

C. A. LOCKWOOD.
WASHING-MACHINE.

No. 174,632.

Patented March 14, 1876.

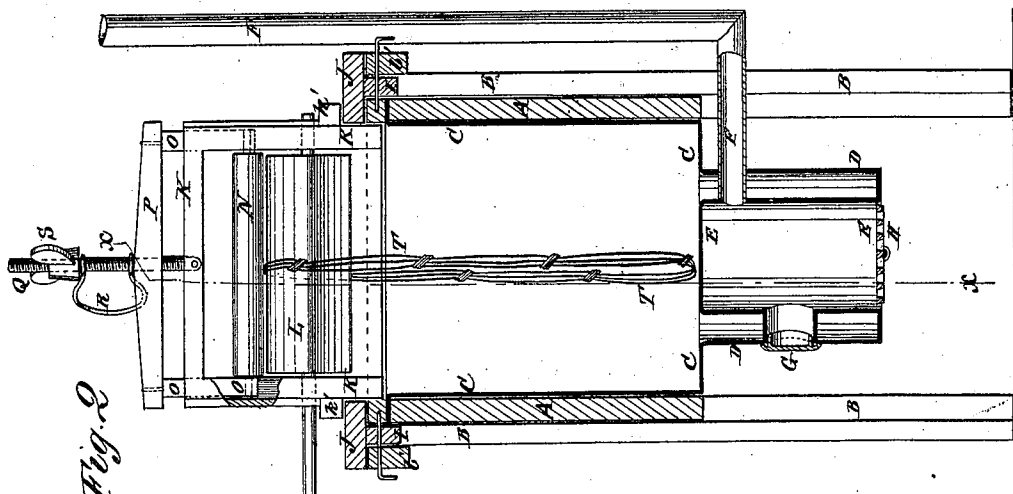


Fig. 2

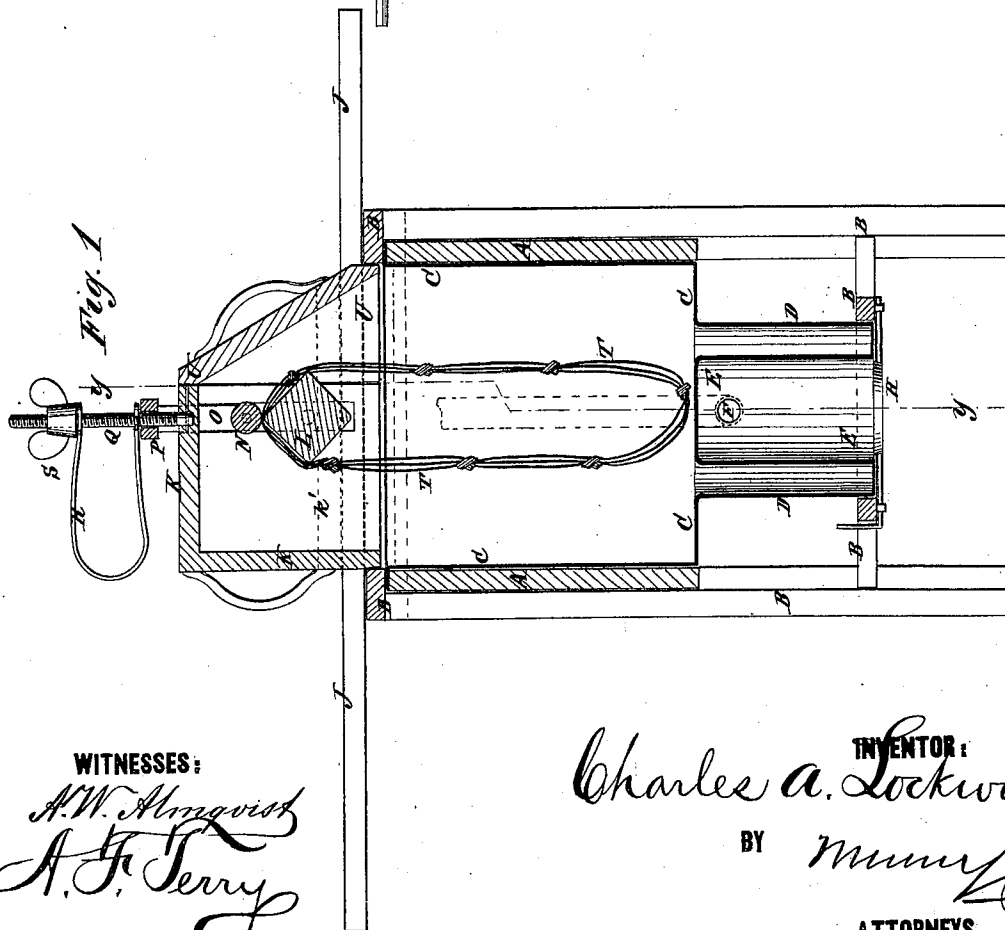


Fig. 1

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES A. LOCKWOOD, OF HAVERSTRAW, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **174,632**, dated March 14, 1876; application filed July 17, 1875.

To all whom it may concern:

Be it known that I, CHARLES A. LOCKWOOD, of Haverstraw, in the county of Rockland and State of New York, have invented a new and Improved Clothes-Washer; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

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

The object of this invention is to furnish an improved machine for washing clothes, which will enable the clothes, after being put into machine to be washed in cold water, to be washed and boiled in hot water, and to be rinsed one or more times in cold water without being again touched, and which shall be simple in construction, convenient in use, effective in operation, and easily operated.

The invention consists in the combination of the box or casing, open at top and bottom, the frame, the metallic box, made with a downwardly-projecting cylindrical extension, and the stove or furnace with each other to form the hot-water tub of a washing-machine; in the combination of the cleats and the flanged bars with the hot-water tub, to form a support and a way or track for the operating mechanism of the machine; in the box, open at the bottom and one side, the square roller, the round roller, the vertical sliding bars, the connecting-bar, the guide-rod, the U-spring, and the hand-nut, with each other, and with the bars attached to the hot-water tub.

A represents a rectangular box or casing of any convenient size, and open at top and bottom, which is attached to and supported by a frame-work, B. The box A is lined with a zinc or other suitable sheet-metal box, C, in the bottom of which is secured the upper end of the cylindrical box D, which projects downward, and within which is placed the stove or furnace E, which is made cylindrical in form, and of a less diameter than the box D, so as to leave a ring-chamber between the walls of the said stove and box. F is the smoke-pipe, which is connected with the upper part of the stove E, passes out through the side of the box

D, and projects upward at the rear side of the frame B. G represents the door, and H represents the grate of the stove E. By this construction the water of the box A C D entirely surrounds the stove E, so as to receive the full benefit of the heat. To the outer sides of the upper ends of the front and rear posts of the frame B are attached cleats *b'*, to form slots to receive flanges I, formed upon or attached to the bars J, and which are secured in place by pins passing in through the said cleats *b'*. The ends of the bars J may project to any desired distance upon both sides of the machine. The bars J are designed to serve as ways for the box K to slide upon, which box is made of such a width as to fit into the space between the bars J, and has cleats *k'* attached to the lower parts of its ends to rest and slide upon the said bars J. The box K is open at its bottom and forward side, and to the lower forward parts of its ends is pivoted the square shaft or roller L, to one of the journals of which is attached the crank M, by means of which the machine is operated. Directly above the axis of the square shaft L is placed a cylindrical shaft N, the journals of which work in bearings in the lower ends of the vertical bars O, which are placed in vertical slots or grooves in the ends of the box K, and the upper ends of which above the said box K are connected by a cross-bar, P. Q is a guide-rod, the lower end of which is attached to the top of the box K, and which passes up through a hole in the center of the cross-bar P, through holes in the ends of the U-spring R, and has a hand-nut, S, screwed upon its upper end, so that by turning the nut S up or down the tension of the spring R, and consequently the pressure of the roller N, may be regulated as required. T are three cords, connected to each other at short intervals by knots, and which are passed around the square shaft L, and are tied together, forming an endless band. The open side of the box K and the part of the box A C in front of the box K are closed by a cover, U, as shown in Fig. 1. The cover U and the bar K are provided with handles for convenience in handling them. In using the machine the box K is drawn back upon the bars J to one side of the box B C.

The clothes to be washed are looped at their

corners into the cords T, and the cords are passed around the square roller L, and their ends are tied together. A tub of cold water is then placed beneath the box K, and one or more tubs of cold water are placed at the other side of the box A B C, beneath the bars J. The crank M is then operated and the clothes are alternately wet in the cold water and then squeezed between the rollers or shafts L N. The box K is then moved forward close to the box A B C, and the crank M is turned a few times, which causes the cords T and the clothes attached to them to pass into the tub A B C D, which contains the hot water. The box K is then moved forward over the box A B C, the cover U is put on, and the crank M is turned until the clothes are ready to be rinsed. The cover U is then removed, the box K is moved forward, and the crank M is turned a few times, to cause the cords T and the clothes to pass into the tub of rinsing-water. The box K is then moved out over the rinsing-tub and the crank M is turned until the clothes have been thoroughly rinsed. The clothes may be passed in the same way through two or more tubs of rinsing-water, and when the rinsing is finished they are passed one or more times between the rollers without being allowed to pass into the water, and are then ready for the line.

Having thus described my invention, what I claim as new is—

1. The combination of the box or casing A, open at top and bottom, the frame B, the metallic box C, made with a downwardly-projecting cylindrical extension, D, and the stove or furnace E, with each other, to form the hot-water tub of a washing-machine, substantially as herein shown and described.

2. The combination of the cleats *b'* and the flanged bars J I with the hot-water tub A B C D E, to form a support and a way or track for the operating mechanism of the machine, substantially as herein shown and described.

3. The combination of the box K, open at the bottom and one side, the square roller L, the round roller N, the vertical sliding bars O, the connecting-bar P, the guide-rod Q, the U-spring R, and the hand-nut S, with each other, and with the bars J, attached to the hot-water tub A B C D E, substantially as herein shown and described.

CHARLES A. LOCKWOOD.

Witnesses:

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