## J. T. WILLS. WASHING MACHINE.

(Application filed May 22, 1899.)

(Model.) 20 ZO Witnesses4 Troventor;
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Atty.

## United States Patent Office.

JESSIE T. WILLS, OF WEST, TEXAS, ASSIGNOR OF ONE-HALF TO AUSTIN M. ROBINSON, OF SAME PLACE.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 638,432, dated December 5, 1899.

Application filed May 22, 1899. Serial No. 717,804. (Model.)

To all whom it may concern:

Be it known that I, Jessie T. Wills, a citizen of the United States, residing at West, in the county of McLennan and State of Texas, 5 have invented new and useful Improvements in Washing-Machines, of which the following

is a specification.

This invention relates to washing-machines, and has for its object to provide a machine for washing clothes which will be simple and inexpensive in construction and rapid and efficient in operation; and it consists in the features and in the construction, combination, and arrangement of parts hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein-

Figure 1 is a vertical longitudinal section 20 of a washing-machine constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a vertical transverse

section on the line 3 3 of Fig. 1.

Referring to the drawings, the numeral 1 25 indicates a rectangular tub or vessel, preferably having its opposite ends 22 inclined toward each other, as shown, and supported in said vessel is a foraminous false bottom or partition 3. Said false bottom or partition 30 consists of a piece of perforated sheet metal, preferably zinc, which is nailed at its ends to a rectangular wooden frame 4. Secured to the opposite sides of the tub midway between its ends are two uprights 5, each provided in their upper portions with elongated slots 6. Journaled in said slots is a shaft 1, the end portions 8 of which project beyond the uprights 5, and over each of its extremities is slipped one end of a coiled spring 9, the other 40 end of which is secured to a staple 10, driven | into the lower end of the upright. The springs operate in an obvious manner to normally hold the shaft 7 at the lowermost ends of the slots 6. Pivoted at their upper ends to said 45 shaft are two links 11, which at their lower ends are pivoted to a rod 12, fixed in the reciprocating rubbing-frame. The rubbingframe comprises two parallel side pieces 13, connected at their opposite ends by rods or

50 bars 14 and carrying the rubbing rollers,

hereinafter described. On the shaft 7, be-

tween the links 11 and the uprights 5 and intermediate the links, are disposed sleeves 15, which operate to hold the links 11 properly spaced apart. Journaled in the side pieces 55 13 are two corrugated or fluted rollers 16, and intermediate the fluted or corrugated rollers is a hollow wooden roller 17, provided with numerous radially-disposed perforations 18 and having attached to its opposite ends metallic 60 caps or disks 19. A shaft 17<sup>a</sup> passes through the roller 17 and its caps 19 and is journaled at its ends in the side pieces 13. On one of the rods 14, fixed in the sides 13, are pivotally arranged two longitudinal bars 20, rigidly con- 65 nected together by cross-bars 21, said longitudinal and cross bars constituting a frame or handle by means of which the rubbing device

may be actuated.

The operation of my improved machine is 70 as follows: The clothes to be washed are placed on the perforated false bottom 3, and a sufficient quantity of hot water is poured into the tub or vessel to saturate the clothes, soap being first intermixed therewith. The 75 operator then grasps the handle 20 21 and forces or pushes the rubbing-frame over the clothes lying on the false bottom. The fluted rollers exert a scrubbing action on the clothes, while the perforated false bottom and the hol- 80 low perforated roller permit the hot water to be forced through the clothes, quickly and effectually removing the dirt therefrom. The springs 9 not only serve to hold the rollers down into operative position upon the clothes, 85 but they also aid in operating the machine, for the moment the rubbing-frame is moved past the vertical plane of the uprights 5 said springs will automatically operate to push or force the rubbing-frame to the end of the tub go or vessel.

Having described my invention, what I claim is—

1. In a washing-machine, the combination with a vessel provided with a foraminous false 95 bottom, of a reciprocating rubbing device comprising a frame provided with fluted rollers and an intermediate hollow roller having perforations therein, means for reciprocating said frame, and means for forcing said rollers 100 against the foraminous bottom with a yielding bearing, substantially as described.

2. In a washing-machine, the combination with a vessel provided with a foraminous false bottom, of a reciprocating rubbing device comprising a frame, fluted rollers journaled at their ends in said frame and a hollow perforated roller disposed intermediate the fluted rollers, said roller having metallic disks fixed on its ends, a shaft extending longitudinally through said roller and disks and journaled at its ends in the frame, and means for forc-

ing the rollers against the foraminous false bottom with a yielding bearing, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 15 nesses.

JESSIE T. WILLS.

Witnesses:

J. B. Cook,

J. A. WEST.