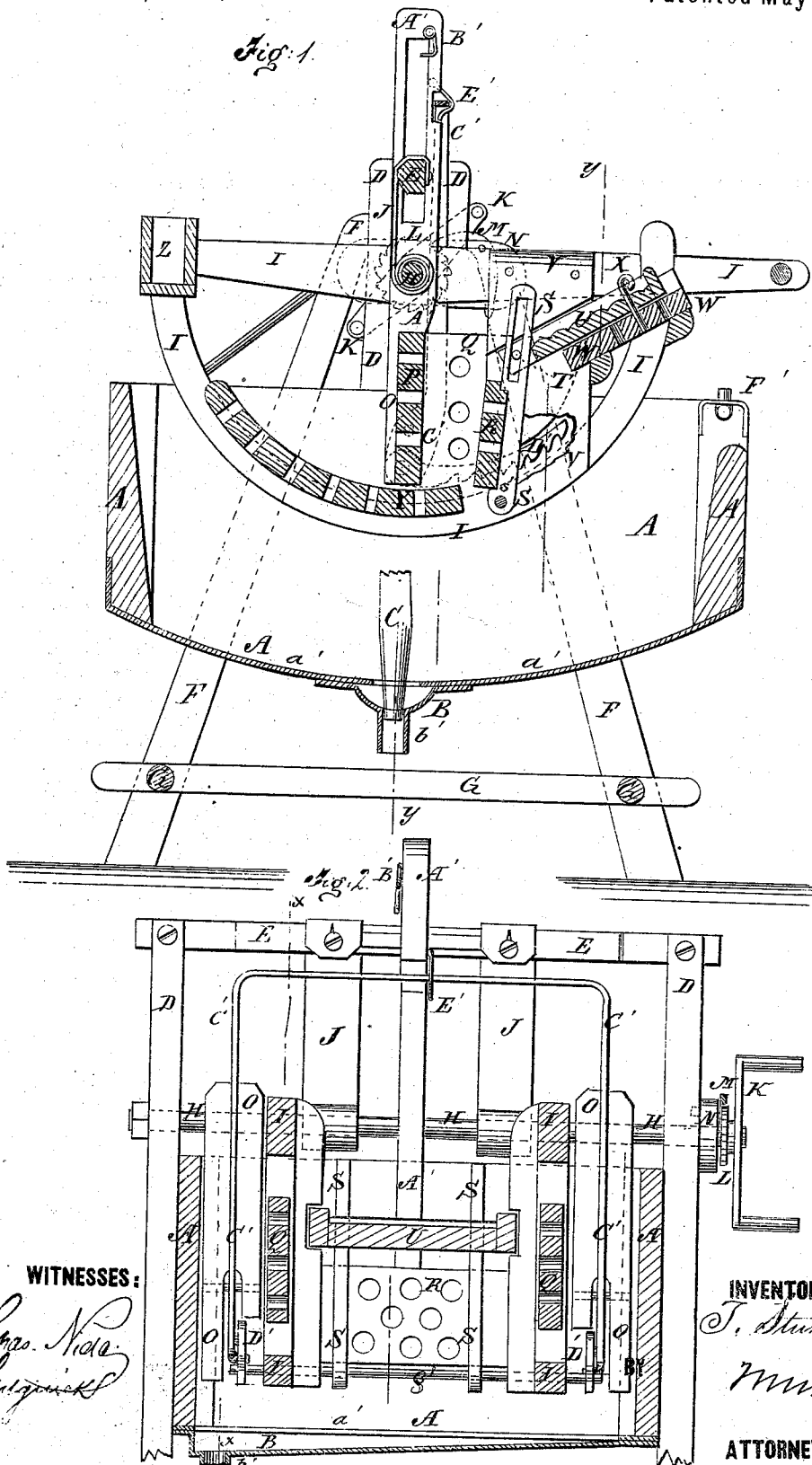


T. STUMM.
Washing-Machines.

No. 150,494.

Patented May 5, 1874.



UNITED STATES PATENT OFFICE.

THOMAS STUMM, OF ADA, OHIO.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 150,494, dated May 5, 1874; application filed January 10, 1874.

To all whom it may concern :

Be it known that I, THOMAS STUMM, of Ada, in the county of Hardin and State of Ohio, have invented a new and useful Improvement in Clothes Washing and Pressing Machines, of which the following is a specification :

Figure 1 is a detail vertical longitudinal section of my improved machine, taken through the irregular line *x x*, Fig. 2. Fig. 2 is a detail vertical cross-section of the same, taken through the irregular line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claims.

A is the suds-box, which is made rectangular in form, and with a slightly-concaved bottom, *a'*. In the bottom *a'* is formed a transverse slot, leading into a small chamber, B, attached to the under side of said bottom *a'*, and which is made deeper at one end than at the other. In the bottom of the deeper end of the chamber B is inserted a short discharge-tube, *b'*, which is closed with a plug, C. The plug C is made long, so that it can be readily removed and inserted, even when there may be much water in the box A. When the machine is in use, the dirt settles into the chamber B, and may be drawn off, when desired, without allowing all the water to flow from the said box A. To the middle part of the sides of the box A are attached the upright bars D, the upper ends of which are connected by a cross-bar, E. F are the legs, which are attached to the sides of the box A, and the upper ends of which are secured to the opposite sides of the upper parts of the uprights D. The lower ends of the legs F project so far below the box A as to raise the machine to a convenient height, and are strengthened by a frame or cross-bars. The upper parts of the uprights D are slotted longitudinally to receive the shaft H, upon which the semicircular frame I is hung. To the shaft H are attached the lower ends of two straps, J, the upper ends of which are attached to the cross-bar E. To one end of the shaft H is attached a crank-wheel, K, and a ratchet-wheel, L. M is a lever-pawl, the engaging end of which takes hold of the teeth of the ratchet-wheel L, and which is pivoted to a cross-bar, N, which rides upon the shaft

H, and is kept from turning by a lug attached to it, and which enters the slot of the upright D. The shaft H also passes through the upper ends of the uprights O, which slide up and down in vertical grooves formed in the inner sides of the side boards of the suds-box A. To the lower parts of the upright bars O are attached the ends of the dasher-board P, against which the clothes are pressed, and which has numerous holes formed through it to allow the suds to readily escape from the clothes. To the end parts of the forward side of the dasher-board P are attached the guard-boards Q, which project into the space between the straight and curved bars of the semicircular pivoted frame I. The guard-boards Q are perforated, to allow the suds to escape freely, and are designed to prevent the clothes from bulging out laterally when put under pressure. R is the presser-board, which is perforated, to allow the suds to pass through it freely, and its ends are attached to the bars S, the lower ends of which are pivoted to the curved bars of the semicircular frame I by a rod, *s'*. The upper parts of the bars S are slotted longitudinally, to receive the rod T, the ends of which are connected with the lower ends of the side bars of the rubbing-board U, which slides in inclined grooves formed in the inner surfaces of the boards V, attached to the bars of the semicircular frame I. The rubbing-board U rests and slides upon a board, W, secured in an inclined position to the frame I, and is secured in place, when adjusted, by a pin, X, which passes through a hole in the said rubbing-board U, and through one or the other of the holes formed in the inclined board W.

By this construction, by sliding the rubbing-board U up or down, the presser-board R will be adjusted to leave more or less space between it and the dasher-board P, as the quantity of clothes to be washed may require.

To the curved bars of the semicircular frame I is attached a curved perforated board, Y, upon which the clothes rest while being operated upon, and which slides back and forth beneath the said clothes as the frame I is oscillated upon its shaft H. The forward ends of the straight bars of the semicircular frame I project and are connected by a round, which serves as a handle in operating the machine. To the

rear end of the frame I is attached a box, Z, to receive weights to balance the presser and rubber boards, and thus enable the said frame and its attachments to be oscillated easily. To the middle part of the dasher-board P is attached the lower end of an upright bar, A', through which the shaft H passes, and the upper part of which is slotted longitudinally to receive the cross-bar E, so that it may slide up and down freely. To the upper end of the bar A' is pivoted a hook, B', which, when the semicircular frame I and its attachments have been lowered into the suds-box A, may be hooked into a hole in the cross-bar E, to prevent the said frame and its attachments from rising out of the suds while being used. C' is a bail or U-shaped lever, the arms of which pass down through the spaces between the frame I and the sides of the suds-box A, along the forward sides of the upright bars O. The lower ends of the arms of the bail C' are bent to the rearward, pass through slots in the lower ends of said uprights O, and are pivoted near their ends to the said uprights. To the ends of the arms of the bail C' are pivoted the rear ends of the notched bars D', which are curved upon the arc of the curved bars of the frame I, and are supported by a lip upon the ends of the arms of the bail C', in such a position as to just clear the projecting ends of the rod s', that pivots the presser-board R S to the frame I, when bail C' rests against the upright bar A', where it is secured in place by a hook, E'. The upper edge of the forward end board of the suds-box A is notched to receive the projecting forward ends of the straight bars of the frame I, and has sliding bolts F' attached to the shoulders thus formed, so that they may be shot over said bars to hold the said frame stationary while using the rubbing-board U.

In using the machine, the frame I and its attachments are lowered into the suds-box,

and the clothes are placed in the space between the presser-board R and the dasher-board P, and the frame I is oscillated, alternately pressing the suds from the clothes and allowing them to be again saturated.

When the clothes have been sufficiently washed, the frame I and its attachments are raised out of the suds by revolving the shaft H, and the water is pressed out of them by operating the frame I. The hook E' is then raised, releasing the bail C', and the said bail is moved downward. This brings the notched bars D' in contact with the projecting ends of the rod s', and furnishes a powerful leverage for pressing the water out of the clothes, and enables it to be done so thoroughly that said clothes may be hung upon the line directly from the machine.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the shaft H, bar E, and strap J, of the frame I, as and for the purpose described.
2. The combination, with perforated board P, of the sliding uprights O and shaft H, as and for the purpose set forth.
3. The combination of perforated board P, perforated guards Q, and pivoted frame I, in the manner and for the purpose specified.
4. The combination, with the presser-board R and rubber U, of the frame I, connected therewith by bars S and rods I, as and for the purpose described.
5. The combination of the bail C' and notched arms D' with the pivoted frame I, presser-board R, and dasher-board P, substantially as herein shown and described.

THOMAS STUMM.

Witnesses:

SAMUEL WATT, Jr.,
H. S. SHANNON.