

Winger.

Patented Mar. 21. 1871.

A detailed technical drawing of a mechanical component, likely a pump or valve assembly. It features a main body with a central opening, a handle or lever on the right side, and various adjustment points or ports labeled with letters. The drawing is oriented horizontally.

A diagram of a simple circuit. It consists of a battery (represented by two cells), a switch, and a light bulb connected in a loop. The switch is shown in the open position. The battery is labeled with 'F' and 'E' at its terminals. The switch is labeled with 'a' and 'b' at its terminals. The light bulb is labeled with 'c' and 'd' at its terminals.

WITNESSES. *C. B. Nottingham.*
Chas. Richards

UNITED STATES PATENT OFFICE.

ALFRED M. BAILEY, OF MIDDLEFIELD, CONNECTICUT, ASSIGNOR TO THE METROPOLITAN WASHING MACHINE COMPANY, OF SAME PLACE.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 112,884, dated March 21, 1871.

To all whom it may concern:

Be it known that I, ALFRED M. BAILEY, of Middlefield, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Clothes-Wringers, of which the following is a specification.

In the drawings, Figure 1 represents a perspective view of a clothes-wringing machine made in accordance with my invention. Fig. 2 is a transverse vertical section of the same, representing it as fixed to a tub. Fig. 3 is a perspective view of one of the brackets or clamps which hold the machine to the tub. Fig. 4 is a like view of one of the plates to which the shield and flap hereinafter referred to are hinged.

My invention, which relates to machines for wringing clothes, employing a pair of rolls between which the clothes are squeezed, consists—

First. In the employment of a hinged shelf to prevent the clothes, after passing out from between the rolls, from being carried around the same. I am aware that a fixed or immovable shield has before been applied to a wringing-machine for a similar purpose; but by hinging the shield I am enabled not only to use it for the purpose stated, but can also fold it up closely against the frame of the machine for convenience in packing, and can employ it to cover and protect the wringer-rolls when the machine is laid up and not in use.

Second. In the employment of a hinged flap or shield applied to that part of the frame of the machine below the rolls, and in such position as to prevent the water which drops from the rolls from escaping from the tub. This hinged flap, when combined, as hereinafter described, with the clamps or brackets which hold the machine to the tub, is also useful in keeping apart the clamps and preventing them from swinging back and forth during the operation of fitting them to the tub.

Third. In the arrangement of the hinged or swiveled brackets or clamps, so that when folded up they may be on all sides within the compass of the frame of the machine, this arrangement being advantageous both for convenience in packing and as a protection for the clamps when the machine is not in use.

Other features of this invention growing out of the improvements just specified will be understood by reference to the drawings, which I will now proceed to describe in order to fully illustrate the manner in which my invention is or may be carried into effect.

The general construction and organization of a wringer such as shown in the drawings are well understood by those skilled in the art to which this invention relates, and I will therefore confine my description to such parts only of the machine as are embraced by my improvements.

The inclined clothes-shelf is represented at A, Fig. 2, applied to the frame of the machine in the position it usually occupies with relation to the wringer-rolls B B. Instead, however, of being fixed in the position shown in the figure, (as has heretofore been the case,) it is hinged at *a* to the wringer-frame, so that when not in use, or when the machine is to be packed for transportation, it may be folded up close against the frame, as seen in Fig. 1, in which position it does not project beyond the brace or rail C, which forms part of the wringer-frame. The shelf in this position covers the rolls, and when the machine is laid down upon its back (as is usually the case when it is not in use) it serves to prevent the rolls from becoming dirty or otherwise damaged.

When the shelf is in use it is held in its inclined position by resting upon the brackets or any other suitable support.

The shelf may be made to fold in either direction, although I prefer it should fold in the direction indicated in the drawings, in order to make room for the shield or flap about to be referred to.

Below the shelf is another piece, D, a flap or shield hinged or otherwise secured to the frame of the machine, and which, when the wringer is placed upon the tub E, as represented in Fig. 2, reaches down as far as the edge of the tub, and prevents the water, when dropping from the rolls, from escaping from or running out of the tub, thus preventing to a great extent the floor in the immediate vicinity of the wringer from becoming wet and sloppy.

The flap and the shelf are hinged to the

wringer-frame in any convenient manner. I prefer, however, to hinge them both by means of metallic plates F, placed one on each side of the wringer, in the position shown in Fig. 1, and constructed each with one or more holes, *c*, for the passage of the screw or screws which bind them to the frame, and with two studs or pins, *b b*, which enter sockets formed for their reception in the flap and shelf, respectively, and constitute the pivots upon which the same work. By forming on the rear part of the plate a pin, *d*, which will enter the frame when the plate is screwed down into place, but one holding-screw need be employed, and an annular or other shaped projection, *e*, is also formed on the inner face of the plate, which enters the frame and supports the plate, relieving the screw of the strain to which it would otherwise be subjected.

To the inner faces of the sides or legs G of the wringer, below the rolls, are hinged the brackets or clamps H, each of which is provided with a clamp-screw, *h*, or equivalent device, between which and the rounded portions G' of the legs the tub is clamped, as shown in Fig. 2. The flap or shield D extends down below the point where the clamps are hinged to the frame, and the hinging of the flap therefore allows the latter to be raised whenever it is required to swing the brackets out or in. Both in order to allow the flap to drop when the brackets are out and to prevent the brackets from swinging about too much while the machine is being applied to the tub, I recess or cut away the flap on each side, as shown at *g*, in such manner that after the brackets are out the flap will drop and confine the movement of the brackets within the limits of the recesses. The clamps or brackets H are each hinged to a leaf-plate, I, upon a vertical axis. As the leaves I must in a measure support the weight of the wringer, and are, moreover, subjected to considerable strain from other causes, I form upon the faces of the leaves which are in contact with the legs of the machine one or more ribs, *i*, preferably arranged, as shown in Fig. 3, so as to withstand both vertical and horizontal strain, which are received in correspondingly-formed grooves made in the legs of the frame. The screws which hold the leaves to the frame are thus to a great extent relieved from injurious strain, and the clamp or bracket is made firmer and more secure. The arrangement of the clamps is such that when folded up they are contained on all sides—top and bottom, front and rear—within the compass of the frame, and are thus protected entirely from injury, to which, were they not thus shielded, they would be extremely liable, especially when packed and shipped for transportation. The extension of the legs below the brackets also allows the machine to be placed and to rest in an upright position.

Having now described my invention and the manner in which the same is or may be carried into effect, what I claim, and desire to secure by Letters Patent, is—

1. In a clothes-wringing machine of otherwise ordinary or suitable construction, the combination of a clothes shelf or board hinged to the frame of the machine, and a support or supports for holding said shelf when unfolded in an inclined position, substantially as shown and described, so that the shelf, when unfolded, may be used to convey or direct the clothes away from the rolls, and when not in use may be folded up against the frame to cover or partially cover the rolls, as set forth.

2. The combination, with the frame of a wringing-machine, of a flap or shield hinged or otherwise secured to the same, and arranged in front of but below the lower roll, so that the water dripping from the clothes as they pass between the rolls may be returned to the tub and prevented from dropping upon the floor.

3. The combination of the fixed hinge or pivot-plates, arranged on each side of the frame, as described, with the movable shelf and shield suspended between and supported by said plates, substantially in the manner shown and set forth.

4. The combination, with vertically-hinged clamps or brackets, of the hinged flap or shield, so recessed at its ends as to hold the brackets when extended in proper position for the attachment of the wringer to the tub, substantially as herein shown and described.

5. The butt-hinge clamps or brackets secured to the machine on the inside of the legs of the frame, substantially as shown and described, so that when folded up they shall be contained on all sides within the frame of the machine, for the purposes stated.

6. The bracket-supporting hinge-leaf provided with one or more ribs, in combination with corresponding grooves in the legs of the machine, into which the said ribs enter when the leaf is applied to the frame, as and for the purposes shown and set forth.

7. In a clothes-wringing machine such as described, the arrangement of the hinged shelf, flap, and brackets, substantially in the manner shown and set forth, whereby the machine is rendered compact and may be packed without danger of injury to the parts above specified.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

ALFRED M. BAILEY.

Witnesses:

WM. P. RICHARDSON,
DWIGHT S. COE.