No. 875,361.

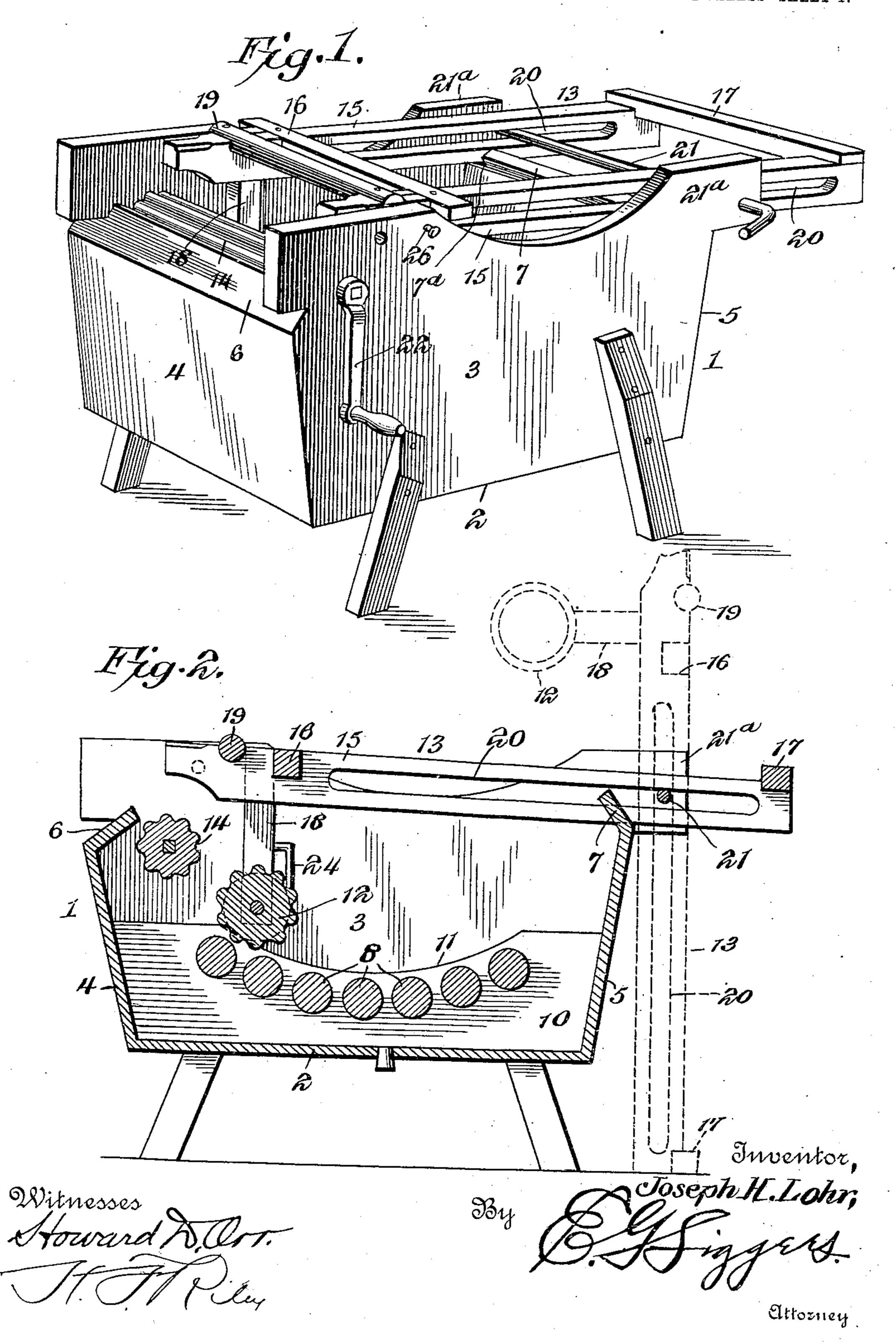
PATENTED DEC. 31, 1907.

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APPLICATION FILED APR. 4, 1906.

2 SHEETS-SHEET 1.



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2 SHEETS-SHEET 2. Joseph H. Lohn Witnesses attorney

# UNITED STATES PATENT OFFICE.

JOSEPH H. LOHR, OF HUSTONTOWN, PENNSYLVANIA.

#### COMBINED WASHING AND WRINGING MACHINE.

No. 875,361.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed April 4, 1906. Serial No. 309,905.

To all whom it may concern:

Be it known that I, Joseph H. Lohr, a citizen of the United States, residing at Hustontown, in the county of Fulton and State 5 of Pennsylvania, have invented a new and useful Combined Washing and Wringing Machine, of which the following is a specification.

The invention relates to improvements in 10 combined washing and wringing machines.

The object of the present invention is to improve the construction of washing machines, and to provide a simple, and comparatively inexpensive one, capable of thor-15 oughly washing the clothes without tearing, or otherwise injuring them, or rubbing the buttons from the garments, and adapted, after the rubbing operation has been completed, to be readily arranged to form a 20 wringer for expelling the water from the clothes.

With these and other objects in view, the invention consists in the construction and novel combination and arrangement of parts, 25 hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims, hereto appended; it being understood that various changes in the form, proportion, size and minor details of construc-30 tion, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspec-35 tive view of a combined washing and wringing machine constructed in accordance with this invention, and shown arranged for washing. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a side elevation, show-40 ing the machine arranged for wringing the clothes. Fig. 4 is a transverse sectional view, taken substantially on the line 4-4 of Fig. 3.

Like numerals of reference designate cor-45 responding parts in all the figures of the

drawings. 1 designates a washing machine body forming a tub or receptacle, and designed to be constructed of any suitable material, 50 either wood or metal. The washing machine body, as shown in the accompanying drawings, is provided with a horizontal bottom 2, vertical sides 3, and inclined ends 4 and 5, which connect the sides and which extend 55 upwardly and outwardly from the bottom. The ends 4 and 5, which terminate short of | cated from one end of the concave roller-bed

the upper edges of the sides, have inwardly inclined upper portions 6 and 7, which are adapted to prevent the water from splashing

from the washing machine body.

Within the washing machine body is arranged a concave roller-bed, forming a rubbing surface and consisting of a plurality of transversely disposed rollers 8, provided at their ends with suitable journals 9, which are 65 arranged in suitable bearing openings of longitudinal bars or pieces 10, which fit against the inner end faces of the sides of the washing machine body, and which are arranged upon and supported by the bottom of the 70 same.

The side pieces 10, which support the bottom rollers 8, are provided with concavedly curved upper edges 11, which are adapted to support a corrugated rubbing roller 12, 75 slightly out of contact with the bottom rollers 11, whereby the washing machine is prevented from rubbing off the buttons of garments. The corrugated rubbing roller 12, which may be constructed of either wood 80 or rubber, is adapted to be moved over the concave roller-bed by an operating frame 13, and which is also adapted, after the operation of rubbing has been completed, to cooperate with an end corrugated roller 14, to 85 form a wringer for expelling the water from the clothes.

The operating frame 13 is composed of spaced side bars 15 and transverse connecting bars 16 and 17. The operating frame is 90 provided at its front portion with a pair of depending arms 18, between which the corrugated rubbing roller is mounted. The front end of the frame is also provided with a round bar 19, extending across the space be- 95 tween the side bars, and forming a convenient handle for operating the washing machine.

The side bars 15 are provided with longitudinal slots 20, which receive a rear transverse rod 21, whereby the operating frame is 100 slidably and pivotally connected with the sides of the washing machine body. The rod 21 passes through suitable perforations of rear extensions  $\check{2}1^a$  of the sides of the washing machine body, and it is arranged 105 below the upper edge of the rear end wall 5, the inclined upper portion 7 thereof being provided with opposite recesses 7a, to permit the operating frame to swing downwardly within the washing machine body. 110 The operating frame is adapted to be recipro-

to the other, and it enables the desired pressure to be applied to the clothes, whereby the same may be thoroughly rubbed and rapidly washed. The longitudinal slots 20 5 also permit the operating frame to be swung rearwardly beyond the washing machine body, to the position illustrated in dotted lines in Fig. 2 of the drawings. This will expose the entire washing machine body, 10 and enable the clothes and other fabrics to be arranged on the concave roller-bed, so that all portions of the fabrics will be exposed

to the action of the rubbing roller.

The corrugated end roller 14, which may 15 be constructed of either wood or metal, is journaled between the sides of the washing machine body, and is provided with an exterior crank handle 22, by means of which it is rotated. The operating frame and the slots 20 of the side bars are of sufficient length to permit the corrugated roller to be placed upon the end roller 14, to form a wringer, and the clothes may be readily passed between the two rollers for expelling the water 25 from them. The desired pressure may be readily applied by pressing downward on the front of the operating frame, and the clothes will be passed through the wringing mechanism by the rotation of the end roller **30** 14.

In order to facilitate the operation of the machine when the same is arranged as a wringer, a transverse rod 23 may be placed in rear of the arms of the operating frame, in 35 suitable staples 24, which form guides and which permit the operating frame to have a limited upward and downward movement. Also, a constant pressure may be maintained on the clothes by means of a pair of coiled 40 springs 25, secured at their lower ends to the sides of the washing machine body by pins 26, or other suitable fastening devices, and at their lower ends to the side bars of the operating frame by means of pins 27. The 45 pins 26 and 27 are removable to enable the springs to be detached, or they may be simply disconnected from the operating frame.

Having thus fully described my invention, 50 what I claim as new and desire to secure by Letters Patent, is:

1. In a combined washing and wringing machine, the combination of a receptacle provided with a rubbing surface and having 55 a horizontal pivot, a wringer roll mounted within the receptacle, an operating frame having guiding means extending longitudinally of the operating frame and receiving the horizontal pivot of the receptacle and 60 slidably and pivotally connecting the said frame with the receptacle, and a roller mounted on the operating frame and adapted to be carried by the sliding movement of the same to the wringer roll to cooperate therewith to 65 form a wringer, said operating frame being

arranged to swing upwardly and downwardly and forming a lever to enable pressure to be applied during the wringing operation.

2. In a combined washing and wringing machine, the combination with a receptacle 70 having a rubbing surface, of a wringer roller mounted in the receptacle and located above one end of the rubbing surface thereof, an operating frame provided at opposite sides with longitudinal slots, a transverse rod 75 located at one end of the receptacle and passing through the slots of the operating frame and pivotally and slidably connecting the latter to the receptacle, and a roller mounted on the operating frame and adapted to be 80 carried by the longitudinal sliding movement thereof to the wringer roller to coöperate with the same to form a wringer.

3. In a combined washing and wringing machine, the combination with a receptacle 85 having a rubbing surface, of a wringer roller mounted in the receptacle and located above one end of the rubbing surface thereof, an operating frame provided at opposite sides with longitudinal slots and having rigid de- 90 pending arms arranged at an angle to the sides of the frame, a transverse rod located at one end of the receptacle and passing through the slots of the frame and pivotally and slidably connecting the latter to the re- 95 ceptacle, and a roller mounted between the arms of the operating frame and adapted to. be carried by the sliding movement thereof to the wringer roller and to coöperate with the same to form a wringer.

4. In a combined washing and wringing machine, the combination of a receptacle provided with a rubbing surface and having a horizontal pivot, a wringer roll mounted within the receptacle, an operating frame 105 having guiding means extending longitudinally of the operating frame and receiving the horizontal pivot of the receptacle and slidably and pivotally connecting the said frame with the receptacle, and a roller mount- 110 ed on the operating frame and adapted to be carried by the sliding movement of the same to the wringer roll to coöperate therewith to form a wringer, said operating frame being arranged to swing upwardly and down- 115 wardly and forming a lever, and springs located at opposite sides of the receptacle and connected with the same and with the operating frame to yieldably hold the rollers in engagement with each other.

5. In a combined washing and wringing machine, the combination with a washing machine body having a rubbing surface, of an operating frame provided with opposite arms, a rubbing roller mounted between the 125 arms and coöperating with the rubbing surface, guides carried by the arms, a roller arranged to cooperate with the said rubbing roller to form a wringer, a rod passing through the said guides for limiting the movement of 130

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the operating frame, and yieldable means detachably connected with the operating frame for applying a constant pressure to the same.

6. In a combined washing and wringing 5 machine, the combination of a receptacle having a rubbing surface, an operating frame provided with a longitudinal slot and carrying a rubbing roller which coöperates with the said rubbing surface, a rod mounted on 10 the receptacle at the back thereof and passing through the slot of the operating frame, an exteriorly operable rotary roller mounted within the body at the front thereof and co- John Hoover.

operating with the said rubbing roller to form a wringer, and springs located at oppo- 15 site sides of the washing machine body and connected with the operating frame for maintaining the rubbing roller in engagement with the other roller.

In testimony, that I claim the foregoing as 20 my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH H. LOHR.

Witnesses:

CHARLES E. BARTON,