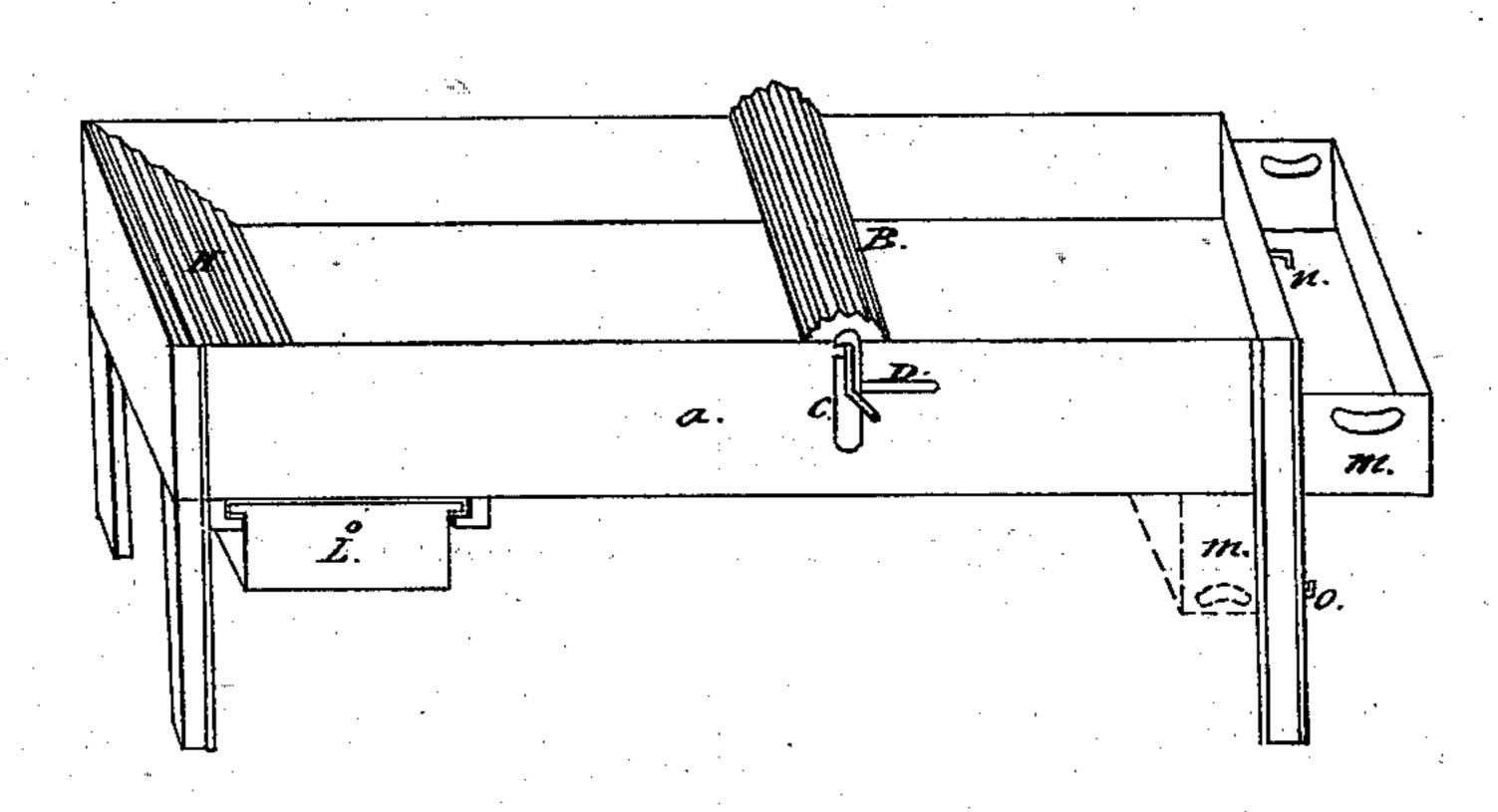
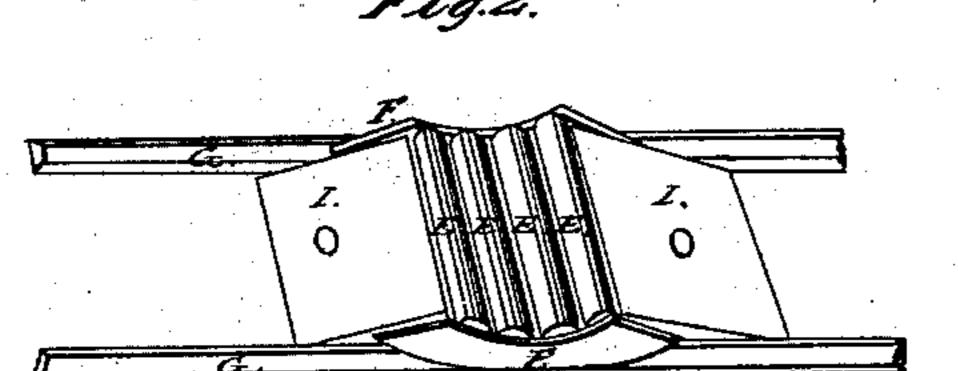
M. A. Fichard Son, Washing Machine. Patented June 27, 1865.

1 48,442

Fig.1.





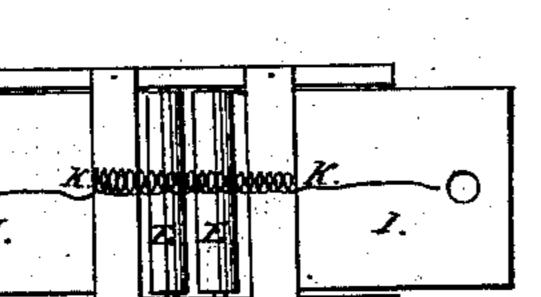


Fig. 3.

Witnesses; J.C. Smith J.W. Soms Inveritor, M. a. Bichardson By D. E. Somes 46. Attornis

United States Patent Office.

M. A. RICHARDSON, OF SHERMAN, NEW YORK.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 48,442, dated June 27, 1865.

To all whom it may concern:

Be it known that I, M. A. RICHARDSON, of Sherman, in the county of Chautauqua and State of New York, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view, and Figs. 2 and 3 are representations of a portion of the

interior mechanism thereof.

The letter A represents the main box or res-

ervoir of the washing-machine.

B is a corrugated roller, which is attached to the reservoir by a journal at one end passing through the side of the reservoir, and by a crank at the other resting in a groove. This crank is secured in the groove by means of the stay C, which is fastened near its lower end by a screw and resting against the button D. By turning this button and stay the corrugated roller is loosened and may be easily removed.

EEEE are plain round rollers, usually four in number, arranged in a concave form and adjusted to the size and form of the corrugated roller, and resting at each end on journals in the rockers FF.

FF are rockers resting on the wooden

springs G G.

G G are wooden springs running lengthwise of the reservoir, on either side of the inside thereof. One end of these springs rests in mortises cut in the end of the reservoir near its bottom, and the other ends rest in grooves in the lower side of the corrugated rubbing-board H. By means of the above-mentioned method of adjusting these springs I am enabled to remove them with great ease, for the purpose of turning them over or bottom side up whenever they become warped or bent by the weight upon them, or when from any other reason it may be desirable so to do.

H is a rubbing-board, usually formed by corrugating the inside of one end of the reservoir and placing it at an angle of about forty-five degrees with the upright posts.

I I are aprons, the upper sides of which are attached to the rockers F F by gudgeons or hinges near the series of rollers E E E E. By

means of the elastic spring K these aprons are made self-adjustable. They serve to keep the clothes from working under the rollers or becoming entangled therewith. They also serve to keep the ends of garments from falling down after they have passed through the rollers, and keep them in position ready to pass through again until they are clean. They also render it more convenient to find small articles in the suds than has been possible by any arrangement heretofore in use.

The spring K is made of a coil of wire or other proper elastic substance, connecting the aprons I I at a point near the middle thereof, making them self-adjustable and keeping them in their proper position and from floating on

the water.

L is a soap-drawer. It is made of wood, zinc, or other suitable material, and is usually attached to the reservoir by means of cleats on its sides running or sliding in grooves on the bottom of the reservoir. This drawer, adjusted as described, serves to keep the soap from contact with the suds while the machine is in operation, and from dust and dirt while it is at rest. Being placed immediately under the rubbing-board, it is always convenient to the

operator's hand. M is a clothes-box, attached to the reservoir by means of adjustable hinges, upon which it is swung up to the end of the reservoir or lowered beneath the same at the will of the operator. When designed for use it is swung up to the end of the reservoir and made fast thereto by means of the button n, and is thus in position to receive the clothes after they pass through the wringer. When filled it is detached from the machine at the hinges by a side movement and may be carried to the clothes-lines. When not in use it may be swung under the reservoir and fastened there by the button o. I construct this clothes-box of light wood, willow-twigs, ash-splints, or other light and suitable material, so that I am enabled to use it as a clothes-box for a washingmachine, and also make it serve as a clothesbasket for ordinary household purposes.

What I claim as new of my invention, and desire to secure by Letters Patent, is—

1. The adjustable aprons II, in combination with the elastic spring K and the wooden springs G G, constructed and operated in the

manner and for the purposes specified, sub-

stantially as set forth.

2. In combination with a washing-machine constructed with two adjustable aprons which are connected by an elastic spring and a series of rollers resting upon wooden springs, as represented, the clothes-box M, constructed and

operated in the manner and for the purposes specified, substantially as set forth.

M. A. RICHARDSON.

Witnesses:

J. C. SMITH,

J. K. Somes.