

(No Model.)

2 Sheets—Sheet 1.

S. M. WINDMILLER & L. HOLFORD.
WASHING MACHINE.

No. 593,344.

Patented Nov. 9, 1897.

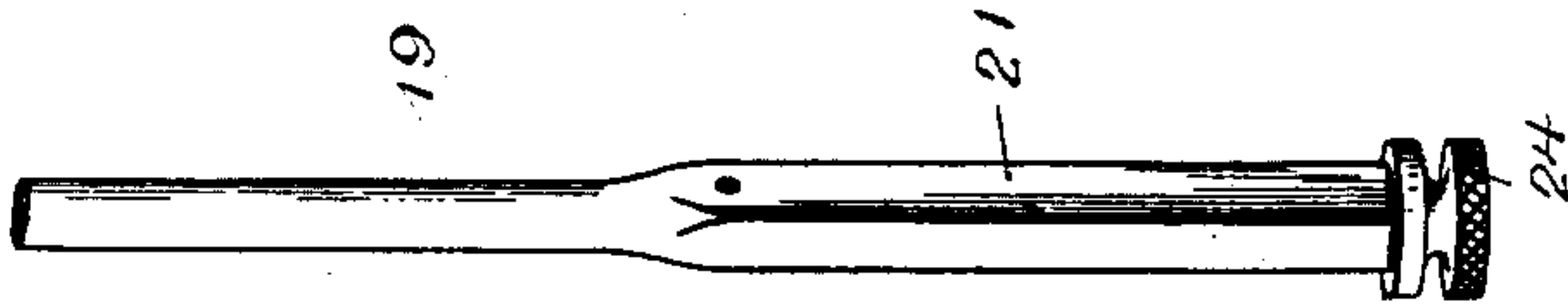


Fig. 4.

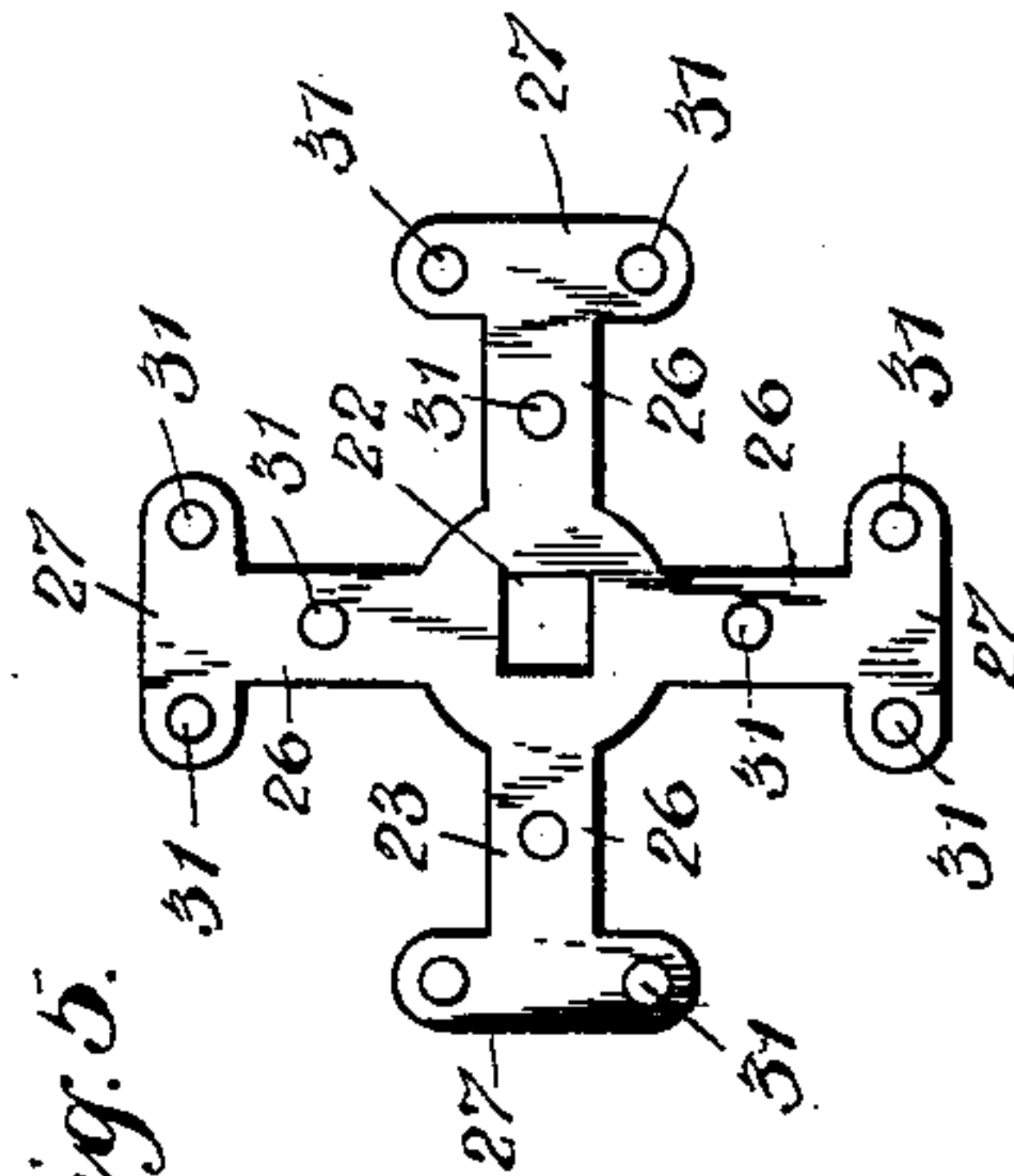


Fig. 5.

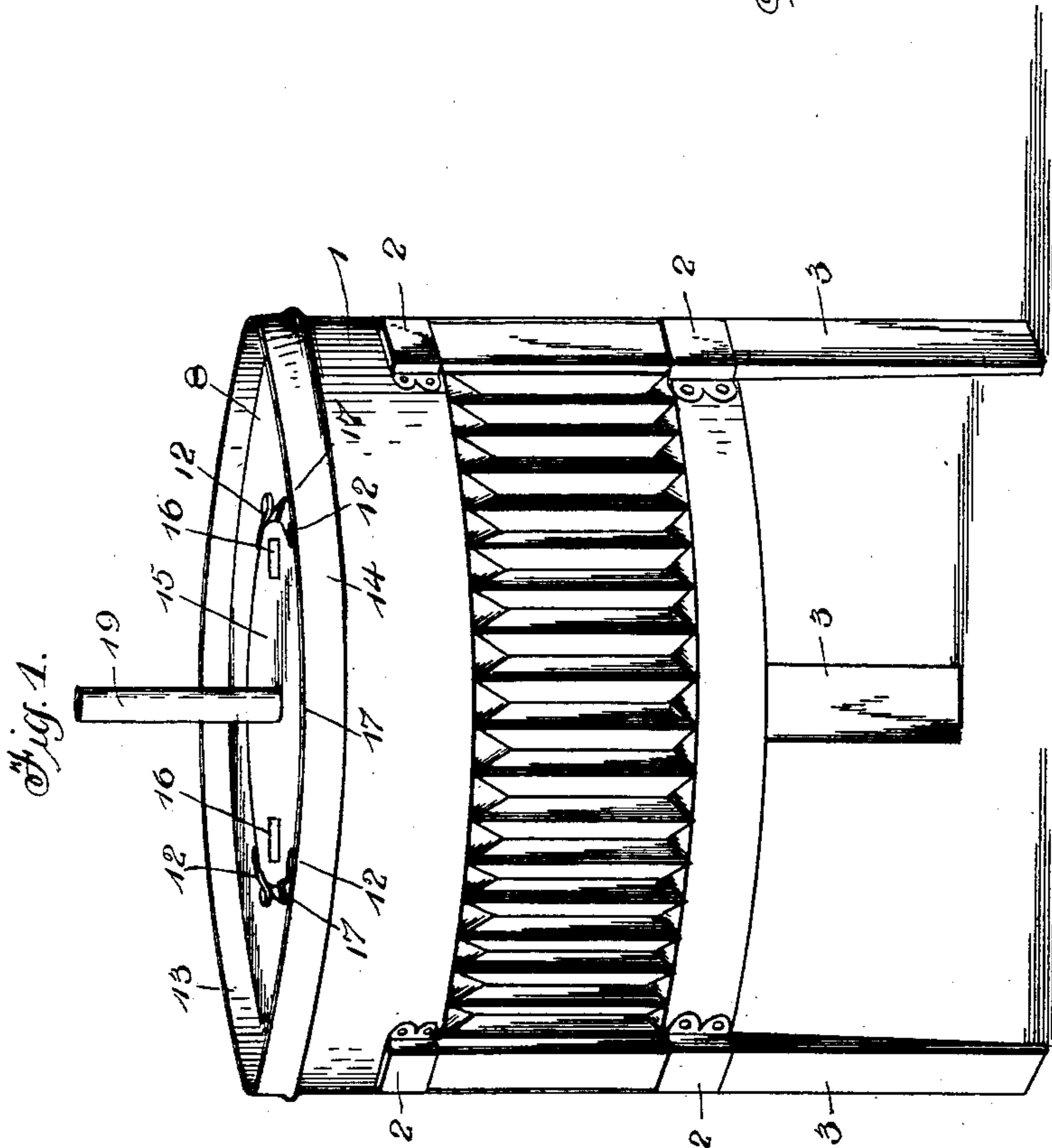


Fig. 1.

Witnesses

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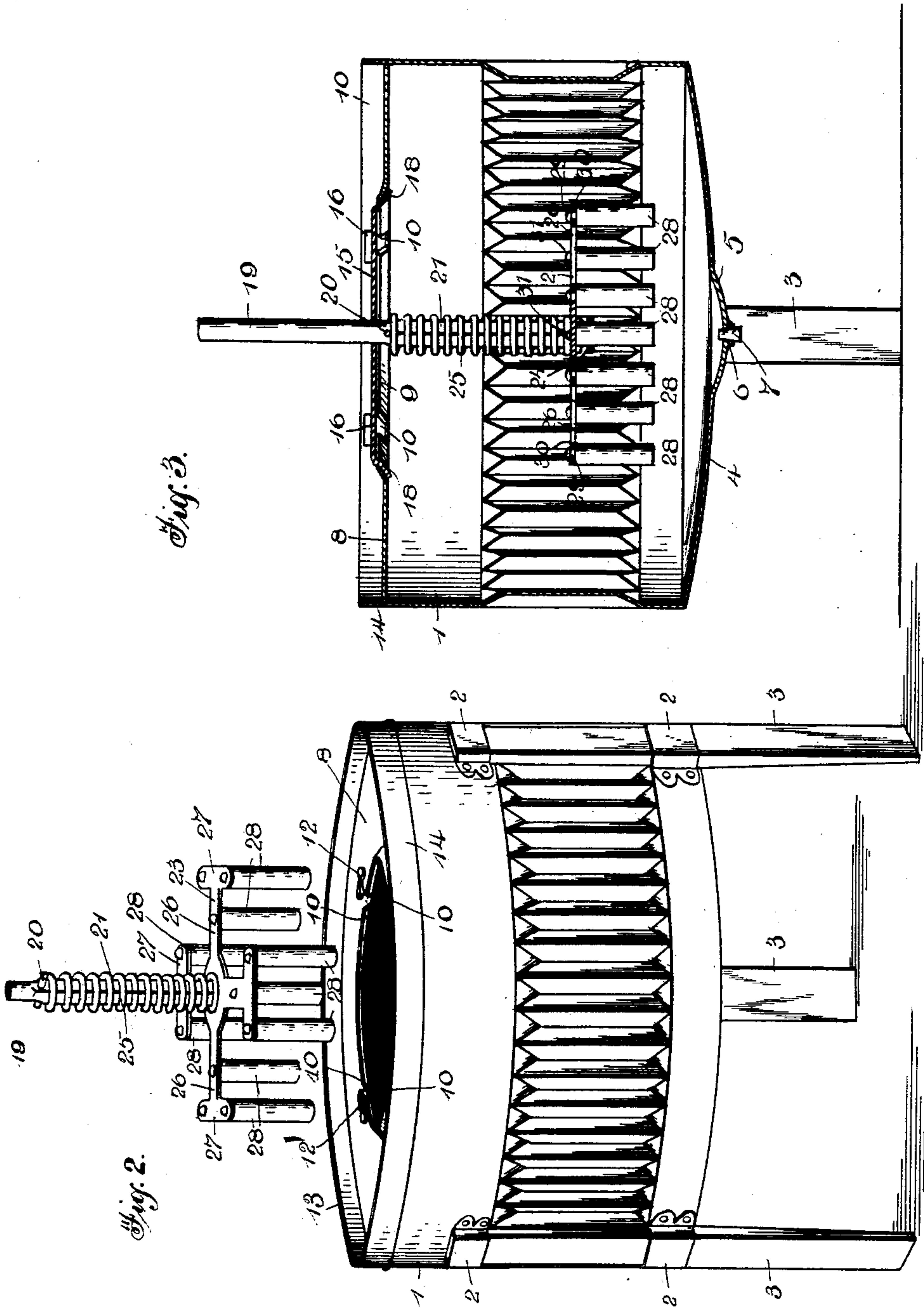
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2 Sheets—Sheet 2.

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WASHING MACHINE.

No. 593,344.

Patented Nov. 9, 1897.



Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL MARTIN WINDMILLER AND LEE HOLFORD, OF NEBO, ILLINOIS;
SAID HOLFORD ASSIGNOR TO GANEY F. WINDMILLER, OF SAME
PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 593,344, dated November 9, 1897.

Application filed December 5, 1896. Serial No. 614,614. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL MARTIN WINDMILLER and LEE HOLFORD, citizens of the United States, residing at Nebo, in the county of Pike and State of Illinois, have invented certain new and useful Improvements in Washing-Machines; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention has relation to improvements in the construction of washing-machines; and the object of the invention is to provide a simple and convenient washing-machine for general family use; and to this end the novelty consists in the construction, combination, and arrangement of the several parts of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-numerals indicate the same parts of the invention.

Figure 1 is a perspective view of our improved washing-machine. Fig. 2 is a similar view with the cover removed and the agitator raised from the tub. Fig. 3 is a vertical section of the machine. Fig. 4 is a detail of the agitator-spindles, and Fig. 5 is a plan view of the agitator.

1 represents a cylindrical corrugated sheet-metal tub provided with ears 2 2, which receive the detachable legs 3 3.

4 represents the concave bottom, formed with a central depressed recess 5, provided with an orifice 6, closed with a removable stopple 7.

8 represents the top of the tub 1, having a central orifice or opening 9 formed with radial rectangular recesses 10 10 and lugs 12 12. This top is set in the tub a sufficient distance below the top edge 13 of the sides to leave a continuous flange 14 around the upper edge of said tub for conveniently securing a suitable wringer to.

15 is the removable cover, which is provided with handles 16 16 and radial recesses 17, the metal cut out from said recesses being severed only on the sides and left solid at the

back, which is then bent downwardly to form tongues 18 18, which fit the recesses 10 10. The cover is then turned to the right or left, so as to engage said tongues under the edge of the opening 9, while at the same time the lugs 12 project over the outer edge of the cover 8 to assist in securing it in place.

19 represents the vertical shaft, mounted in the cover 15, said shaft being cylindrical as far down as the cross-pin 20, and from that point it is square in cross-section to its lower end. This square portion 21 passes freely through a correspondingly-shaped central orifice 22 in the frame 23, and 24 is a set-screw the enlarged head of which prevents the frame 23 from coming off.

25 is a spiral spring encompassing the square portion 21 of the shaft, its lower end being held in operative contact with said frame by the cross-pin 20, the spring allowing the frame 23 to play up and down on the square portion, while it is at the same time imparting a rotary motion to it. This frame is formed with the integral radial arms 26, the outer ends of which terminate in integral cross-bars 27.

28 28 represent a series of spindles having journals 29 formed on their upper ends, by means of which they are inserted in circular orifices 30 in the frame, being held in place by a screw 31, and these journals are slightly smaller than the orifices in which they are mounted, so as to permit them to rotate freely therein when the machine is in operation.

The tub being made of corrugated sheet metal, as above described, the corrugated wall of the tub acts as a washboard when the frame 23 is rotating the clothes.

Having thus fully described our invention, what we claim as new and useful, and desire to secure by Letters Patent of the United States, is—

A washing-machine comprising a cylindrical tub having a corrugated wall, a detachable cover therefor, an agitator comprising a shaft the outer end of which is round and fitted in a corresponding opening in the cover, and the lower end is squared, an agitator-head fitted to said shaft and consisting of a sheet-metal support having a central

square aperture for the shaft, radial arms, extending therefrom, and cross-bars at the outer ends of said arms, apertures in the arms and cross-bars, spindles mounted to revolve in
5 the apertures, and a spring surrounding the shaft and bearing upon the head or support, substantially as described.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

SAMUEL MARTIN WINDMILLER.

LEE HOLFORD.

Witnesses:

C. H. BUSH,

S. M. ASH.