No. 659,580.

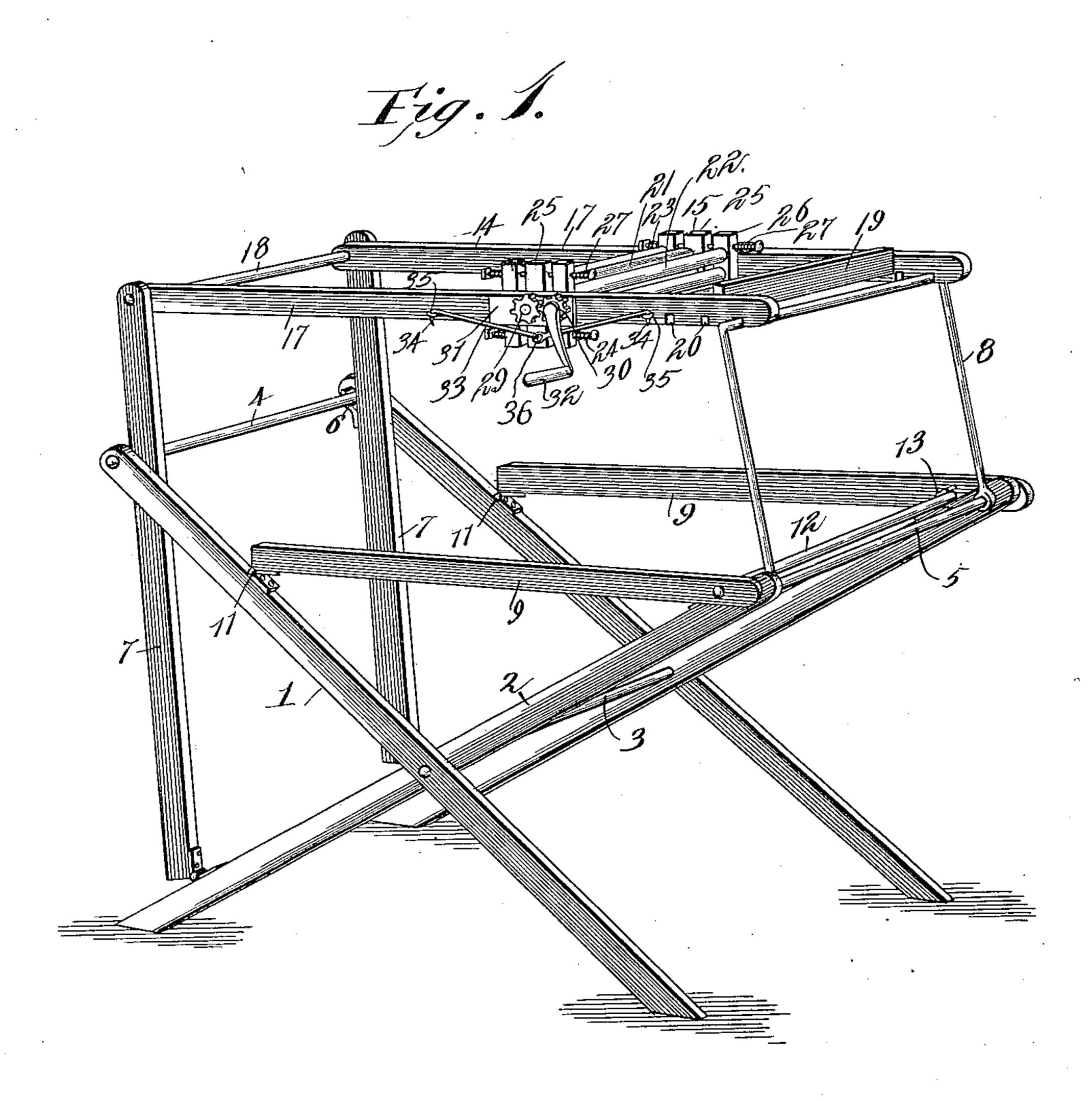
Patented Oct. 9, 1900.

J. C. CHURCHILL. WASHING MACHINE.

(Application filed May 31, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

J.C. Churchill Inventor

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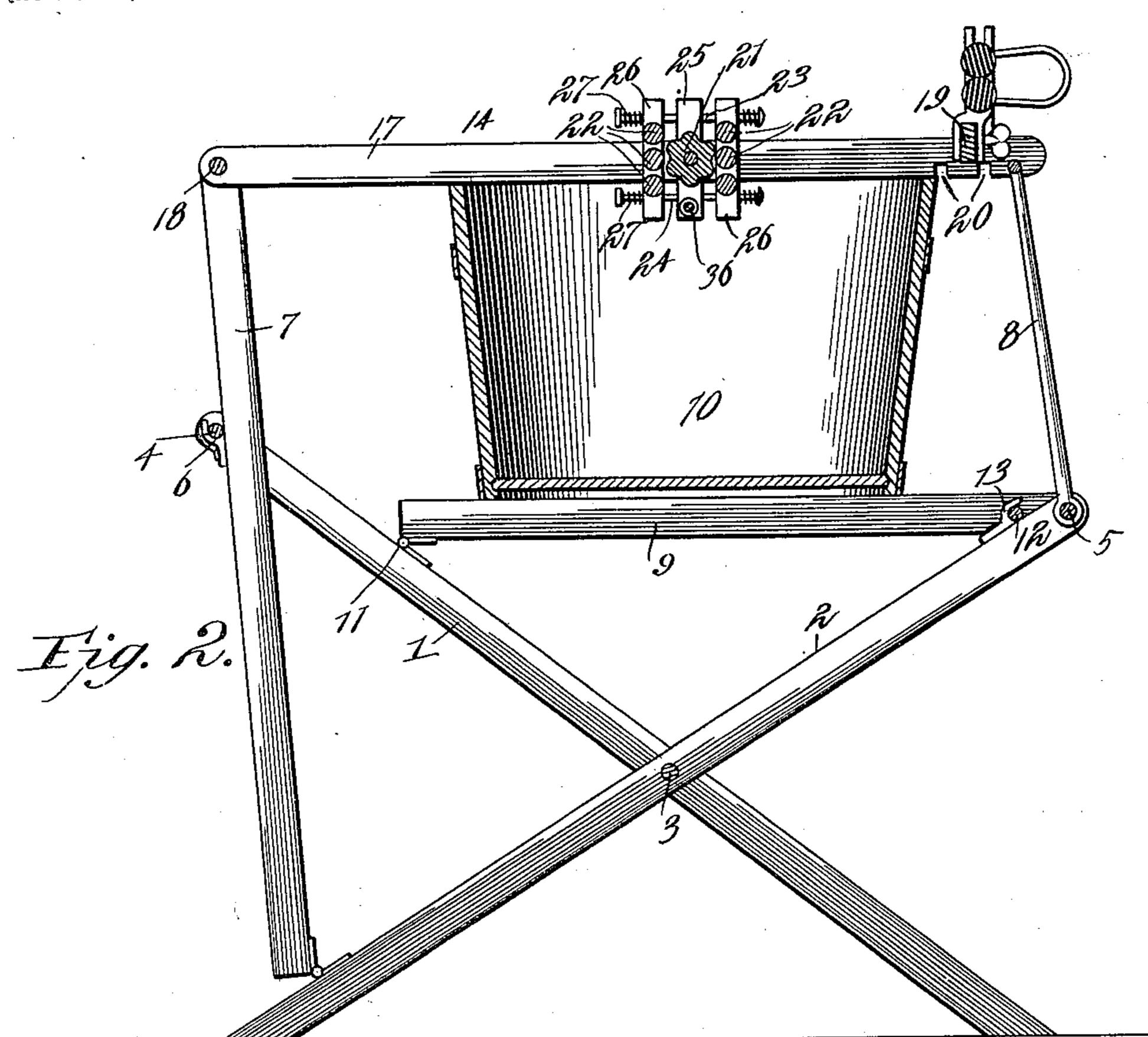
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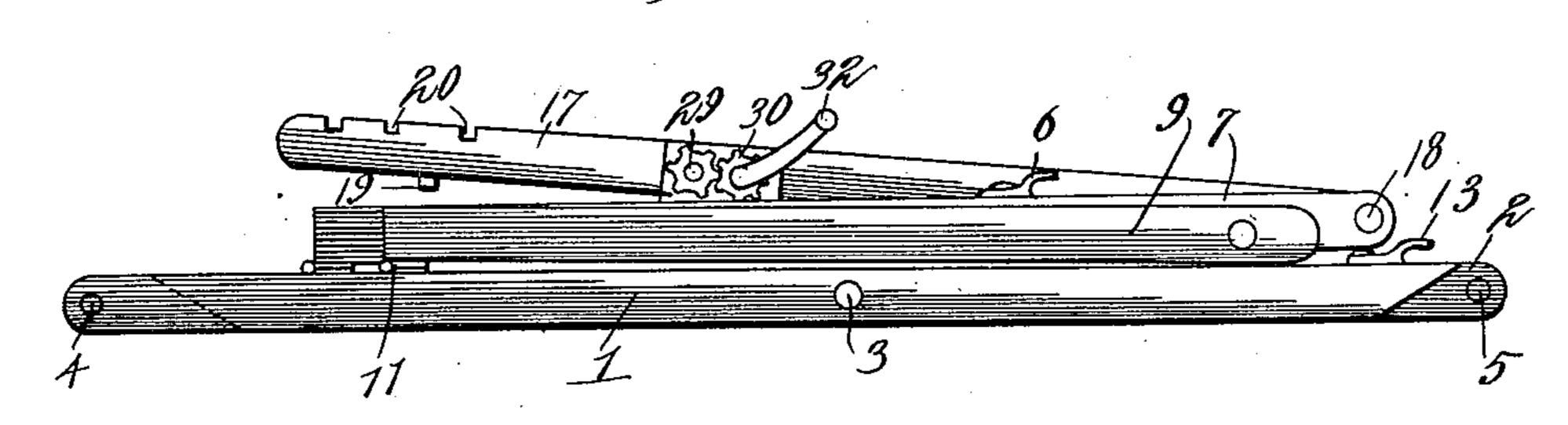
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United States Patent Office.

JOSEPH CRAFFORD CHURCHILL, OF WHITT, TEXAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 659,580, dated October 9, 1900.

Application filed May 31, 1900. Serial No. 18,609. (No model.)

To all whom it may concern:

Be it known that I, Joseph Crafford Churchill, a citizen of the United States, residing at Whitt, in the county of Parker 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 having the frame or stand adapted to support a tub or other resentations.

15 ceptacle and capable of being compactly folded when not in use.

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, the tub being removed. Fig. 2 is a vertical longitudinal sectional view of the same, the tub being in position. Fig. 3 is a side elevation, the washing-machine being folded.

Like numerals of reference designate cor-30 responding parts in all the figures of the draw-

ings.

1 and 2 designate oppositely-inclined legs arranged in pairs and connected near their centers by a transverse rod 3, which passes 35 through registering openings in the said legs, whereby the same are pivotally connected and are adapted to be set up, as illustrated in Figs. 1 and 2 of the drawings, and to be folded compactly, as shown in Fig. 3. 40 The legs, which are crossed when the washing-machine is in use, are connected at their upper ends by transverse rods 4 and 5, the rod 4 being arranged at the back of the washing-machine and engaging hooks or stops 6 45 of a pair of standards 7, as clearly shown in Fig. 2. The front transverse rod 5, which connects the legs 2, forms a pintle for a brace or prop 8, and the rear transverse brace-rod 4, which connects the upper ends of the said 50 legs 1, may be readily disengaged from the hooks 6 when a pair of horizontal supportingbars 9 is disengaged from the front leg 2.

The horizontal supporting-bars, which are adapted to receive the tub 10 or other receptacle, are hinged at their rear ends 11 to the 55 upper portions of the legs 1, and their front portions are connected by a transverse rod 12, which engages a pair of hooks or stops 13, secured to the upper edges of the legs 2 and arranged as clearly shown in Fig. 2. The 60 weight of the tub or other receptacle firmly holds the supporting-bars in a horizontal position and retains the transverse connecting-rod 12 in engagement with the hooks or stops 13.

The rear standards 7 extend above the upper ends of the legs 1 and support a hinged frame 14, which is disposed horizontally, as clearly shown in Figs. 1 and 2, when the parts are in operative position and which is adapted 70 to suspend the washing mechanism 15 within the tub 10 or other receptacle and to retain such washing mechanism out of contact with the bottom of the tub to avoid bruising or otherwise injuring the same. The hinged 75 frame 14 is composed of a pair of side bars 17, a rear transverse rod 18, and a front transverse bar 19. The rear transverse bar 18 forms a pintle for hinging the top frame 14 to the standards 7, and the front transverse 80 bar, which projects above the side bars 17, is adapted to receive and support a wringer. The front ends of the side bars 17 of the hinged frame 14 are provided with notches 20, which are adapted to receive the brace or 85 prop 8, and the latter is substantially rectangular, being composed of parallel sides and a transverse connecting portion. The sides of the brace or prop are provided at their lower ends with eyes, which are arranged on 90 the front rod 5, as clearly shown in Fig. 1.

When it is desired to fold the frame or stand, the brace or prop 8 is disengaged from the notches or recesses at the lower edges of the side bars 17 of the hinged top frame 14 by lift- 95 ing the latter, and it is then swung downward. The transverse rod 12 is then disengaged from the hooks 13 and the rear transverse rod 18 is disengaged from the hooks or projections 6. The legs 1 and 2 will then fold to a horizontal position and the horizontal supportingbars will fold compactly upon the legs. The hinged frame which carries the washing mechanism may be swung downward directly

against the standards or it may be swung backward over the standards to permit the latter to fold compactly against the legs. By this construction the frame may be folded 5 compactly, as illustrated in Fig. 3 of the accompanying drawings, and it is adapted to be quickly set up into operative position when it is desired to use it.

The washing mechanism consists of a cento tral roll and side rolls. The central roll 21 is corrugated and the side rolls 22, which are arranged in vertical series, are perfectly smooth and are mounted upon horizontal rods 23 and 24. The central roll is preferably provided 15 with a shaft, forming journals which extend through central vertical bars 25 and through the side bars 17 of the hinged top frame 14. The upper and lower horizontal rods 23 and 24, which are located above and below the 20 rolls, are centrally connected with the vertical bar 25 and pass through side bars 26, arranged vertically and provided with bearings for the journals of the side rolls, which are preferably smaller than the central roll and smooth; 25 but they may be constructed in any desired manner to secure the necessary squeezing and rubbing action on the clothes or other fabrics passed between them and the central roll. The necessary pressure is obtained by coiled 30 springs 27, mounted upon the ends of the horizontal rods and provided with nuts for regulating the tension. The nuts are arranged on the threaded ends of the rods and engage the adjacent springs, the rods being adapted to 35 slide through the perforations of the vertical bars sufficiently to permit the spring to exert a uniform pressure on the clothes. One of the journals of the central roll is extended beyond the hinged top frame and carries a pin-40 ion 29, which meshes with a pinion 30, arranged adjacent to the pinion 29. The adjacent side bar 17 has a metal bearing-plate 31 secured to it, and a crank-handle 32 is connected with the pinion 30. The washing 45 mechanism is supported in proper position by bracing-rods 33, connected with the lower portions of the central vertical bars 25 and provided with hooks 34 for engaging eyes 35, mounted on the side bars 17 of the hinged 50 frame and located at opposite sides of the washing mechanism. The braces are connected with the central bars 25 by means of a transverse rod 36, connecting the lower portions of the said bars 25 and provided with 55 suitable shoulders for engaging the inner faces of the same. The transverse rod 36 is extended beyond the bars 25 and passes through eyes or openings of the braces.

It will be seen that the washing-machine is 60 simple and comparatively inexpensive in construction, that the stand, which is adapted to be compactly folded, is capable of being readily set up into operative position, and that the

washing mechanism is supported above and out of contact with the bottom of the tub or 65 other receptacle and is held in convenient position, so that it may be readily operated. It will also be apparent that the bracing-rods may be readily disengaged from the side bars of the hinged frame 14 to permit the washing 70 mechanism to be tilted upward to facilitate the removal of the tub or other receptacle.

What I claim is—

1. In a washing-machine, the combination of the inclined legs pivotally connected and 75 crossing each other, the horizontal supporting-bars hinged at one end to the adjacent legs and detachably connected at the other end to the other legs, the rear standards hinged to the lower ends of the adjacent leg 80 and detachably interlocked with the upper end of the other legs, the hinged frame connected at its back to the standards and adapted to support the washing mechanism, and means for supporting the front of the hinged 85 frame, substantially as described.

2. In a washing-machine, the combination of the inclined legs 1 and 2 pivotally connected between their ends, the rear standards hinged at their lower ends to the lower ends 90 of the legs 2 and detachably connected with the upper ends of the legs 1 and extended above the same, the supporting-bars hinged to one set of legs and detachably interlocked with the other, the hinged frame adapted to 95 support the washing mechanism, and connected with the upper ends of the standards, and the brace hinged to the legs 2 and adapted to fold against the same, and detachably interlocked with and supporting the front ends of 100 the hinged frame, substantially as described.

3. In a washing-machine, the combination with the inclined legs 1 and 2 pivotally connected, the legs 2 being provided at their upperends with hooks, the rear standards hinged 105 to the lower ends of the legs 2 and provided at their upper portions with hooks, the transverse rod 4 connecting the legs 1 and engaging the hooks of the standards, the horizontal supporting-bars 9 hinged at their rear ends 110 to the legs 1, the rod connecting the front portions of the bars 9 and engaging the hooks of the legs 2, the hinged frame disposed horizontally at the top of the rear standards and connected with the same, and the rectangu- 115 lar brace or support hinged to the legs 2 and interlocked with the front end of the hinged frame, substantially as described.

In testimony that I claim the foregoing as: my own I have hereto affixed my signature in 120

the presence of two witnesses.

JOS. CRAFFORD CHURCHILL.

Witnesses:

A. J. THOMAS, W. A. HOWARD.