

(No Model.)

W. GRAHAM.
MOP WRINGER.

No. 503,663.

Patented Aug. 22, 1893.

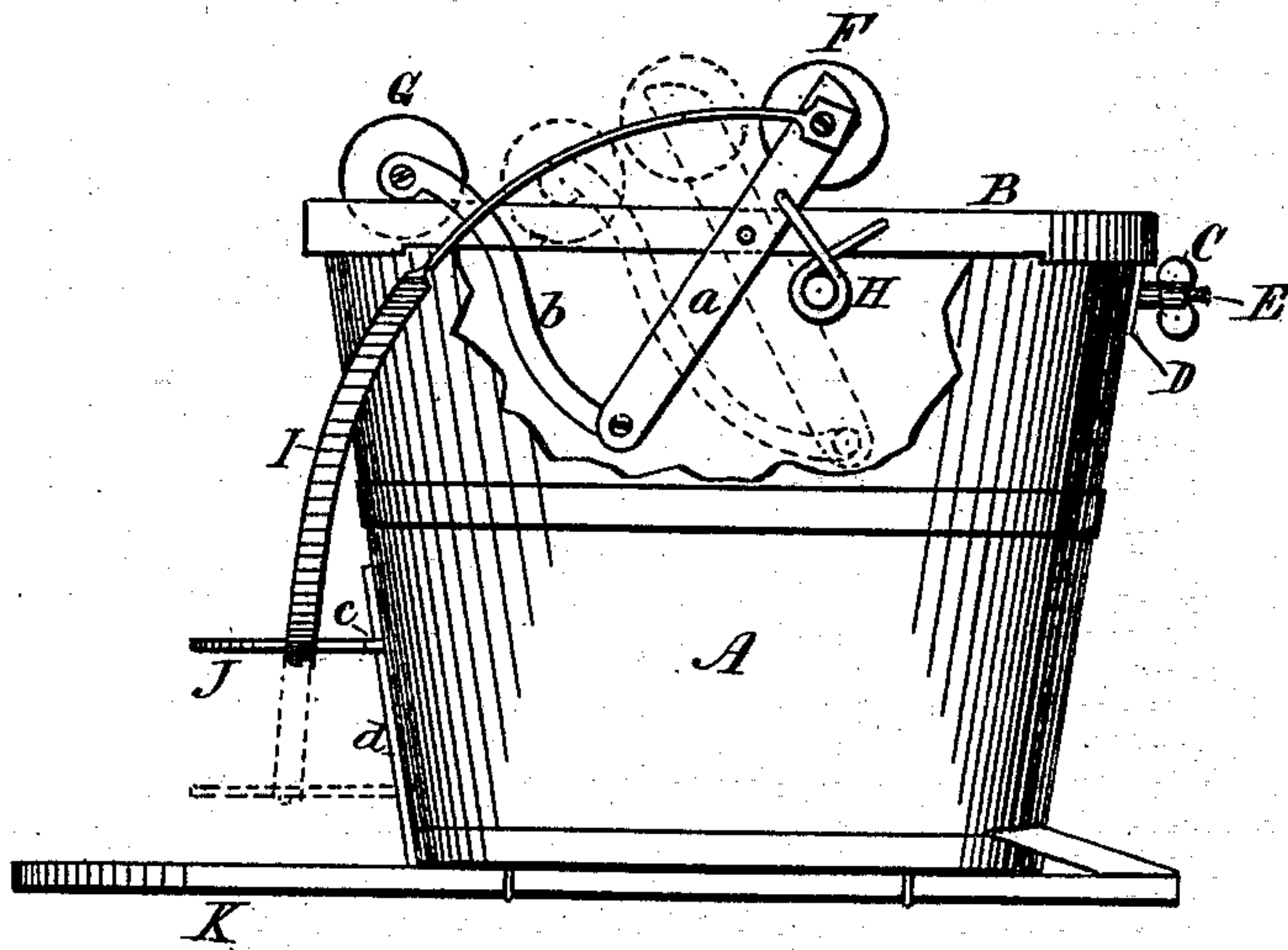


Fig. 1.

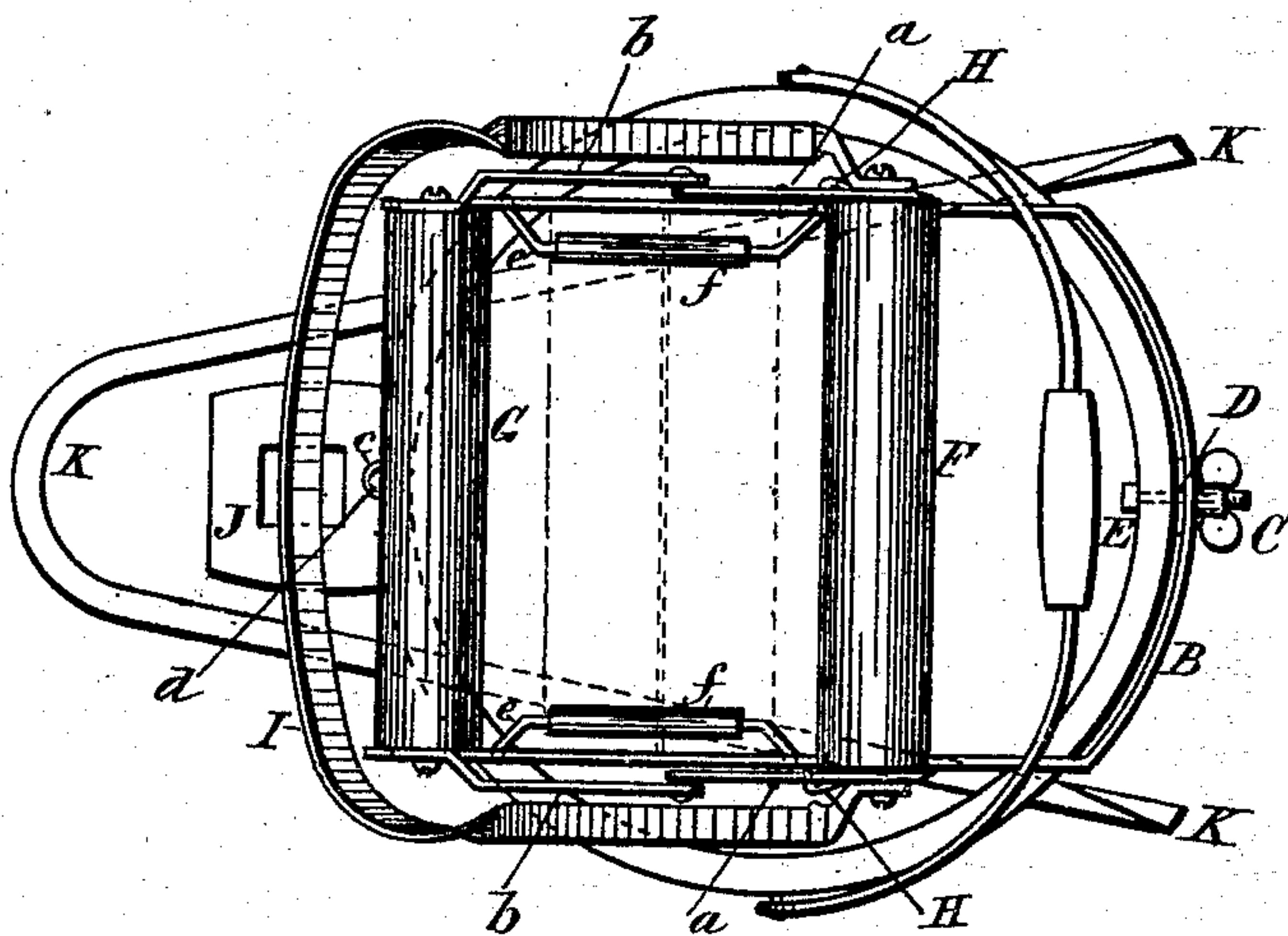


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM GRAHAM, OF HAMILTON, CANADA, ASSIGNOR OF ONE-HALF TO
WILLIAM F. ASHBAUGH, OF SAME PLACE.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 503,663, dated August 22, 1893.

Application filed October 17, 1892. Serial No. 449,178. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GRAHAM, a citizen of the Dominion of Canada, residing at Hamilton, in the county of Wentworth, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Mop-Wringers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

The invention relates to a very convenient, clean and expeditious device attached to a common pail for wringing mops without soiling the hands or clothes, and allowing the use of boiling water, lye, strong soap suds, &c., and so constructed as to be simple and light, yet strong, durable, and not likely to get out of order.

The invention consists: First—In an adjustable metal frame attached to an ordinary pail, and secured thereto by a thumb screw, and capable of being easily removed when desired. Second—Two wooden rollers are attached to V shaped connecting levers, the rear one being pivoted to the frame and carrying the rear roller, and the front part of the V shaped connecting levers being pivoted to the lower end of the first named lever and carrying the front roller. Third—A yielding spring treadle is attached at the two upper ends of the rear levers and made to pass down to the front of the pail, where a foot pad is attached to operate the device by pressure of the foot thereon. Fourth—Guards are placed at each side, attached to the main frame, to keep the mop while being wrung, in the center of the pail. Fifth—A guide and wear iron rod will be fastened to the pail in front, on which the foot pad slides, it having a notch cut in it to receive the rod and slide upon it. Sixth—A U shaped base iron frame will be attached to the bottom of the pail so as to steady it.

Figure 1, is a side elevation of pail and wringer. Fig. 2, is a plan view.

In the drawings A is the pail to which the device is fastened.

B, is the metal frame, straight on the sides and curved at one end to conform to the shape of the pail against which it has a bearing to prevent it from springing. The lower edge of

the frame is let into the top of the pail slightly where it rests upon it and is attached to the pail by a threaded bolt E which passes through a slotted plate D, and held by a thumb-screw C, screwed on the outer end of the bolt, which latter passes through a slot in the plate; the frame which carries the working parts is thus held securely to the pail.

a, a, are flat levers pivoted to the sides respectively of the frame B, and b, b, are levers pivoted at their lower ends to the bottom ends of the levers a, a, constructed to operate inside of the pail and the two form a V shape; these levers a, a, and b, b, are attached at their upper ends to the two wooden wringer rollers F, G, which are arranged to come together for mop wringing, as will be more fully described hereinafter. The said rollers are kept apart by means of coiled springs H, H, on each side respectively, one end of each being secured to the levers a and the other to the sides of the frame B.

The device for causing the rollers F and G to come together for wringing a mop may be described as follows: A yielding double curved spring treadle I is attached to the upper ends of the levers a, a, and bent to pass down toward the lower part of the pail, and at its lowest portion a foot pad J is affixed by rivets or otherwise, so that when the operator's foot is pressed upon it, a slight pressure causes the two rollers F and G, to come together as shown by dotted lines in Figs. 1 and 2, the curve of the levers b, b, sliding on the top of the frame B. It will be observed that the said foot pad J has a half circular notch c or other form cut on its inner edge which is made to slide on a corresponding circular rod d or other form attached to the front of the pail as shown; this keeps the foot pad in the center and causes the treadle I to press the rollers equally at both ends, and it may here be observed that the said treadle I is so constructed that the upper curved portion is being flat horizontally, act sufficiently as springs to prevent the treadle from being too rigid in operation.

In order to keep the mop in the center of the pail, I affix two spring guards e, e, of the requisite strength to the frame B, and parallel with it, each carrying a friction roller f as

shown in Fig. 2; this effectively keeps the mop in the center while being drawn out between the rollers, so that the pressure of them is equalized and there is no danger of the mop catching on the operating parts. A U shaped base frame K of iron is attached by staples or otherwise to the bottom of the pail to steady it, having no connection with the operating parts.

The operation of the device is as follows:—

- 10 The rollers F, G, being apart (as they always are except while operating), the mop to be wrung is placed in the pail between the rollers. The operator places one foot on pad J and presses downward which causes the rollers to
- 15 close up on the mop with sufficient pressure to remove the water in it while it is being drawn out from the rollers.

Having thus described my device and its advantages, what I claim as my invention, and

- 20 desire to secure by Letters Patent, is—
1. In a mop wringer, the combination with the frame B attached to a pail, of two levers

a, a, pivoted to said frame and carrying a roller F at their upper ends, two levers b, b, pivoted to the bottom ends of the levers a, a, and carrying at their upper ends a roller G, and a spring treadle I attached to the upper ends of the levers a, a, and provided with a foot pad J for operating the rollers, all constructed substantially as and for the purpose specified.

2. In a mop wringer, the combination of the rollers F, G, levers a, a, b, b, guides e, e, with friction rollers f, f, frame B, springs H, H, treadle I, foot pad J, guide rod d, fastening plate D, bolt E, thumb screw C, base K, all constructed substantially as and for the purpose specified.

Dated at Hamilton, Ontario, this 24th day of August, 1892.

WILLIAM GRAHAM.

In presence of—

V. H. LISDALE,
WM. BRUCE.