

(No Model.)

I. F. BROWN.
WRINGER.

No. 574,386.

Patented Jan. 5, 1897.

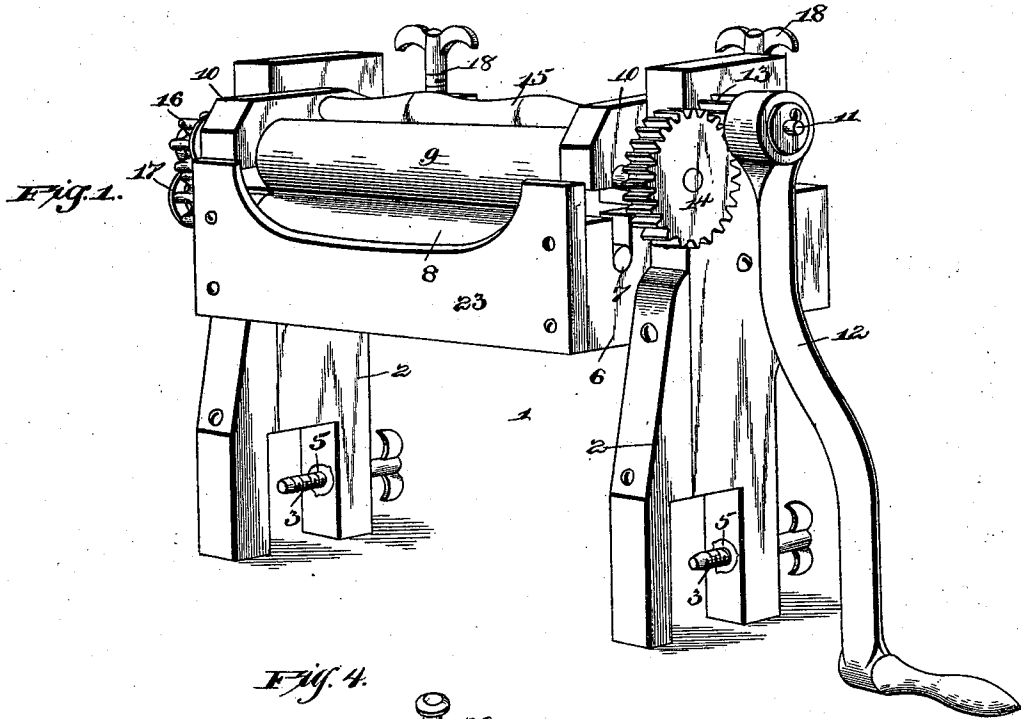


Fig. 4.



Fig. 3.

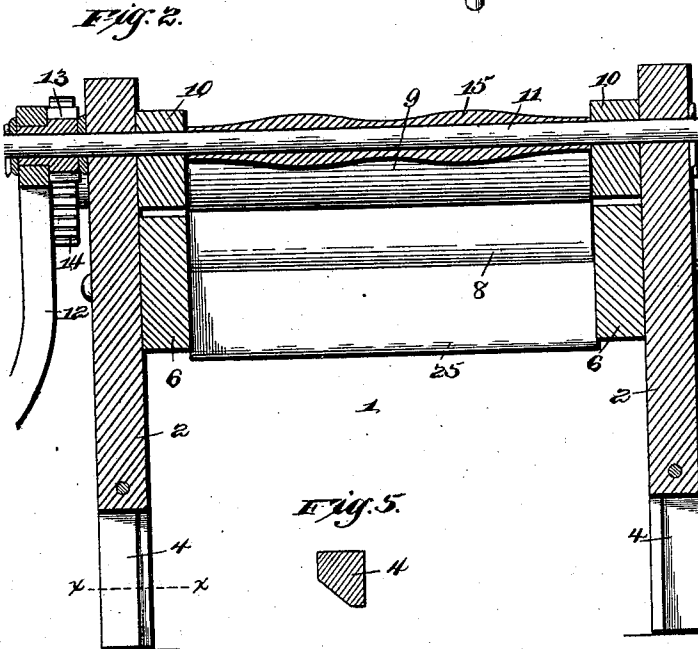
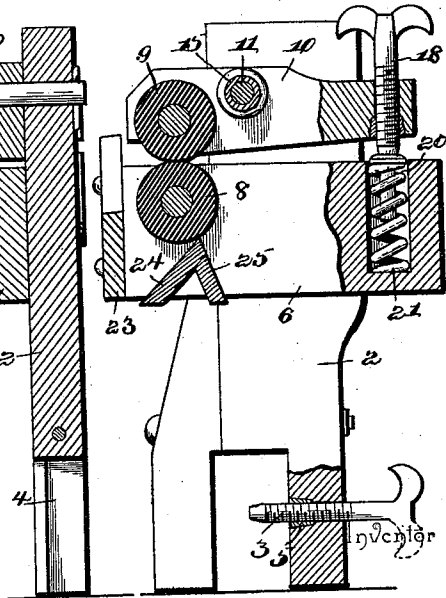


Fig. 5.



Witnesses

W. T. Doyle
J. H. Siggers

By *his* Attorneys. **Ismael Brown.**

Chas. Brown & Co.

UNITED STATES PATENT OFFICE.

ISRAEL F. BROWN, OF NEW LONDON, CONNECTICUT.

WRINGER.

SPECIFICATION forming part of Letters Patent No. 574,386, dated January 5, 1897.

Application filed August 28, 1894. Serial No. 521,505. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL F. BROWN, a citizen of the United States, residing at New London, in the county of New London and State of Connecticut, have invented a new and useful Wringer, of which the following is a specification.

The invention relates to improvements in wringers.

The object of the present invention is to improve the construction of wringers and to provide a simple and efficient one which will enable the pressure exerted on the clothes in wringing to be readily regulated in order to fully extract the water and at the same time prevent injury to the fabrics.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a wringer constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail view of the core for the spring. Fig. 5 is a transverse section on the line *x x* of Fig. 2.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a wringer-frame provided with vertical standards 2, which are bifurcated at their lower ends and provided with clamping-screws 3 to enable the wringer to be securely fastened on a washtub, washing-machine, or the like. The inner sides 4 of the bifurcated portions of the standards are beveled in order to fit snugly against the inner side of the tub, and the clamping-screws, which pass through perforations in the outer sides of the bifurcated portions, engage nuts 5, fitted in enlarged portions of the perforations and provided with ribs to prevent them from turning.

The wringer-frame is provided near the upper ends of the standards with horizontal bars 6, provided at their front ends with bearings 7, in which are journaled the ends of a lower roll 8, and cooperating with the lower roll is an upper roll 9, which is journaled in suitable bearings at the front ends of a pair of levers 10. The levers 10 are fulcrumed on the up-

per portions of the standards at the inner faces thereof by means of a horizontal shaft 11, which passes through the standards, extending entirely across the space between the standards, and projects from one of them to receive a pinion 13, which revolves upon said shaft. A crank-handle 12 is fastened to the pinion 13, and the latter meshes with a cog-wheel 14 of the upper roll. The shaft between the levers is covered by a hollow bar or sleeve 15, which spaces the levers and prevents them from moving inward on the shaft. The upper and lower rolls are connected at the side opposite to that having the handle by gear-wheels 16 and 17.

The pressure of the rolls is regulated by screws 18, mounted in threaded openings at the rear ends of the levers 10 and engaging cushions 20, arranged in sockets 21 of the rear ends of the bars 6. Each cushion 20 consists of a spiral spring and a core provided at its upper end with a flange bearing upon the spring and having a concavity to receive the adjusting-screws. The cores are of a size to fit loosely within the springs. They strengthen and support the same, and the cushions are adapted to permit the upper roll to yield to avoid breaking buttons and to avoid too great a pressure on thickened or folded parts passing between the rolls.

At the front of the wringer is arranged a board 23, and at the bottom of the lower roll are located oppositely-inclined strips or boards 24 and 25, which form an inverted-V-shaped stop for the clothes. This construction prevents the clothes from following the lower roll after passing between the rolls, and the front board serves as a guide for the clothes in introducing them between the rolls, and this board is cut away at its top edge to admit of the clothes passing readily to the pressure-rollers. The angle of the V-stop touches the lower pressure-roller in the rear of its axis, so as to effectually prevent any clothes or fabric following the roller after once passing in the rear thereof. The strips 24 and 25 and the board 23 connect the horizontal bars 6 and brace and strengthen the side standards.

It will be seen that the wringer is simple and comparatively inexpensive in construction, that it is adapted to be readily secured to a washtub, washing-machine, or the like,

and that the pressure on the clothes may be readily regulated.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

In a clothes-wringer, the combination of
10 side standards having their lower ends provided with clamping means, parallel horizontal bars firmly attached between their ends to the standards, and having vertical sockets in the top edges near their rear ends,
15 a board cut away at its top edge and connecting the front ends of the horizontal bars and forming a guide, a horizontal shaft journaled in the upper ends of the standards, levers extending parallel with the horizontal bars and
20 fulcrumed upon the horizontal shaft, a spacing-sleeve mounted upon the shaft and having its ends touching the inner sides of the levers, pressure-rollers journaled in the front ends of

the said bars and levers, springs placed in the aforesaid vertical sockets, set-screws mounted 25 in the rear ends of the levers and engaging with the springs, oppositely-inclined strips secured to the aforesaid bars and forming an inverted-V stop disposed to come beneath the lower pressure-roller, and having its angle 30 touching the surface thereof in the rear of its axis, a pinion mounted upon one end of the horizontal shaft and having a crank connected therewith, and a gear-wheel secured to the projecting journal of the adjacent pressure-roller and meshing with the said pinion 35 and driven therefrom, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 40 the presence of two witnesses.

ISRAEL F. BROWN.

Witnesses:

EDWARD T. BROWN,
GEORGE COLFAX.