

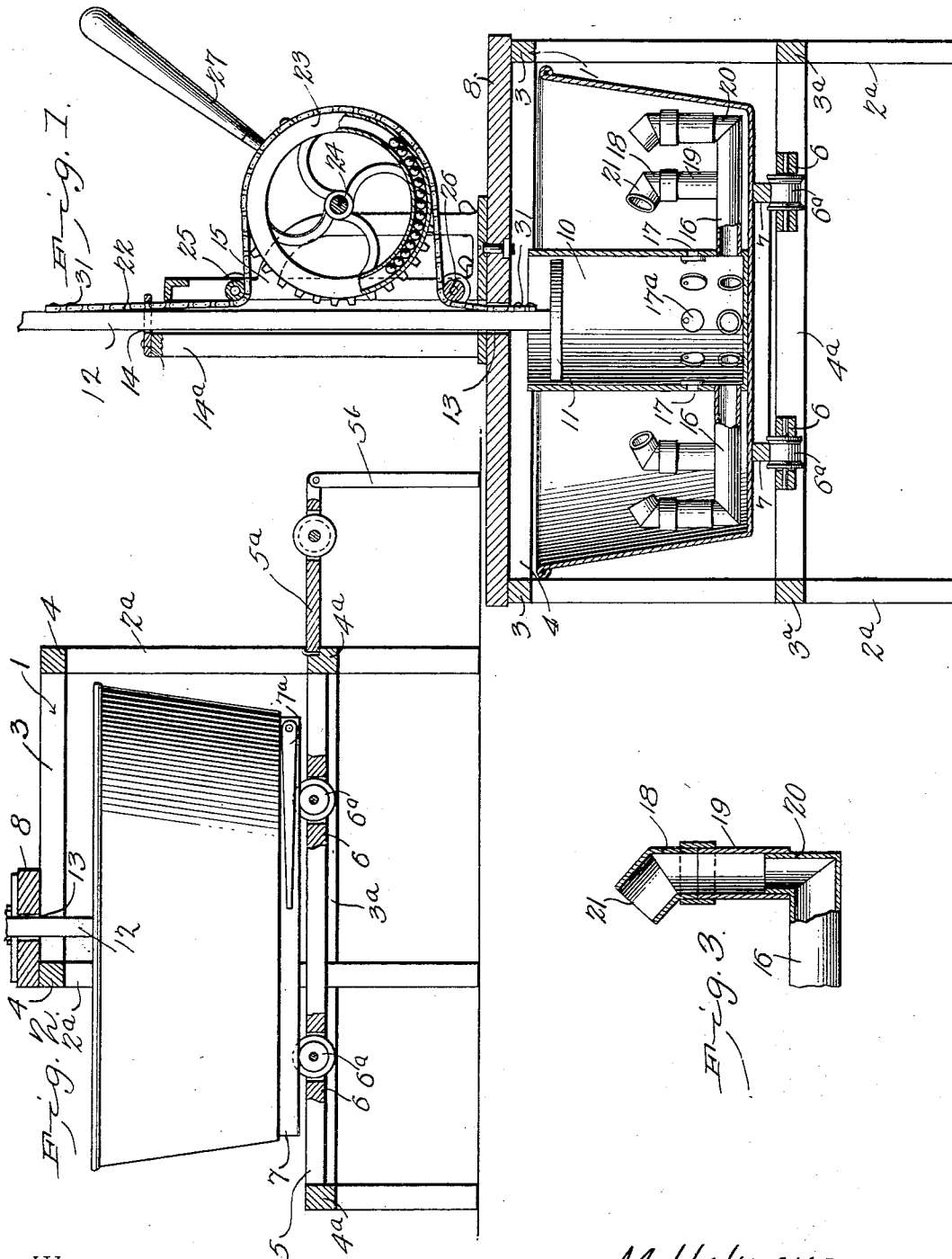
No. 733,481.

PATENTED JULY 14, 1903.

M. HOLMAN.
WASHING MACHINE.

APPLICATION FILED OCT. 18, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

MARIA HOLMAN, OF WAUKOMIS, OKLAHOMA TERRITORY.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 733,481, dated July 14, 1903.

Application filed October 18, 1902. Serial No. 127,896. (No model.)

To all whom it may concern:

Be it known that I, MARIA HOLMAN, a citizen of the United States, residing at Waukomis, in the county of Garfield and Territory of Oklahoma, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing-machines.

10 The object of the present invention is to improve the construction of washing-machines and to provide a simple, inexpensive, and efficient one adapted to be readily operated at the expenditure of a minimum
15 amount of labor and capable of enabling clothes to be rapidly and thoroughly washed without wearing, tearing, or otherwise injuring the fabrics.

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

In the drawings, Figure 1 is a vertical sectional view of a washing-machine constructed
25 in accordance with this invention. Fig. 2 is a similar view taken at right angles to Fig. 1. Fig. 3 is a detail view illustrating the construction of the discharge-tubes.

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

1 designates a supporting-frame, provided at opposite sides with uprights 2 and 2^a, connected by upper and lower side bars 3 and 3^a, and the uprights 2^a are connected by upper and lower cross-bars 4 and 4^a. The frame is provided at one end with a fixed extension 5, and it has a folding extension 5^a at its other
40 end. The fixed extension 5, which may be constructed in any suitable manner, supports the adjacent ends of intermediate longitudinal bars 6, which have their other ends secured to the lower cross-bar 4^a, and these longitudinal bars 6 are provided with grooved
45 rollers 6^a, mounted in suitable slots or openings and receiving a movable tub-carrying frame 7. The antifriction rollers or wheels, which may be of any desired number, permit
50 the tub-carrying frame to be readily reciprocated, and the said tub-carrying frame is composed of suitable side bars and connect-

ing rods or bars and is adapted to be drawn outward to enable it to project beyond the supporting-frame. One end of the movable
55 tub-carrying frame is provided with suitable legs 7^a, pivotally mounted and adapted to be folded, as illustrated in Fig. 2 of the drawings, when the frame is moved inward; but the pivoted legs may be omitted, if desired.
60 The foldable extension 5^a consists of a board hinged at its inner edge to the lower cross-bar 4^a and provided at its outer edge with pivoted legs 5^b. The foldable extension is adapted to be arranged, as shown in Fig. 2,
65 to form a continuation of the supporting-frame, and it may be conveniently employed for supporting a receptacle for receiving clothes after the same have passed through
70 a wringer. The top of the supporting-frame is provided with a transverse board or bar 8, upon which the operating mechanism, hereinafter described, is mounted.

The tub 9, which constitutes the washing-machine body, is preferably constructed of
75 sheet metal to enable a suitable heating device to be employed for heating the contents of the washing-machine body during the operation of washing. Within the washing-machine body is arranged a vertical cylinder
80 10, in which operates a vertically-movable plunger or piston 11, having a stem or bar 12, and the latter is guided in an opening 13 of the top bar or board 8 of the supporting-frame and in an opening 14 of a guide 14^a. The
85 stem or bar 12 is arranged between the guide 14^a and a bracket 15, and the cylinder is provided at its lower end with a series of radially-arranged horizontal discharge-tubes 16 and has a series of inlet-openings 17, arranged
90 a short distance above the discharge-tubes and provided at their inner faces with inwardly-opened valves 17^a, whereby when the plunger or piston is raised water will be drawn
95 into the cylinder through the inlet-openings and when the piston descends water will be discharged out of the cylinder through the tubes. The inwardly-opening valves 17^a prevent water from escaping through the inlet-openings on the downstroke of the piston or
100 plunger. If, however, the inwardly-opening valves be omitted, the water will be simultaneously forced outward through the openings and through the discharge-tubes when the

piston descends. In this manner the water and suds are forced through the clothes and other fabrics being washed, and the dirt and stains are quickly removed without injuring the clothes. The discharge-tubes are provided at their outer ends with upwardly-extending arms consisting of removable upper and lower sections 18 and 19. The lower section 19 of each discharge-tube is removably fitted on a short nipple or extension 20, which projects upward from the outer end of the tube, and the upper section 18, which has an angularly-disposed discharge end 21, fits within the upper end of the lower section and is adapted to be removed therefrom and to be placed on the nipple or extension 20 when the lower section is removed. The lower section has its ends of different diameters, as clearly shown in Fig. 1; but the parts may be constructed in any other desired manner to permit this operation. The angularly-disposed discharge ends of the upper sections cause the water to be discharged over the clothes and other fabrics being washed, and the said upper sections may be turned and adjusted to discharge the water in the desired direction. By removing the lower sections the discharge-tubes may be arranged for operating on a smaller quantity of clothes.

The vertically-movable rod or stem 12 is connected with the ends of a strap or band 22, preferably consisting of a sprocket-chain and secured to a pulley or wheel 23, and the latter is journaled or mounted on a suitable shaft or axle 24 and is provided with an operating arm or lever 27. The shaft or axle 24 is mounted on the bearing-bracket 15, as

clearly shown in Fig. 1, and the end portions of the strap or band pass over guide-pulleys 25 and 26 and form flexible connections between the operating pulley or wheel and the plunger.

The flexible connection 22 is preferably in the form of a sprocket-chain, which engages suitable teeth formed on the periphery of the wheel 23 and which has its ends passed around guide-pulleys 25 26 and secured to the operating-shaft 13 by suitable fastening devices 31.

The guide 14^a consists of a post or bar provided at the top with an arm or extension having an opening to receive the rod or stem and the upper portion of the flexible connection. The bottom of the guide 14^a is suitably secured to the bar 8 of the supporting-frame.

What I claim is—

A washing-machine comprising a washing-machine body, a cylinder having inlet-openings, discharge-tubes extending from the cylinder and provided at their outer ends with upwardly-extending arms composed of detachable upper and lower sections, the upper sections being also adapted to be directly attached to the outer ends of the discharge-tubes and being provided with angularly-disposed discharge ends, 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.

MARIA HOLMAN.

Witnesses:

W. E. WORDEN,
M. O. GARRETT.