

No. 844,595.

PATENTED FEB. 19, 1907.

W. H. HEFFERNAN & H. F. MARSHALL.

WASHING MACHINE.

APPLICATION FILED OCT. 19, 1905.

Fig. 1.

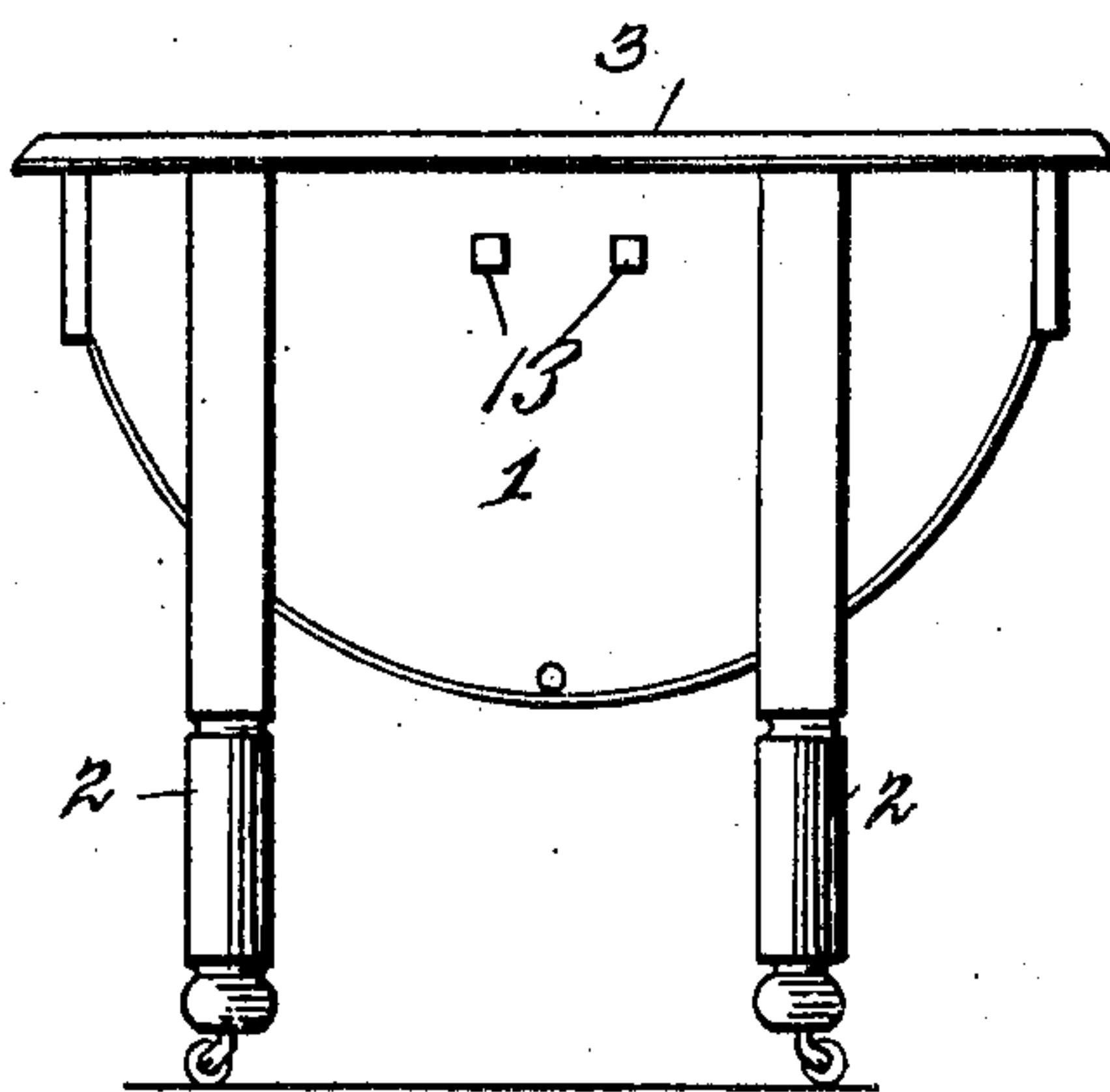


Fig. 2.

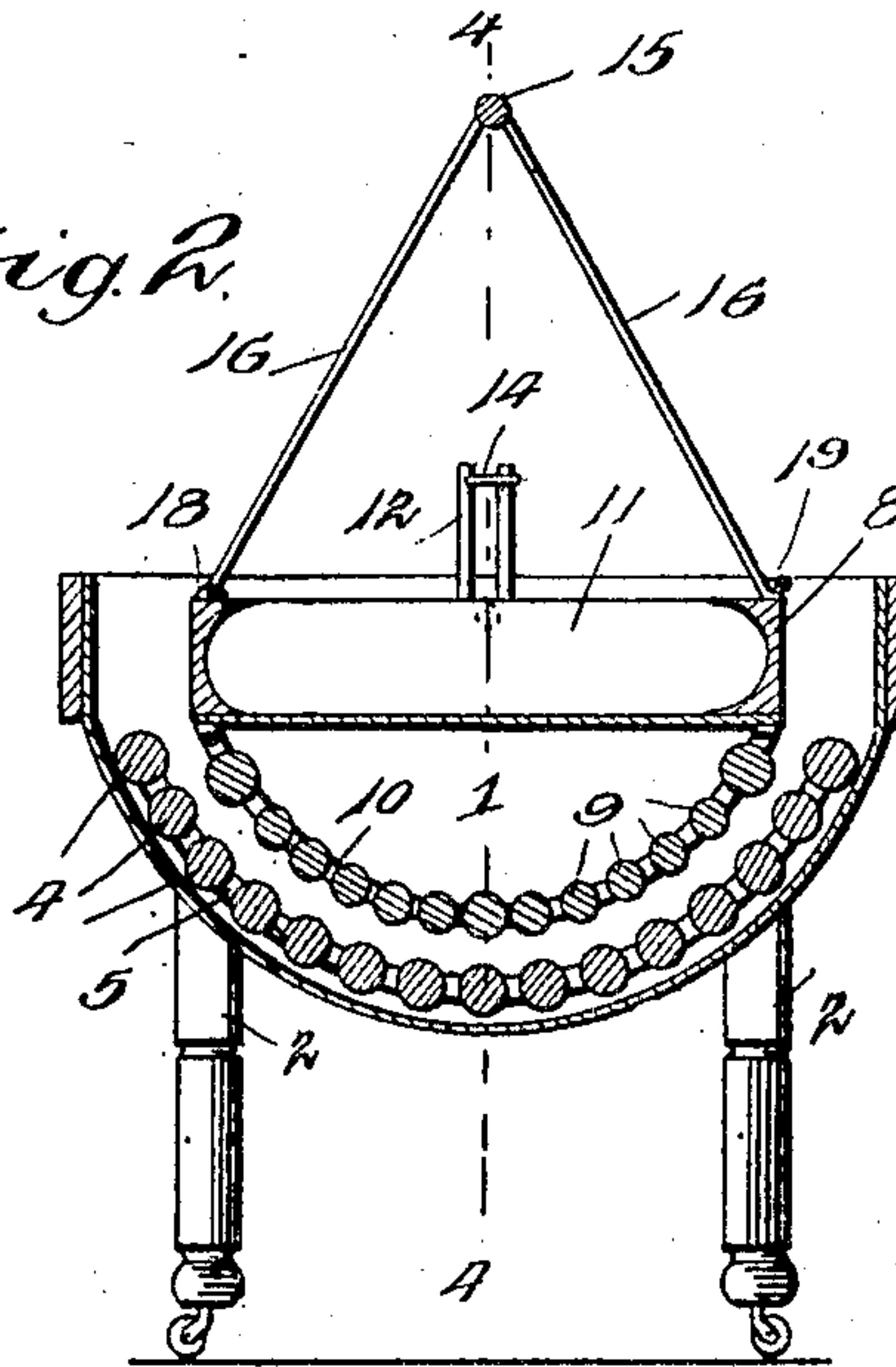


Fig. 3.

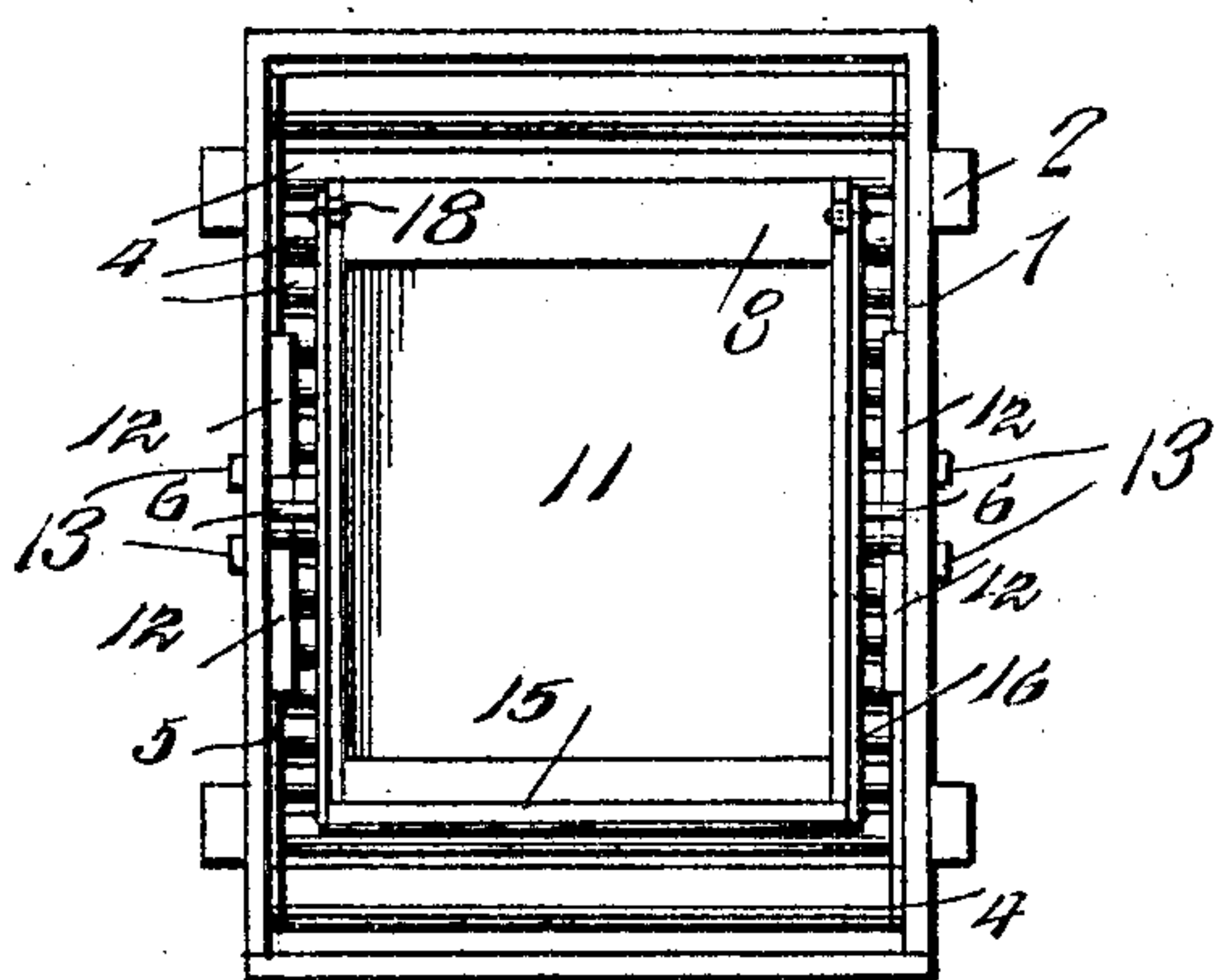


Fig. 5.

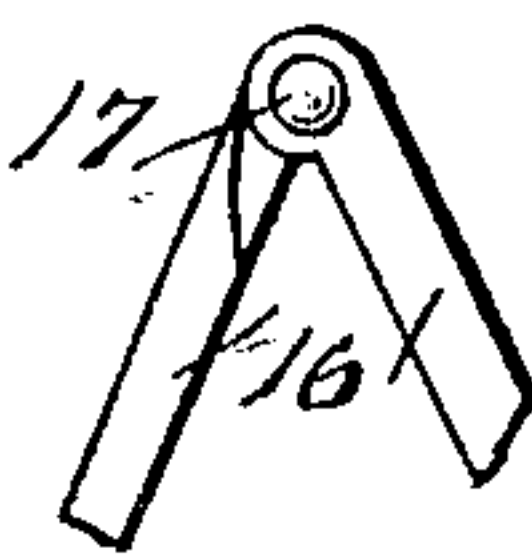


Fig. 4.

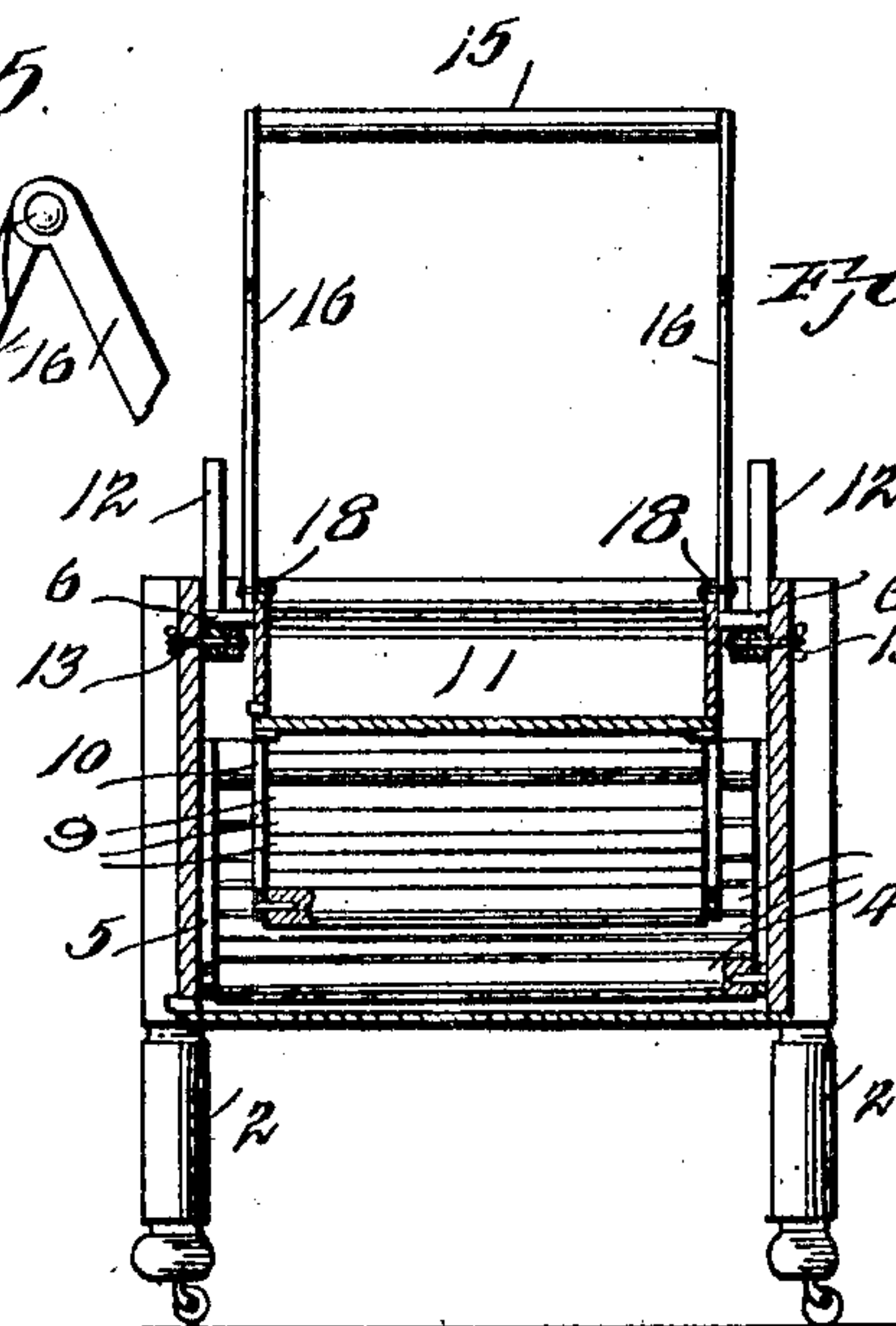
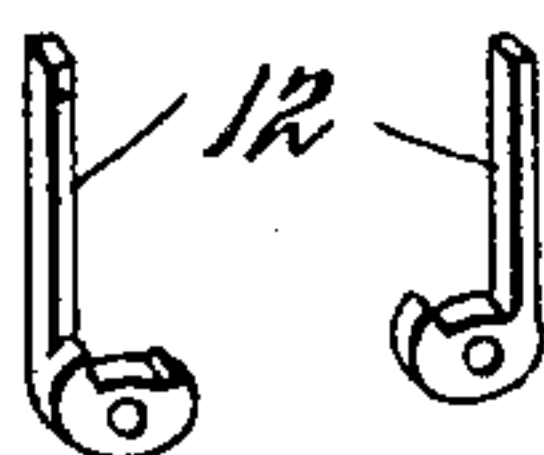


Fig. 6.



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# UNITED STATES PATENT OFFICE.

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## WASHING-MACHINE.

No. 844,595.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed October 19, 1905. Serial No. 283,557.

*To all whom it may concern:*

Be it known that we, WILLIAM H. HEFFERNAN and HOMER F. MARSHALL, citizens of the United States, residing at North Adams, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to washing-machines of the type embodying an oscillatory rubbing member, and has for its objects to produce a comparatively simple inexpensive device of this character in which the rubbing member may be conveniently operated for rapidly and thoroughly cleansing the clothes or other fabrics under treatment, one wherein the operating-handle of the rubbing member may be readily folded to permit application of the cover of the machine, and one wherein the rubbing member presents an auxiliary chamber for the reception of lace or other delicate fabrics to be washed.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is an end view of a washer-machine embodying the invention and showing the same in closed condition. Fig. 2 is a vertical longitudinal section showing the parts of the machine in condition for operation. Fig. 3 is a top plan view with the cover removed and showing the handle and guides in folded condition. Fig. 4 is a vertical transverse section taken on the line 4 4 of Fig. 2. Fig. 5 is a detail view showing the manner of hinging the parts of the operating-handle. Fig. 6 is a detail view of the foldable guides.

Referring to the drawings, 1 designates a receptacle or tub, preferably composed of sheet metal and of substantially semicircular form, as shown, said tub being sustained by legs 2 and equipped with a removable cover 3, while journaled for rotation within the tub and disposed to follow the contour of the bottom thereof is a series of transversely-extending rollers 4, having bearing at their ends in curved supports 5 and constituting a lower rubbing-surface.

Suspended in the tub by means of horizontal pintles or trunnions 6 is an oscillatory rubbing member comprising a body 8 and a series of transverse rollers 9, journaled at

their ends in curved supporting members 10, in turn attached to the body 8, which latter is hollow to present a chamber or compartment 11. The trunnions 6 rest upon bearing and guiding members 12, arranged in pairs, as shown, and attached to the side walls of the tub by means of pivoting members or bolts 13, adapting the members for movement from a horizontal to a vertical position, there being pivoted to one of the members 12 of each pair a locking member or link 14, adapted for engagement with the companion member 12 to hold the members 12 in vertical position, as illustrated in Fig. 2.

The rubbing member is equipped with an operating-handle 15, sustained by two pairs of supporting members or arms 16, the pairs of members which converge from their lower toward their upper ends being pivoted at their upper ends to the handle 15 and connected together by a hinged joint 17, whereby they may fold one upon the other, while one of the members 16 of each pair is pivotally connected at its lower end at 18 to the body 8, the other member of the pair being detachably connected to the body by means of a thumb-screw 19, whereby it may be readily disengaged to permit folding of the members.

In practice and under normal conditions the guide members 12 are folded downward in horizontal position within the tub, as seen in Fig. 3, while the handle 15 and its supporting members 16 lie in similar folded condition, as seen in said figure, thus to permit of the cover 3 being applied to the tub. When, however, it is desired to operate the machine, the cover 3 is removed and the bearing members 12 and handle-supports 16 arranged in operative unfolded position, as illustrated in Figs. 2 and 4. The tub having been filled with water, the clothes or other fabrics to be washed are introduced into the vessel 1 between the rubbing-surfaces formed by the rollers 4 and 9, while handkerchiefs, lace, and similar fine delicate fabrics are introduced into the compartment 11. The rubbing member 7 is then operated by grasping the handle 15 and moving the same back and forth, this action serving to rock the member 7 on its axis to carry the clothes back and forth between the rubbing-surfaces and effect a rapid thorough cleansing of the material, it being understood that the lighter fabrics which are contained in the compartment 11



will wash back and forth in the latter and be effectually cleansed under the action of the water and suds.

It is to be noted that during the operation  
5 of the machine the member 7 as a whole may move vertically upward within the guides 12 to accommodate heavy pieces of clothes between the rubbing-rollers. It will be understood that when the parts are to be again  
10 folded for application of the cover 3 the links 14 are manipulated to release the bearing members 12, which may then be turned to horizontal position, and that in like manner the screws 19 may be loosened to release the  
15 lower ends of the arms 16 and permit folding of the handle.

From the foregoing it is apparent that we produce a simple device admirably adapted for the attainment of the ends in view, it being  
20 understood that in attaining these ends

minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus fully described our invention, what we claim as new is—<sup>25</sup>

In a washing-machine, a receptacle, a rubber pivotally sustained therein, a pair of handle-supporting members having meeting ends hingedly connected, and a handle carried by the supporting members, one of said  
30 members being pivotally connected with the rubber and the other being detachably engaged with the latter.

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

WILLIAM H. HEFFERNAN.  
HOMER F. MARSHALL.

Witnesses:

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