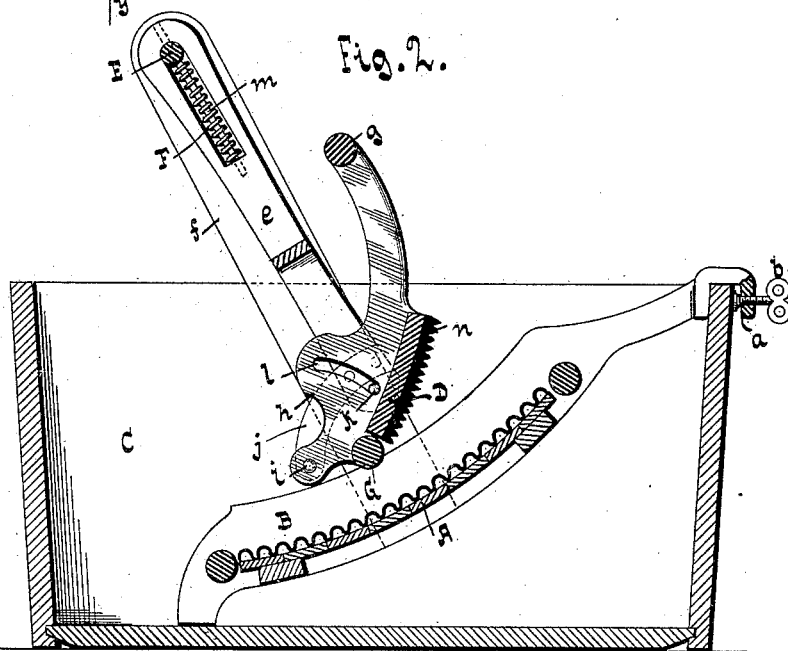


Fig. 2.



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BY

*A. Faber du Faur*  
their ATTORNEY.

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Fig. 3.

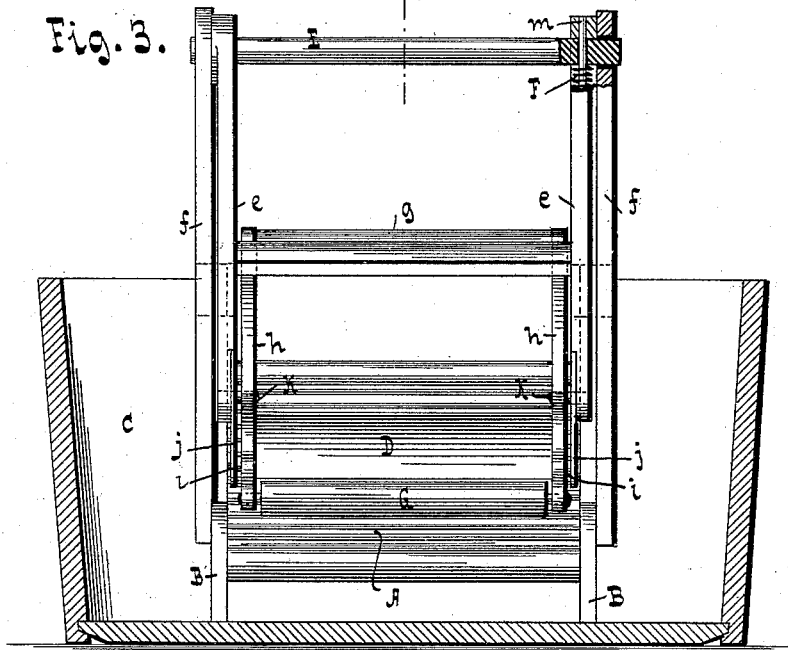
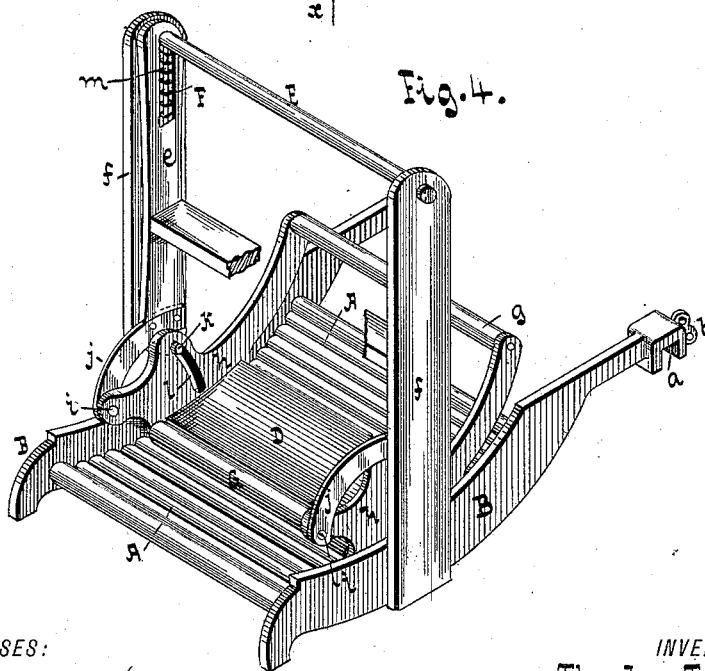


Fig. 4.



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# UNITED STATES PATENT OFFICE.

THEODORE TAYLOR AND CHARLES H. LAMBKIN, OF MOUNT VERNON,  
NEW YORK.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 417,955, dated December 24, 1889.

Application filed September 7, 1888. Serial No. 284,785. (No model.)

### *To all whom it may concern:*

Be it known that we, THEODORE TAYLOR and CHARLES H. LAMBKIN, citizens of the United States, and residents of Mount Vernon, in the county of Westchester and State of New York, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

Our invention relates to improvements in washing-machines; and it consists in certain novel features of construction whereby the operation of the machine is facilitated and its effectiveness increased, all of which is fully pointed out in the following specification and claim, and illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section in the plane  $x x$ , Fig. 3, of a washing-machine embodying our invention, the same being placed within a tub. Fig. 2 is a similar section showing the movable rubber turned about its pivots to permit the insertion of the articles to be washed. Fig. 3 is a vertical section in the plane  $y y$ , Fig. 1. Fig. 4 is a perspective view of the machine, part being broken away.

Similar letters indicate corresponding parts. In the drawings, the letter A designates the lower or stationary rubber, which may be constructed similar to an ordinary wash-board. It is firmly secured in rigid side frames B B, which are provided with sockets  $a a$ , that are adapted to engage with the edge of the tub C, to hold the stationary rubber in an inclined position similar to that in which the ordinary wash-board is placed. Suitable thumb-screws  $b b$  can be placed at the ends of the frames to secure the same rigidly in their inclined position. The upper rubber D, which is arranged to slide to and fro above the stationary rubber A, is carried by a movable frame consisting of arms  $e e$ , which are attached to a rock-shaft E, having bearings in standards  $f f$ , rising from the side frames B B of the stationary rubber. The rubber D is pivoted to the arms  $e e$  at or near its end, and it can swing freely about said pivot. It is provided on the opposite end with a handle  $g$ , so that it can be readily swung upward about its pivot and away from the stationary rubber A, (see Fig. 2,) to permit the insertion

of the articles to be washed or the removal of the cleansed articles. In the example shown in the drawings the sides  $h h$  of the rubber are pivoted at  $i i$  to lateral extensions  $j j$  of the arms  $e e$ , and a pin  $k$  on the said arms engages with a slot  $l$ , formed in the sides  $h h$ , whereby the downward and upward movements of the rubber D are limited, said pin serving as a stop. This pin-and-slot connection also serves to guide and steady the movable rubber. The pin is so arranged with relation to the upper end of the slot that the downward movement of the movable rubber is arrested when the latter is approximately parallel or concentric with the surface of the stationary rubber, Fig. 1. Consequently its entire surface must bear with a uniform pressure upon the fabric. The arms  $e e$  of the swinging frame are slotted for the passage of the rock-shaft E, and springs F F are located within said slots and bear against the rock-shaft to force the arms  $e e$  downward. The springs encompass pins or rods  $m m$ , which extend loosely through the rock-shaft and enter the arms, thereby serving both to prevent a lateral movement of the arms  $e e$  on the rock-shaft and as a guide for the linear movement of said arms. An anti-friction roller G is mounted at the end of the rubber D, which can turn in suitable bearings in the sides  $h h$ , and which, coming into contact with the articles on the rubber A when the rubber D is turned on its pivot and drawn backward, turns in its bearings and does not cause a backward drag on the said articles.

On inspection of Fig. 1 it will be seen that the roller G is so mounted that its periphery is above the lower surface of the movable rubber. Consequently it does not come into operation while the rubber is being reciprocated, but only when the latter is swung upward.

In the example illustrated in the drawings we have shown the movable frame as swinging about a pivot; but it is evident that our pivoted rubber could be applied equally as well to a sliding frame.

The lower or stationary rubber A we have shown provided with a metallic corrugated

or undulating surface and the movable rubber D with an elastic or yielding corrugated or serrated surface—such, for instance, as rubber—which will firmly grasp the article  
5 to be washed without injuring the fabric.

It will be readily understood that our washing-machine can be applied with ease to any form of tub, as the side frames terminate in legs which rest upon the bottom of the tub  
10 and form a frictional bearing, and the socket is made large enough to admit of the thickest walls. The leg-like terminations of the frames also provide for an increased space beneath the machine for the reception of the articles  
15 to be washed.

What we claim as new, and desire to secure by Letters Patent, is—

In a washing-machine, the combination of

a stationary rubber, a movable frame having rearwardly-projecting extensions, a rubber 20 pivoted at its end to said frame and freely movable about its pivot, inwardly-projecting pins carried by the lower ends of the movable frame and engaging with the sides of the movable rubber for limiting the down- 25 ward movement of the latter to an approximately-parallel position with the stationary rubber, substantially as described.

In testimony that we claim the foregoing as our invention we have signed our names in 30 presence of two witnesses.

THEODORE TAYLOR.

CHARLES H. LAMBKIN.

Witnesses:

A. FABER DU FAUR, Jr.,

EUGENE C. MAUBORGUE.