

No. 695,556.

Patented Mar. 18, 1902.

S. HERR.

WASHING MACHINE.

(Application filed Nov. 4, 1901.)

(No Model.)

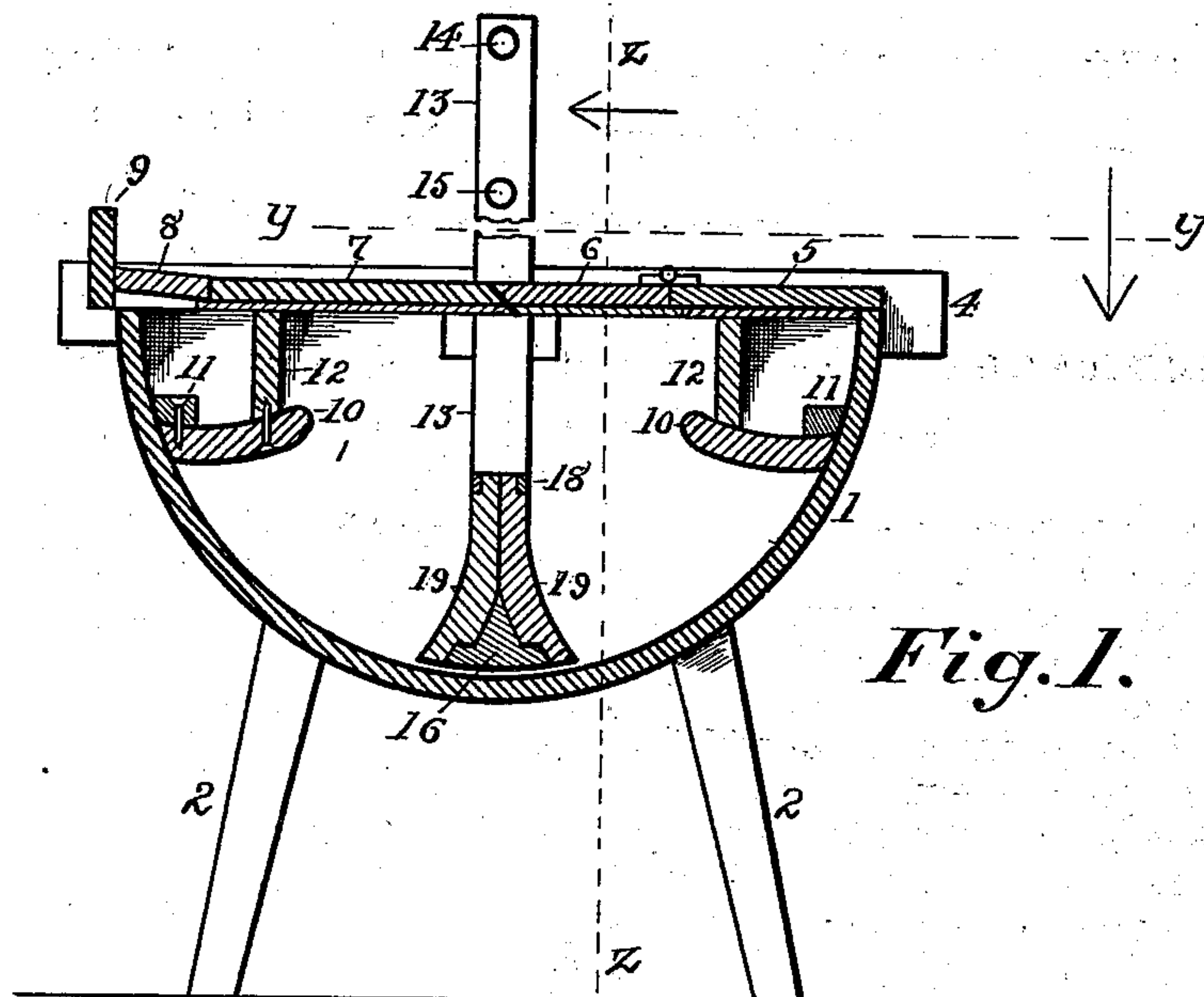


Fig. 1.

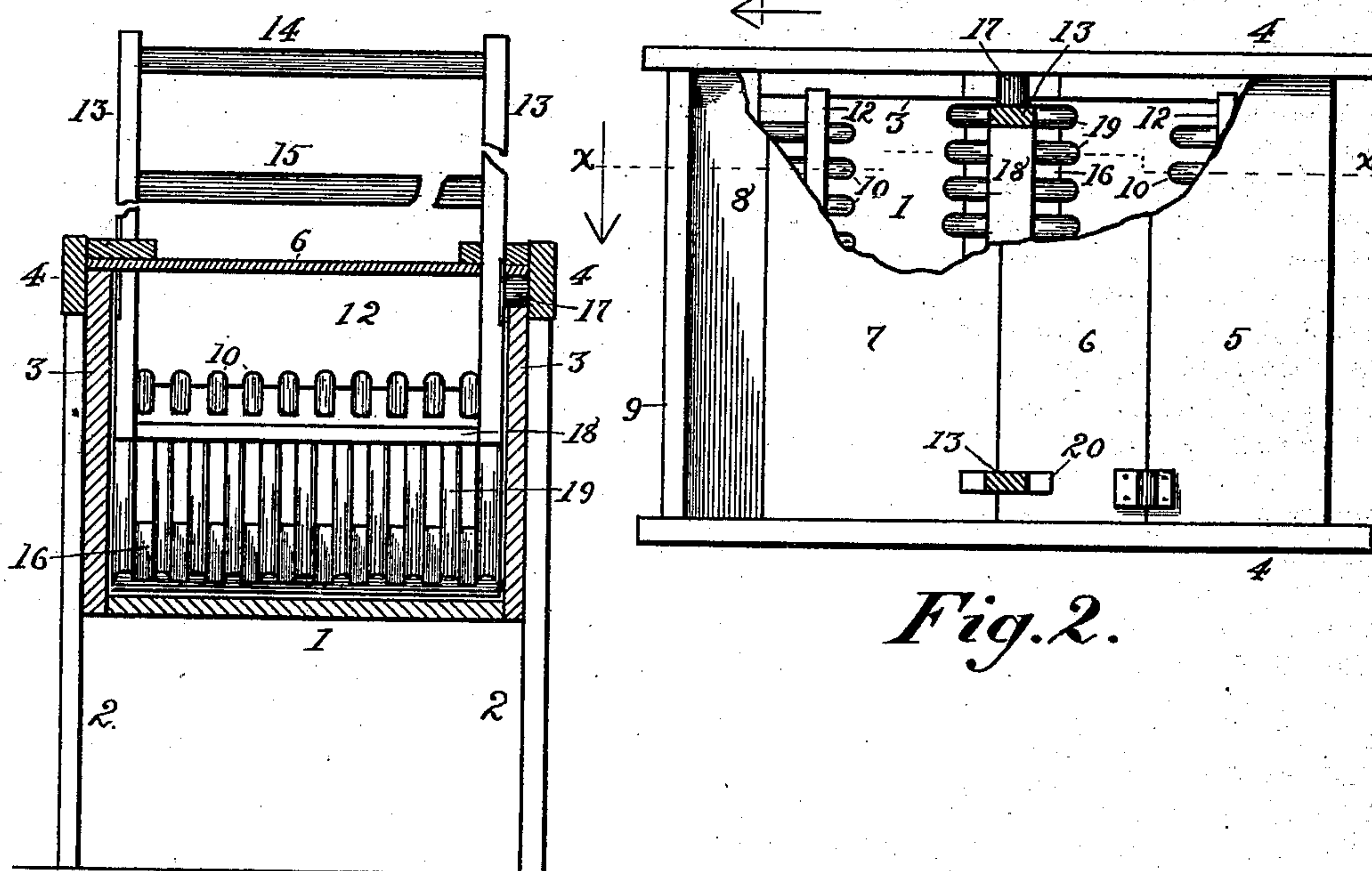


Fig. 2.

Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

SAMUEL HERR, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF TO WILLIAM H. NEESE, OF AKRON, OHIO.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 695,556, dated March 18, 1902.

Application filed November 4, 1901. Serial No. 81,073. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HERR, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have
5 invented a certain new and useful Improvement in Washing-Machines, of which the following is a specification.

My invention has relation to improvements in that class of washing-machines in which a
10 swinging rubber is arranged to be reciprocated in a tub with a curved bottom concentric with the pivot of the rubber.

The object of my invention is to produce a new and improved washing-machine in which
15 the cleansing effect shall be produced by agitating the articles to be washed in soapy water and repeatedly squeezing them between oppositely-disposed separately-placed slats, whereby wearing of the articles on or be-
20 tween rubbing-surfaces shall be avoided.

To the aforesaid object my invention consists in the peculiar and novel construction, arrangement, and combination of parts herein-
25 after described and then specifically pointed out in the claims, reference being had to the accompanying drawings, which form a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts
30 in the different figures, Figure 1 is a view of my improved machine in section at the line $x x$ of Fig. 2; Fig. 2, a plan of the machine with the cover partially broken away and the arms of the squeezer in section at the line $y y$
35 of Fig. 1, and Fig. 3 a section of the machine at the line $z z$ of Fig. 1.

Referring to these figures, 1 is the tub or tank, supported on legs 2 and having side
40 pieces 3, the upper edges of which are in a common horizontal plane. Secured on the outside of each side piece, extending a short distance above and extending beyond it at each end, is a strip 4. At one end of the tub is a
45 partial cover 5, that rests on the upper edges of the tub, and to this is hinged a swinging half-lid 6, having its outer edge beveled to meet and match the removable lid 7 on the opposite side. At the opposite end of the
50 tank is secured a partial cover 8, inclined toward the center of the tank to cause the water to flow back from the articles in the

wringer, and to the front edge of this partial cover is secured an upright board 9, to which to attach a wringer. The partial lid 7 extends slightly under the edge of the partial
55 cover 8, and is thus retained until it is desired to remove it. At the opposite ends of the interior of the tub are similar ranks of upwardly-curved parallel fingers 10, the lower
60 edges and ends of which are rounded to avoid wearing the articles to be washed. The back ends of these fingers are fastened to a strip 11, that rests against the interior wall of the tub, and near their front ends the fingers are
65 secured to a cross-bar 12, the ends of which slide vertically into and rest in grooves in the inner faces of the sides of the tub. By this arrangement these ranks of fingers can be raised out of and removed from the tub when
70 desired.

The squeezer consists of two side levers 13,
united at their upper ends by a handle-bar 14 with a strengthening counter-bar 15 below
75 it and at their lower ends by a cross-bar 16, curved on its under face concentric with the inner face of the tub and in operation suspended a short distance from it. On the
80 outer face of each lever 13 is a journal 17, that fits in a bearing in the edge of the sides 3. Between the journals and cross-bar 16 is a cross-bar 18. Ranks of curved blades 19
85 of substantially the same thickness and curvature as the fingers 10, similarly spaced and arranged alternately with these fingers, are secured at their upper ends in the bar 18 and
90 at their lower ends to the bar 16, the whole constituting the squeezer. Openings 20 are cut in adjacent edges of the lids 6 7 for the levers 13 and permit their rocking motion therein.

In operation, the tub being partially filled
95 with soapy water, the articles to be washed are placed therein, the squeezer placed therein, and the lids 6 7 put in place. The squeezer is then rocked, thus agitating the
100 articles in the water and alternately raising a part of them up against the fingers 10 and squeezing them at each upward movement, whereby the articles are cleansed. The lid 7 is then removed, the squeezer lifted out,
and the articles raised and passed through a wringer on the board 9.

Having thus described my invention, what I claim, and desire to protect by Letters Patent, is—

1. An improved washing-machine consisting of a tub having a curved bottom, ranks of curved fingers on its inner opposite ends, the back ends of which are fastened to a strip that rests against the interior wall of the curved bottom and near their front ends are secured to a cross-bar the ends of which rest in grooves in the inner faces of the sides of the tub, and a removable swinging squeezer pivoted in the sides of said tub and having ranks of curved blades on its opposite sides alternating with said fingers and arranged to be brought into juxtaposition therewith, substantially as shown and described.

2. The combination with a tub having a curved bottom of ranks of curved fingers

on its inner opposite ends and a swinging squeezer consisting of two side levers united at their upper ends by a handle-bar and at their lower ends by two cross-bars having ranks of blades on opposite sides alternating with said fingers, of substantially like curvature and secured at their ends in said cross-bars and arranged to be alternately brought into juxtaposition with said curved fingers at opposite ends of said tub, substantially as shown and described.

In testimony that I claim the above I hereunto set my hand in the presence of two subscribing witnesses.

SAMUEL HERR.

In presence of—

C. P. HUMPHREY,
C. E. HUMPHREY.