

No. 643,686.

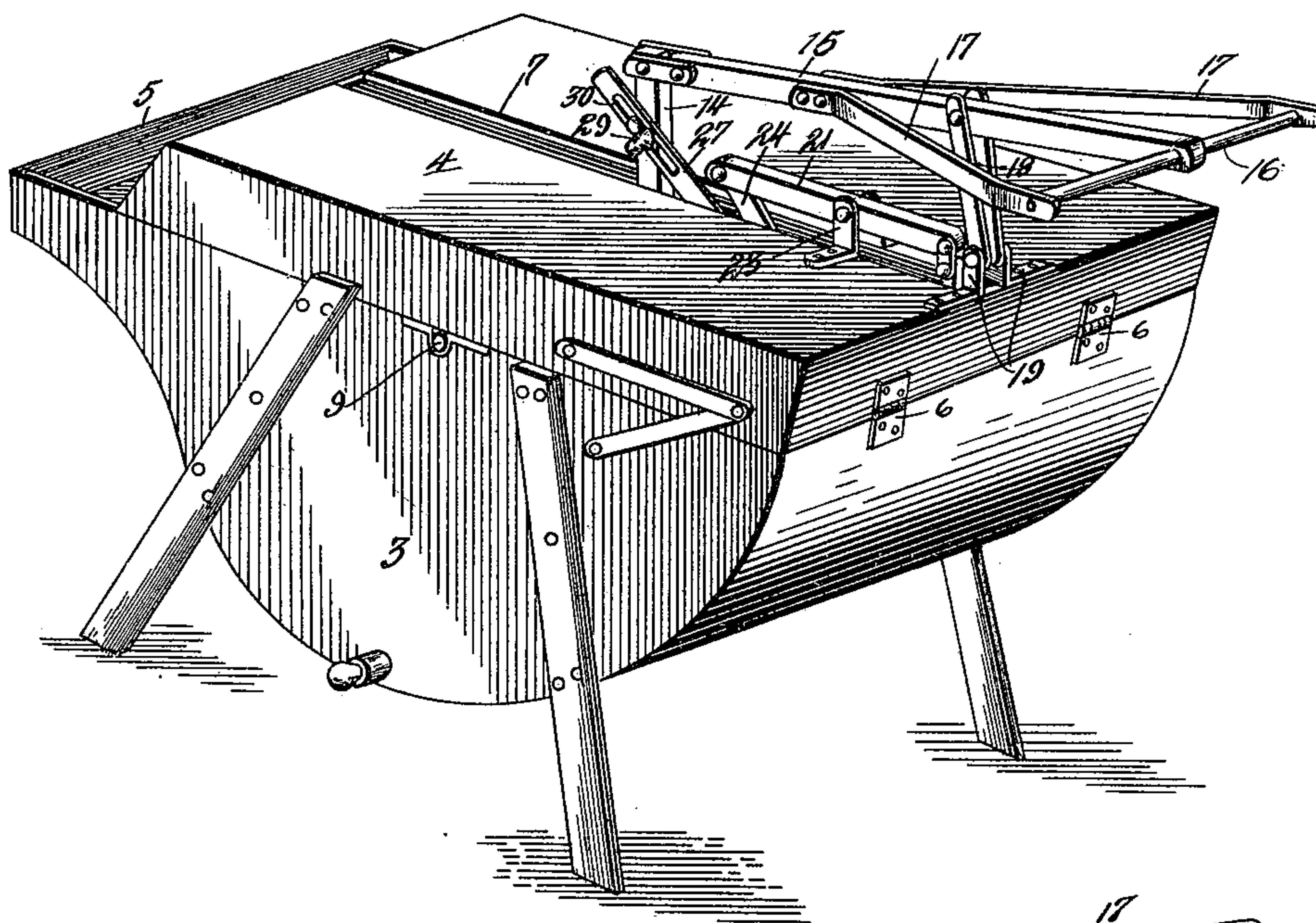
Patented Feb. 20, 1900.

H. G. SCHUMACHER.  
WASHING MACHINE.

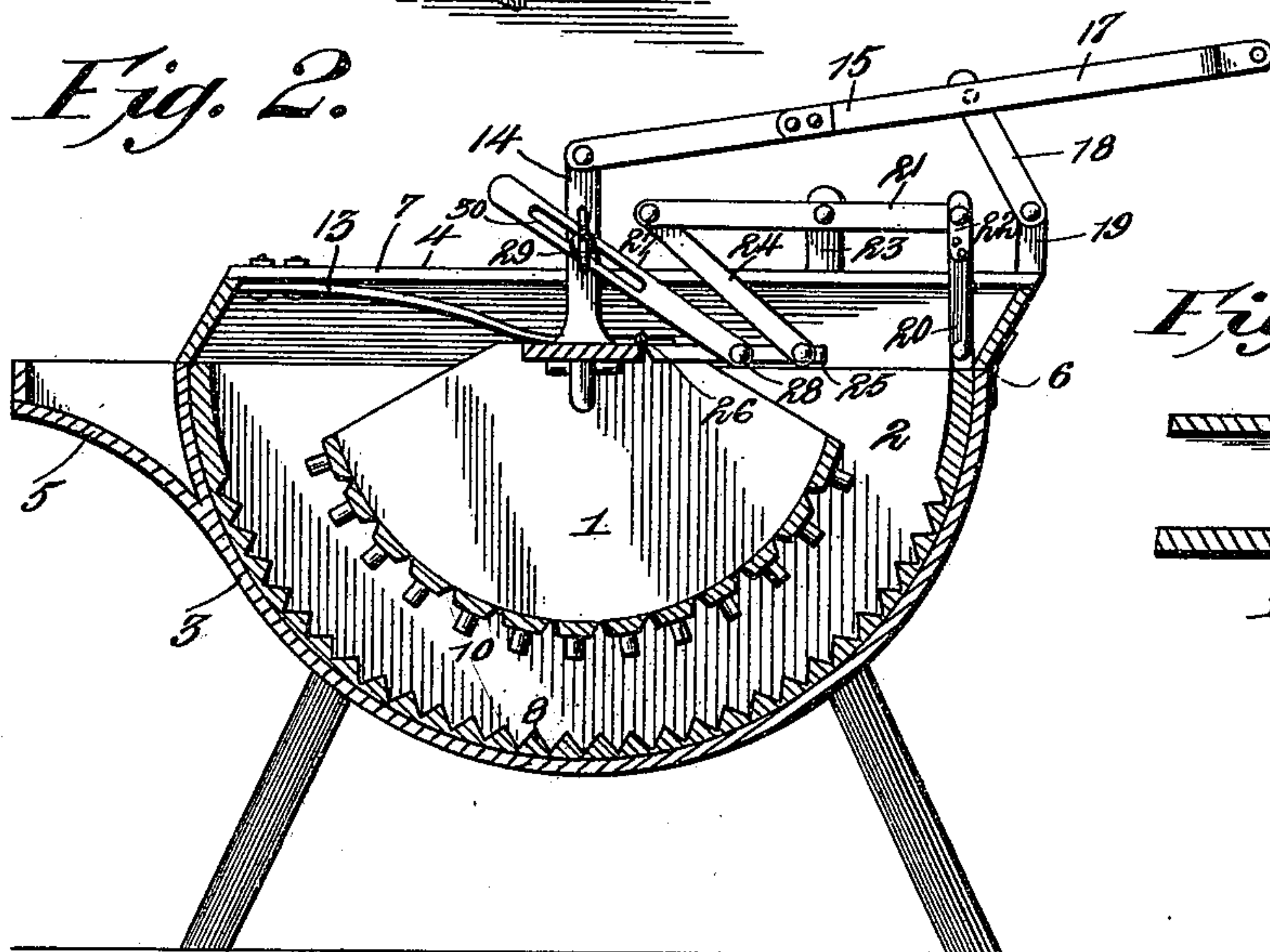
(Application filed Nov. 18, 1899.)

(No Model.)

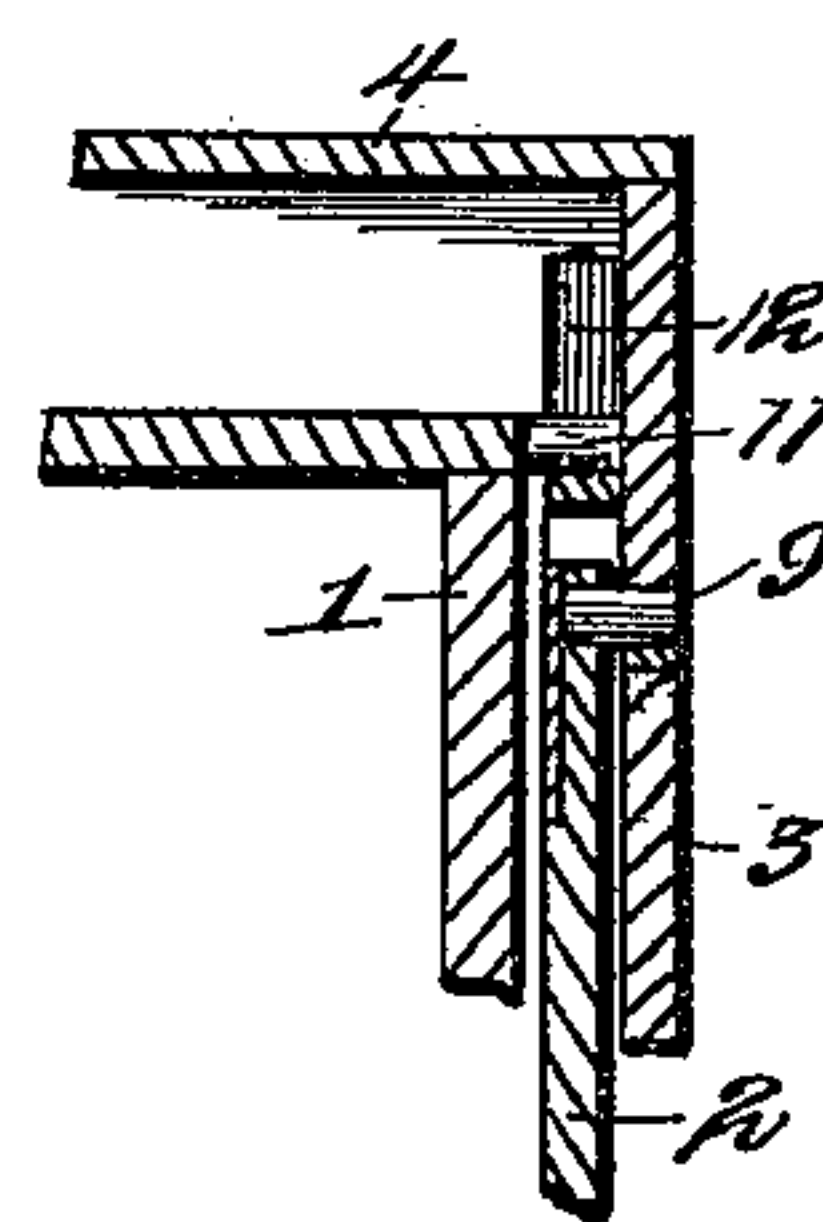
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

HERMANN G. SCHUMACHER, OF HOCHHEIM, TEXAS.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 643,686, dated February 20, 1900.

Application filed November 18, 1899. Serial No. 737,489. (No model.)

*To all whom it may concern:*

Be it known that I, HERMANN G. SCHUMACHER, a citizen of the United States, residing at Hochheim, in the county of Dewitt and State of Texas, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing-machines.

The object of the present invention is to improve the construction of washing-machines and to provide a simple and comparatively inexpensive one adapted to be easily operated and capable of enabling clothes and other fabrics to be rapidly and thoroughly washed.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a washing-machine constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail sectional view illustrating the manner of mounting the upper and lower oscillating rubbers.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 and 2 designate upper and lower substantially-semicylindrical rubbers mounted within an approximately-semicylindrical washing-machine body 3 and adapted to be reversely oscillated and capable of moving simultaneously in opposite directions, whereby clothes and other fabrics placed between them are thoroughly and uniformly rubbed and rapidly washed. The washing-machine body 3, which is supported by suitable legs, is provided with a cover 4, and it has an extension 5 at one end. The cover or lid 4 is connected at one end with the body by hinges 6, and it is provided with a central longitudinal opening 7 for the reception of the mechanism hereinafter described for reversely operating the upper and lower rubbers.

The lower rubber 2, which is substantially semicylindrical, is provided with a rubbing-surface 8, and it has journals 9, arranged in

suitable bearings of the washing-machine body. The upper rubber 1, which is provided with a curved rubbing-surface 10, has opposite journals 11, arranged in vertical ways 12 of the lid or cover, as clearly illustrated in Fig. 3 of the accompanying drawings, whereby the upper rubber is capable of vertical movement to vary the distance between the rubbing-surfaces 8 and 10, whereby the latter are accommodated to the quantity of clothes being washed. The rubbing-surface 8, which is curved, is arranged on the inner or upper face of the lower rubber, and the other rubbing-surface 10, which is located on the lower face of the upper rubber, is provided with pins adapted to engage and carry the clothes over the lower rubbing-surface. This construction insures a thorough rubbing of the clothes and it enables the operation of washing to be rapidly effected.

The upper rubber is held yieldingly in engagement with the clothes or other fabrics being washed by means of a spring 13, secured at its outer end to the inner face of the cover, as clearly illustrated in Fig. 2 of the accompanying drawings. The free inner end of the spring bears against the upper face of the top portion of the upper rubber, and one or more springs may be employed, as will be readily apparent.

The upper rubber is provided at its top with a centrally-arranged upwardly-extending arm 14, passing through the slot or opening 7 of the cover, and pivotally connected at its upper end with a handle-frame 15, consisting of a bar provided at its outer end with a handle 16, which is supported by side braces 17. The handle-frame is supported by a pair of links 18, pivotally connected at their upper ends to the longitudinal bar of the handle-frame at a point between the ends thereof and at opposite sides of the same. The lower ends of the links 18 are pivoted to perforated ears or lugs 19 of plates which are secured to the top of the cover at opposite sides of the slot. The handle-frame is adapted to be grasped at its outer end, and it is moved longitudinally to oscillate the arm 14, whereby the upper rubber is actuated. The lower rubber is connected by a pitman or link 20 with the



outer end of a lever 21; and this pitman, which is pivoted at its lower end to the lower rubber, is provided at its upper end with a pair of perforated ears 22, preferably consisting of plates secured to the pitman and arranged at opposite sides of the lever 21. The lever 21 is fulcrumed between its ends on upwardly-extending arms or lugs of L-shaped plates 23, which are secured to the cover at opposite sides of the slot or opening, and the inner end of the lever 21 is connected by a link or pitman 24 with an arm 25 of the upper rubber. The arm 25 is connected at its inner end by a hinge 26 with the upper portion of the rubber 1, and it is rigidly held at any desired adjustment by means of a slotted brace 27. The brace 27, which is pivoted at its lower end at 28, extends upward at an inclination and is secured to the rigid arm 14 by a fastening device 29, preferably consisting of a screw, which passes through the slot 30. Any other suitable fastening device may be employed to secure the arm 25 at the desired adjustment to accommodate the parts to the position of the upper rubber. When the upper rubber is oscillated, it communicates motion through the lever 21 to the lower lever, which is reversely operated, and these rubbers are simultaneously moved in opposite directions.

It will be seen that the washing-machine is simple and comparatively inexpensive in construction, that it is easily operated, and that it is capable of rapidly and thoroughly washing clothes at the expenditure of a minimum amount of labor. It will also be apparent that the upper and lower rubbers are reversely oscillated and that the connections

between the rubbers are readily adjusted to accommodate the washing-machine to different quantities of clothes.

What is claimed is—

1. A washing-machine comprising a body, upper and lower rubbers, the upper rubber being provided with a rigid arm, operating mechanism connected with the arm, a lever disposed longitudinally of the body and connected at its outer end with the lower rubber, an arm hinged to the upper rubber and connected with the inner end of the lever, and an adjustable connection between the hinged arm and the upper rubber; whereby the mechanism is adjusted to operate on different quantities of clothes, substantially as described.

2. A washing-machine comprising a body, upper and lower rubbers, the upper rubber being provided with a rigid vertical arm, a longitudinal lever arranged at one end of the washing-machine and connected at its outer end with the lower rubber, an arm hinged at its inner end to the upper rubber, extending longitudinally of the machine at a point below the lever, an inclined link connecting the inner end of the lever with the outer end of the hinged arm, and an inclined brace pivoted at its lower end to the hinged arm and having a slotted connection with the rigid arm, substantially as described.

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

HERMANN G. SCHUMACHER.

Witnesses:

J. S. MARTIN,

E. G. SCHUMACHER.