

(No Model.)

2 Sheets—Sheet 1.

R. N. SCHERER.
WASHING MACHINE.

No. 584,563.

Patented June 15, 1897.

Fig. 1

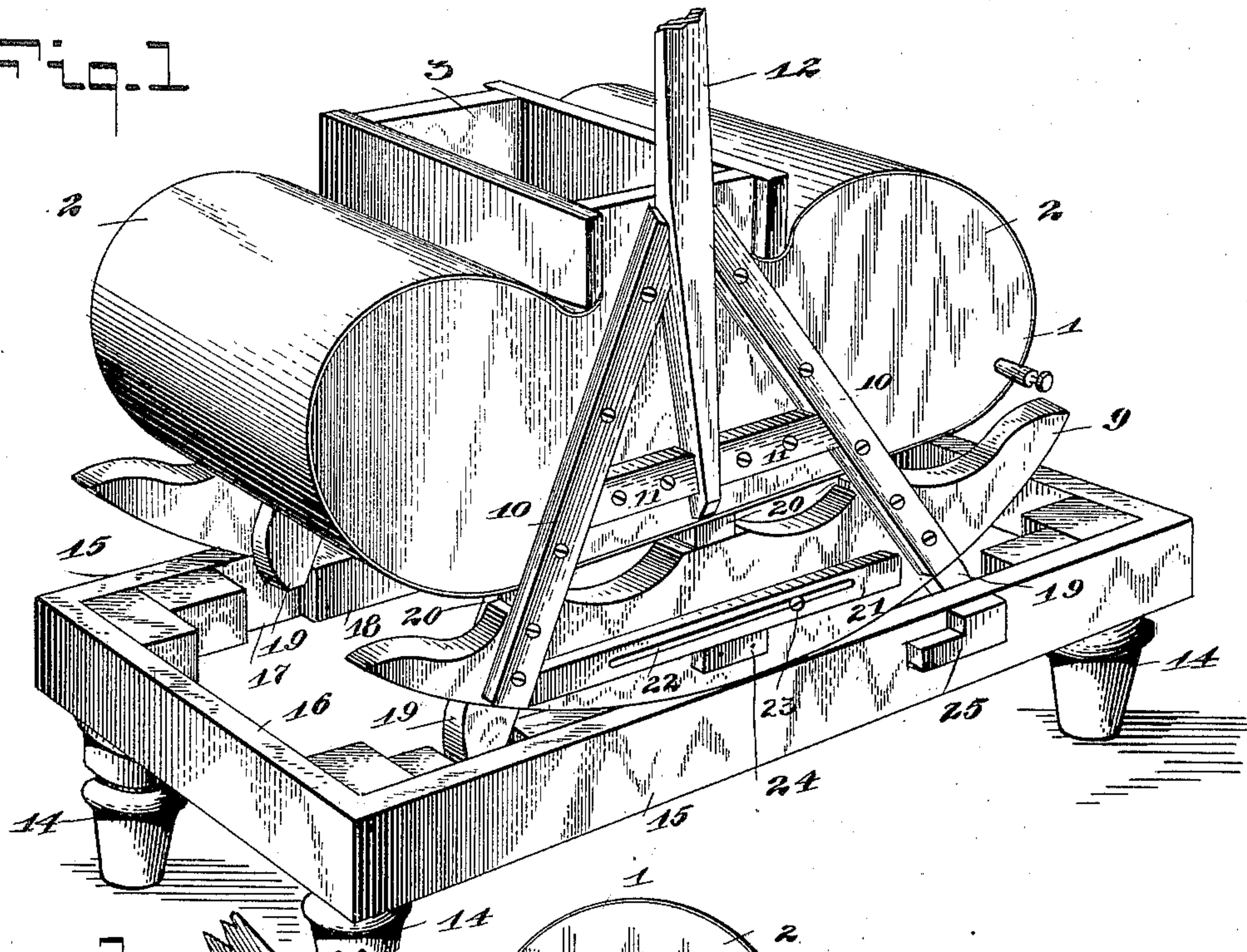
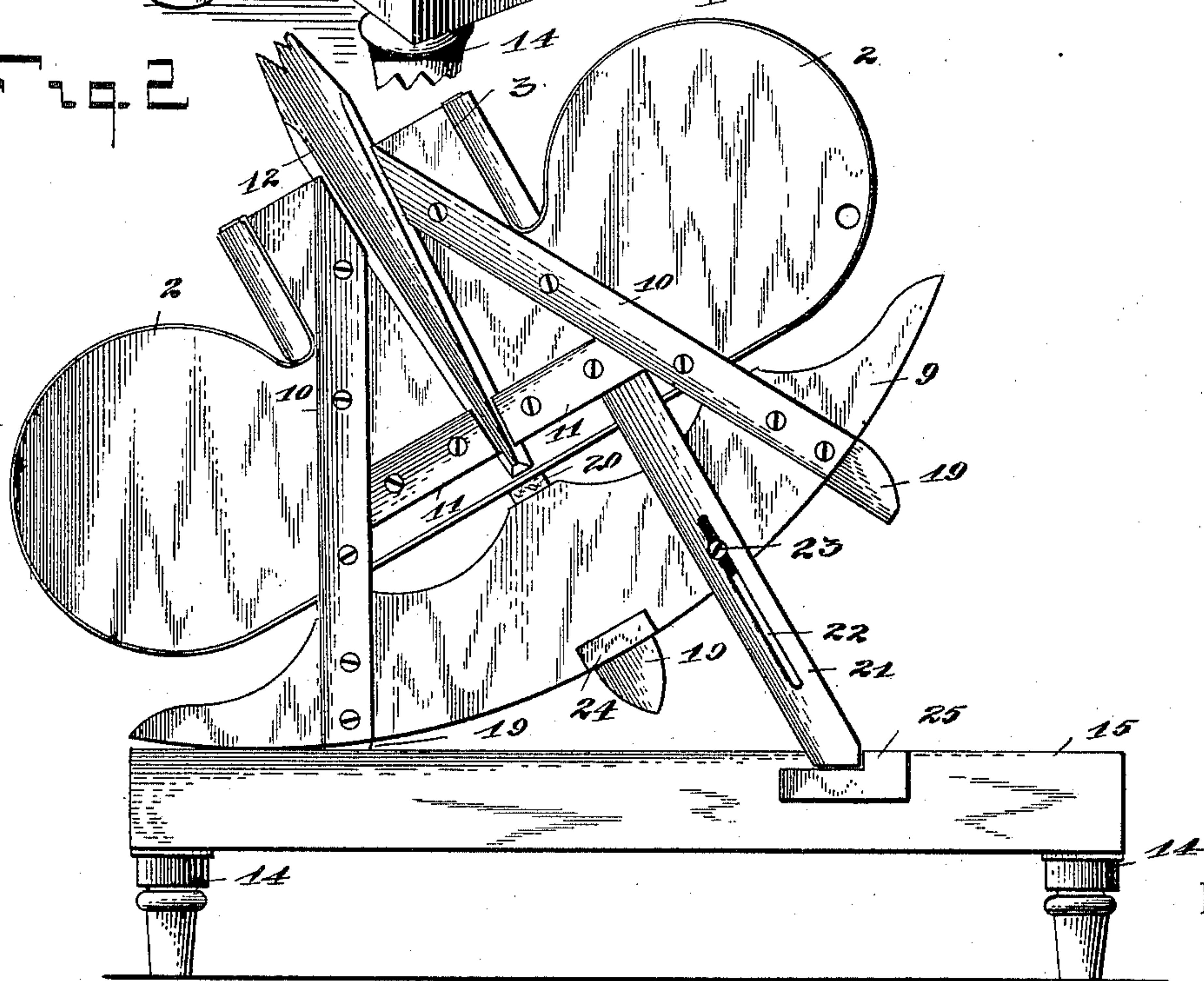


Fig. 2



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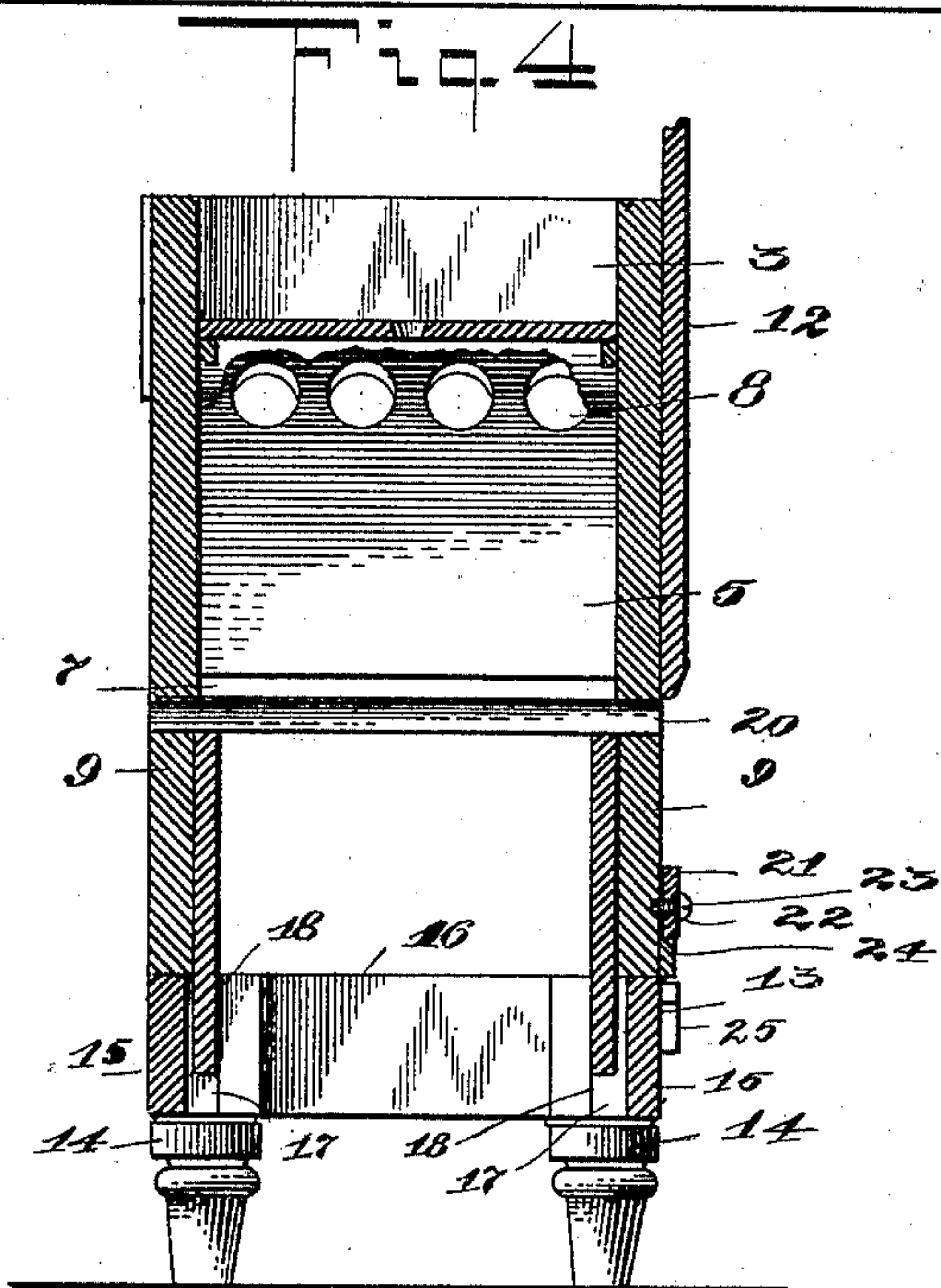
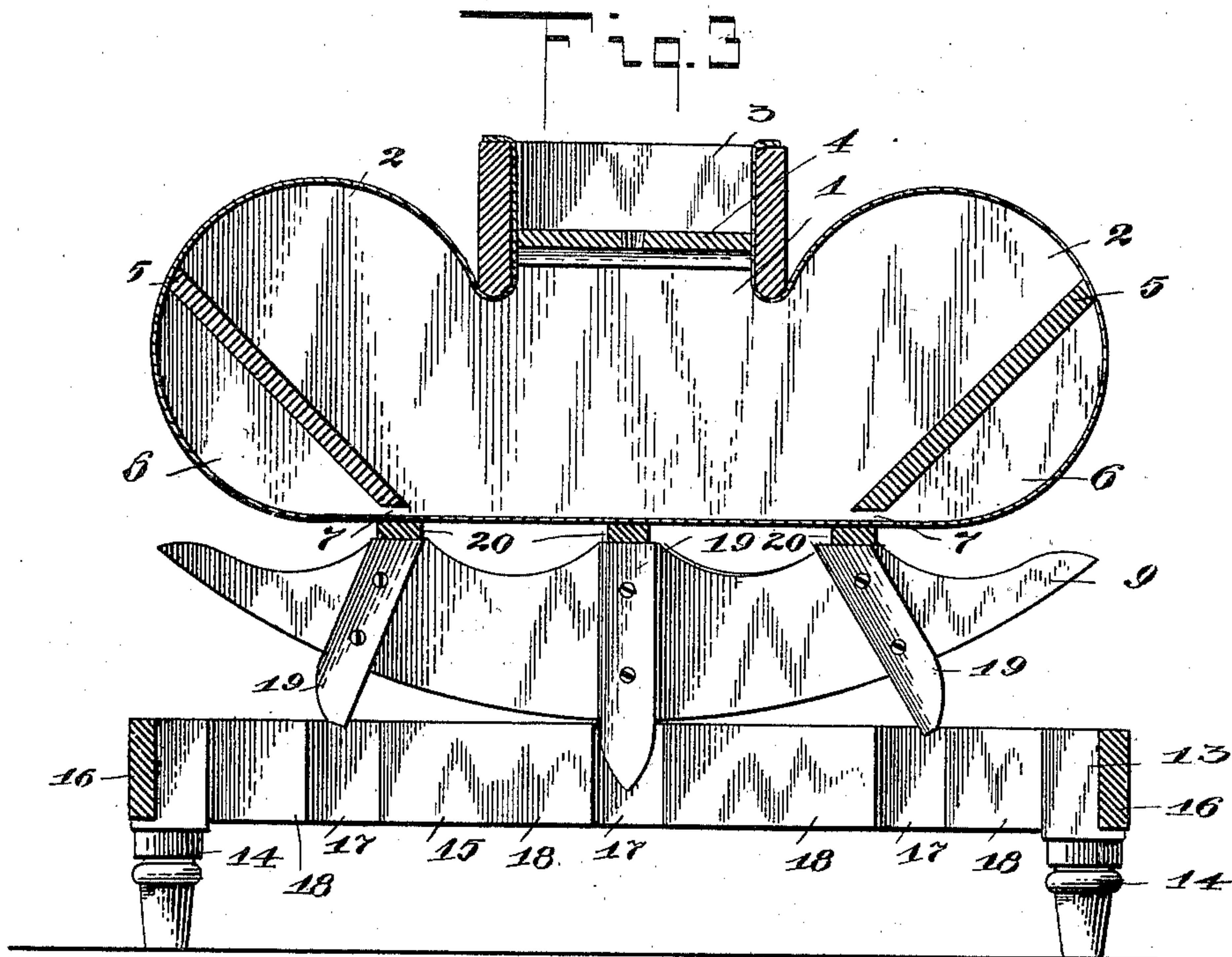
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2 Sheets—Sheet 2.

R. N. SCHERER.
WASHING MACHINE.

No. 584,563.

Patented June 15, 1897.



Inventor

Witnesses

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UNITED STATES PATENT OFFICE.

RUFUS N. SCHERER, OF MARSHALL, MISSOURI, ASSIGNOR OF ONE-HALF TO
F. B. CHURCHILL, OF LA HARPE, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 584,563, dated June 15, 1897.

Application filed June 26, 1896. Serial No. 597,018. (No model.)

To all whom it may concern:

Be it known that I, RUFUS N. SCHERER, a citizen of the United States, residing at Marshall, in the county of Saline and State of Missouri, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to body-working washing-machines operated by a rocking or oscillating motion, the body being mounted upon rockers, whereby it can be easily oscillated to agitate the clothes in the washing operation.

One of the objects of the invention is to relatively fix the position of the machine so as to prevent its wandering when in operation. This result is attained by mounting the body upon a base or stand and providing interlocking means between the rockers and the base, said means consisting of a series of projections at intervals in the length of the rockers and corresponding depressions in the base to receive the said projections as the body is rocked or oscillated.

A further object of the improvement is the provision of means for holding the body tilted at one end, so as to admit of the clothes being conveniently placed within the body or removed therefrom.

Other objects and advantages are sought to be attained and will appear as the nature of the invention is understood, and to this end reference is to be had to the following description and the drawings hereto attached.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a machine constructed in accordance with the principles of this invention for attaining the ends thereof. Fig. 2 is a side elevation showing the body tipped to one end and held by a brace interposed between the said body and base. Fig. 3 is a longitudinal section. Fig. 4 is a transverse section, parts being broken away, so as to show the splash-board in front elevation.

Corresponding and like parts are referred to in the following description and indicated

in the several views of the accompanying drawings by the same reference-characters.

While the machine is especially designed for laundry purposes, it can with equal facility be employed for churning butter, the grain and texture of the latter being fine and the churning facilitated and the butter compacted and in better condition to be removed from the body.

The body 1 is formed with end compartments 2 of approximately cylindrical form and has a central portion 3, which is open for the introduction and removal of the clothes and other articles placed within the body. This central portion 3 is closed by a cover 4, which has an opening and which rests upon cleats applied to the inner side thereof. The bottom of the body is flat, so as not to offer any resistance to the sloshing action of the water and clothes when rocking or oscillating the body. By having the end compartments of approximately cylindrical form the water and clothes are more thoroughly agitated than if the said compartments were made rectangular or given any other form.

Each compartment 2 is divided by a splash-board 5, the latter inclining from the bottom in an upward and outward direction and providing a chamber 6 at the lower end of the compartment. The splash-boards 5 incline in opposite directions at an angle of about forty-five degrees and are secured at their ends to the side pieces of the body. A space 7 is formed between the bottom and the lower edge of each splash-board, and the latter has a series of openings 8 near its upper edge, through which the water and air are forced when the machine is in operation.

Rockers 9 are secured to the body 1 by means of oppositely-inclining strips 10, which converge at their upper ends and which assist materially in strengthening and bracing the sides of the body. Blocks 11 are secured to a side of the body near the lower edge thereof, and the outer ends of these blocks touch the inner sides of the strips 10, and their inner ends are spaced apart, and the upper ends of the strips 10 are likewise spaced apart, and an operating-handle 12 is inserted into the spaces thus formed between the parts 10 and 11 and is retained in place by beveling the opposing portions of the said parts 10

and 11 and correspondingly beveling the edges of the operating-handle. The lower end of the operating-handle tapers, thereby making provision for tightening the handle by forcing it into the spaces formed between the opposing ends of the parts 10 and 11, the space between the blocks 11 being less than the space between the upper ends of the strips 10. This construction admits of the operating-handle being quickly placed in position and removed, as desired.

A base or stand 13 is provided for the parts 9 to rock upon, and consists of a frame mounted upon feet 14, the frame comprising longitudinal bars 15 and end bars 16, the said bars being secured to one another and to the feet in any substantial and durable manner. Spaces 17 are provided between blocks 18, secured to the inner sides of the bars 15, and receive projections 19 of the rockers 9, whereby the said rockers are retained in place upon the base or stand when the machine is in operation.

It will be understood that the spaces 17 may be provided in any convenient way so long as they cooperate with the projections 19 and attain the desired end. The projections 19 are short bars secured to the inner sides of the rockers 9 and which are disposed about on radial lines, the projecting parts extending beyond the lower edges of the rockers tapering so as to facilitate the entrance and withdrawal of the projections from the spaces 17. Transverse strips 20 connect corresponding projections 19 at their upper ends and bear against the bottom of the body, thereby strengthening and supporting the latter.

A brace 21, having a slot 22, is secured to a side of one of the rockers and is held in place by a screw or headed fastening 23, which operates in the slot 22. A block 24, secured to the same side of the rocker with the brace 21, supports the latter in a horizontal position when not required for immediate use.

When the body is tipped toward one end, as shown in Fig. 2, the brace 21 is disengaged from the block 24, and one end is caused to engage with a block 11, and the lower end is engaged with a block 25, secured to a bar 15 on the same side of the machine with the brace 21. In this position of the body access can be conveniently had to the interior for any required purpose. The block 25 is formed with a shoulder 26 to prevent slipping of the lower end of the brace when the latter is adjusted to hold the body tilted. When the brace 21 is not in use, it is retained in an approximately horizontal position by the headed fastening 23 and the block 24, and its ends engage with the lower ends of the strips 10, whereby it is held against longitudinal movement.

By reason of the projections 19 engaging with the spaces 17 the body will be held upon the base at all times, and by having the projections tapering they will be directed into

the spaces as the body oscillates. When the machine is used for washing clothes, the suds-water and clothes will move bodily from one end of the body to the other as the body oscillates, and the air and suds-water passing through the openings 8 of the splash-boards will enter the chambers 6 and escape by way of the spaces 7 and pass thence through the clothing, thereby removing the dirt and foreign matter adhering thereto. For purposes of churning the splash-boards are removed, thereby obviating destroying the fine grain which is essential to the production of good butter. The flange forming the central portion 3 provides for the attachment to the machine of a wringer after the clothes are washed.

Having thus described the invention, what is claimed as new is—

1. In a washing-machine, the combination of a base comprising longitudinal bars, blocks attached at intervals to the inner sides of the longitudinal bars, forming spaces which aline transversely, rockers about equal in length to the longitudinal bars and mounted thereon, short bars attached to the inner sides of the rockers and projecting below their lower edges to cooperate with the aforesaid spaces, and having their upper ends flush with the top edges of the rockers, transverse strips connecting the rockers and the upper ends of corresponding short bars, and a body mounted upon the said transverse strips, substantially as shown and described.

2. In a washing-machine, the combination of a base, a shouldered block 25 applied to a side thereof, rockers about equal in length to the base and mounted thereon, interlocking projections between the rockers and base, a body mounted upon the base, oppositely-inclined strips 10 connecting the rockers and body and having their upper ends spaced apart, blocks 11 secured to a side of the body near its bottom and having their outer ends touching the inclined strips 10 and their inner ends spaced apart, an operating-handle detachably fitted to the body by entering the spaces formed between the opposing ends of the aforesaid strips and blocks, a block 24 secured to a rocker, a headed fastening 23 applied to the rocker to one side of the block 24, and a longitudinally-slotted brace tiltingly and slidingly mounted upon the said headed fastening and normally supported between the lower ends of the inclined strips by the block 24, and adapted to be turned so as to engage at its lower end with the shouldered block 25 and at its upper end with a block 11, substantially as shown for the purpose described.

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

RUFUS N. SCHERER.

Witnesses:

W. B. LAURIE,

CHAS. M. HAWLEY.