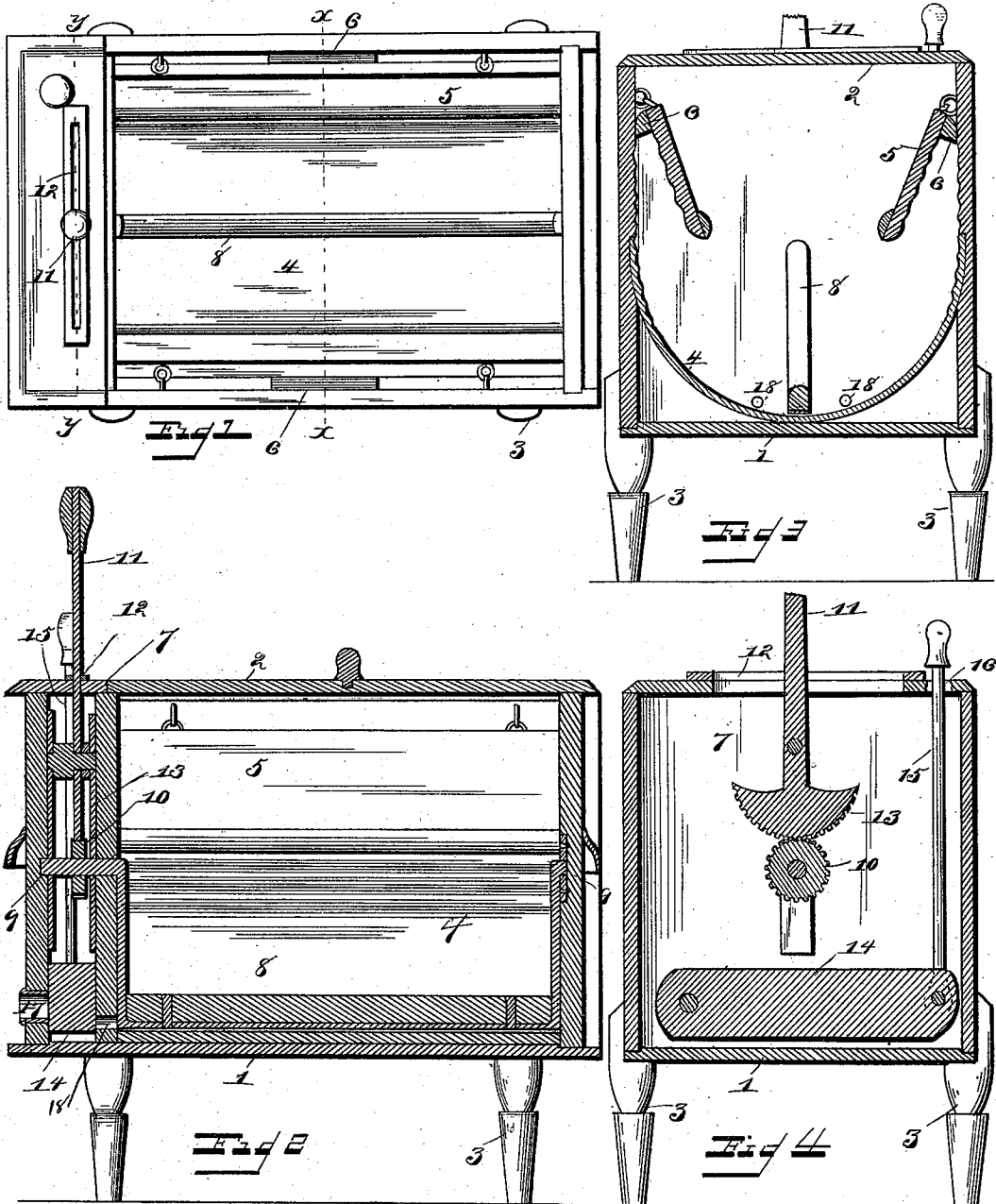


(No Model.)

R. NASH.
WASHING MACHINE.

No. 400,702.

Patented Apr. 2, 1889.



WITNESSES,
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UNITED STATES PATENT OFFICE.

RICHARD NASH, OF NORTH LA CROSSE, WISCONSIN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 400,702, dated April 2, 1889.

Application filed December 27, 1887. Serial No. 259,038. (No model.)

To all whom it may concern:

Be it known that I, RICHARD NASH, a citizen of the United States, and a resident of North La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a top or plan view of my improved washing-machine with the cover removed. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a transverse section on line *x x*, Fig. 1; and Fig. 4 is a transverse view on line *y y*, Fig. 1.

Similar numerals of reference indicate corresponding parts throughout the several views.

My invention has relation to improvements in washing-machines; and it consists in the peculiar construction and combination of parts of the same, as hereinafter more fully described and pointed out.

Referring to the several parts by their designating numerals, the numeral 1 indicates the frame or casing of my improved washing-machine, 2 the top or cover thereof, and 3 the supports or uprights.

4 is the suds-box having curved bottom and its sides corrugated or fluted. Longitudinal wings 5 5 are pivoted in the top of the sides of the suds-box, said wings being also corrugated on their under sides, and further provided on said under sides with lugs or projections 6 6, which prevent the wings from bearing directly against the sides of the suds-box.

The interior of the machine is divided into a second compartment or end chamber, 7, in which is disposed the operating mechanism.

8 is the angular dasher having lateral extensions 9 9, which are suitably journaled in the end pieces of the frame of the machine. The lateral end, which passes through the chamber 7, carries a cog-wheel, 10, rigidly secured thereto. A vertical operating-rod, 11, is suitably pivoted between the sides of the chamber 7 and passes through an elongated

slot, 12, in the cover or top of said chamber 7, the end of the operating-rod carrying the segment-gear 13, which meshes with the cog carried by the extended end of the angular dasher. A longitudinal valve, 14, is arranged in the bottom of the chamber 7, being pivoted at one end between the sides of said chamber, and having a vertical rod, 15, pivotally secured to its opposite end, said rod passing through a perforation, 16, in the cover or top of the chamber 7.

17 represents the discharge-pipe arranged in the end of the casing or frame of the machine and communicating with the chamber 7.

Near the lower end of the inner side of the chamber 7 are discharge-perforations 18 18 18, which permit the waste water to pass from the suds-box into said chamber 7, and when desired to discharge the same the vertical rod 15 is raised, thereby also raising the valve 14 and allowing the water to pass freely through the discharge-pipe 17. When it is desired to check the flow of the waste water, all that is necessary is simply to depress the rod, when the valve will again close the discharge-pipe.

This being the construction of my improved washing-machine the operation of it is as follows: The clothes or material to be cleansed are arranged in the bottom of the machine and between the wings and sides thereof, and when motion is imparted to the dasher by the operator said dasher will be made to reciprocate, thus thoroughly rubbing and pressing the clothes against the bottom and sides of the frame. The dasher when thrown upward will also strike against the wings on either side, thereby throwing them upward, and thus subjecting the clothing to an effectual and thorough beating operation, the wings by their own gravity falling back into position, only to be again raised at the next stroke of the dasher. By this arrangement the wings are made to alternate in this beating operation, whereby, it will be seen, a continued rubbing and pounding of the clothing are obtained. The elevation or lifting of the wings is facilitated by the lugs or projections 6 6, before referred to, which tend to make the lower ends of the wings stand out and prevent them from bearing directly against the sides of the frame. The said lower ends, also being beveled outwardly, readily permit the dasher to pass un-

der the wings far enough to raise or throw the same upward, which could not be done if the wings were permitted to bear directly against the sides of the suds-box, as in that case the wings would act as stops or projections and seriously limit the play of the dasher.

From the foregoing description, taken in connection with the accompanying drawings, the operation, construction, and advantages of my improved washing-machine will be readily understood. It will be seen that it is simple in construction and most effectual in operation, having the twofold advantage of both beating and pounding the clothing as well as rubbing and pressing the same.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The washing-machine comprising the compartment suds-box, the dasher hung therein and geared to an operating handle or lever arranged in its lesser compartment, and the pivoted longitudinally-arranged wings, the undersides of which, as also the opposite surfaces of the suds-box, are corrugated, which wings also stand off from the sides of the suds-box as well as being yielding, substantially as specified.

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

RICHARD NASH.

Witnesses:

INGEBRIGT RANUM,

ERIK BECH RYNNING.