



UNITED STATES PATENT OFFICE.

THOMAS A. DUGDALE, OF RICHMOND, INDIANA.

WASHING-MACHINE.

Specification of Letters Patent No. 17,030, dated April 14, 1857.

To all whom it may concern:

Be it known that I, Thomas A. Dugdale, of the city of Richmond, county of Wayne, and State of Indiana, have invented new and useful Improvements in Machines for Washing Garments and other Fabrics, and do hereby declare that the following is a

full and exact description.

The nature of my invention consists in 10 the employment of vibrating frames with rollers at their lower ends hung behind two wash boards in such a way that their tendency will be against the wash boards inclining them together while clothes or other 15 articles are being washed between them, and also the employment of circular plates attached to the wash box in the proper place for the cord (that holds down the wash boards) to pass through into a knob pro-20 vided with a pin adjusted to holes in the outer edge of the said plate. Said cords being secured to the back side of the box and passing over the rollers are passed through the front of the box and secured to 25 the knob, so that by turning the knob the cord is twisted and held to any desired length by the pin in the knob being inserted in a hole in said plate.

To enable others skilled in the art to make 30 and use my invention I will proceed to describe its construction and operation, reference being had to the annexed drawings of the same, making part of this specifica-

tion.

Figure 1 represents a perspective view of the machine complete. The faint lines on the front marked FF are designed to show the position of the frames and rollers when hung inside of the front and of the back of the machine, the parts being marked with letters corresponding with the letters in other figures hereinafter described, viz., A being a box about eighteen inches wide and twenty inches high and twenty eight inches 45 long. B B are two wash boards with rollers attached at the top and bottom of each lengthwise with the wash boards, as D D in Fig. 3, and turning on small journals; C, a wash board attached to a lever J, as shown 50 in Fig. 4. A part of said wash board is made to slide up and receive the clothes and when pushed down may be secured by means of a set screw or in any other convenient way, when the clothes may be

worked up and down between the wash 55 boards B B by means of the lever J. D D, rollers attached to the top of wash boards B. E E are cords passing over the rollers in the top of the wash board and secured to the back side of the box and passing through 60 the front side of the box and through the plate G, as Fig. 7, and secured to the knob H, as Fig. 6. Said cords prevent the wash boards from rising, and serve to press said wash boards toward or on the bottom of the 65 box. F F, the vibrating frame and roller which should be hung so as to incline against the back of the wash boards. They may be hung on hinges or on a rod extending from one end to the other of the ma- 70 chine, thereby inclining the bottom of the wash board toward the center. G. G. the plates for holding the knob H, by means of the pin m; H, the knob; m, the pin; i, projection to which the lever is attached; J, the 75 lever. K K represents two inclined planes terminating at the center of the box and placed crosswise at each end of the box, and designed to incline the rollers and wash boards to the center of the box while rest- 80 ing up on them.

Fig. 2 represents a vertical section, L being a part of the box; B B, the wash boards as shown in Fig. 3; B, the wash board; D D, rollers as described in Fig. 1; C, the 85 wash board attached to a lever as described in Fig. 1. E is a cord passing over the rollers in the top of the wash boards, also described in Fig. 1; F, F, F, F, F, frames and rollers as described in Fig. 1; G, the plate 90 as described in Fig. 1; H, the knob; m the pin as also described in Fig. 1; K K, inclined planes at the ends and on the bottom

of the box as described in Fig. 1.

Fig. 3 represents the wash board with a ⁹⁵ roller at the top and bottom; B, the wash

board; D D, the rollers.

Fig. 4 represents a wash board attached to a lever; C, the wash board; J, the lever. Fig. 5 represents the frame and rollers F, 100 F. Fig. 6 represents the knob H and pin m. Fig. 7 represents the plate G—all of which have been referred to in Figs. 1 and 2. There may if desired be a strip nailed on each end of the box inside to prevent the 105 wash boards coming together. All the parts should be made sufficiently loose when new to allow for the wood swelling so that the

working parts may not bind or become tight which will retard the operation of the machine.

What I claim as my invention and desire

5 to secure by Letters Patent is— Combining the vibrating frames and rollers F, F, F, F, the plate G, the knob H,

and pin m with the wash boards B, and rollers D, substantially as above described.

THOS. A. DUGDALE.

Witnesses:

JOHN FINLEY, JEREMIAH HADLEY.