

Harvey C Hersey. Impd. Washing Machine.

118014

Fig. 1.

PATENTED AUG 15 1871

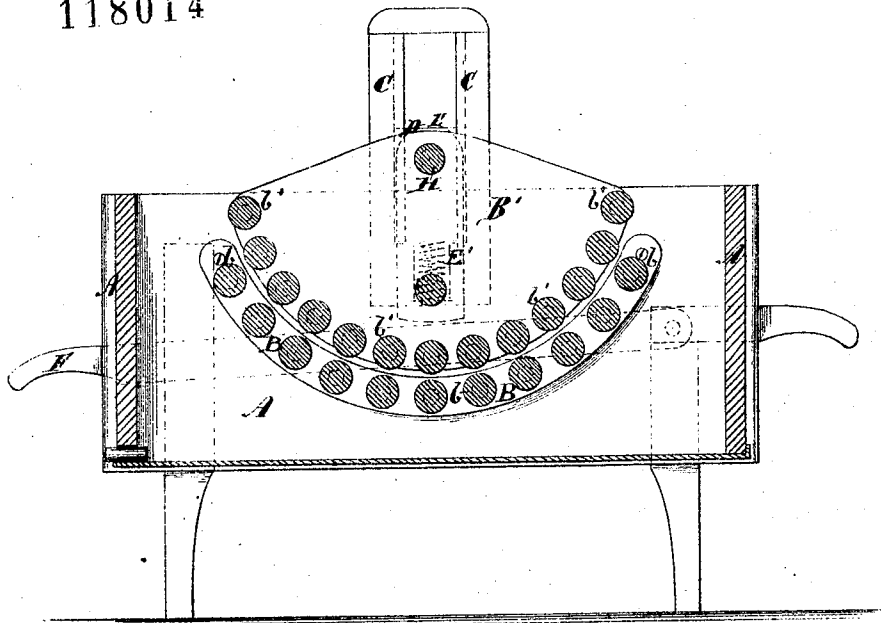
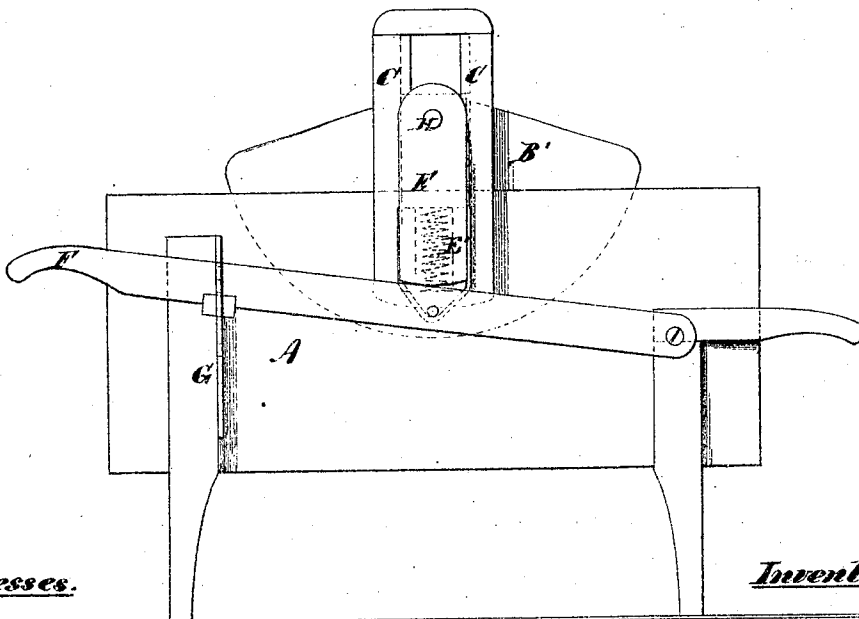


Fig. 2.



Witnesses.

Peter Moore
Edward Thompson

Inventor.

Harvey C. Hersey

UNITED STATES PATENT OFFICE.

HARVEY C. HORSEY, OF ROME, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 118,014, dated August 15, 1871.

To all whom it may concern:

Be it known that I, HARVEY C. HORSEY, of Rome, in the county of Henry and State of Iowa, have invented certain Improvements in Washing-Machines, of which the following is a specification:

My invention relates to improvements in that class of washing-machines in which the clothes to be cleansed are confined between sets of rollers; and the invention consists in a new and improved combination of devices whereby the distance between the two sets of rollers may be regulated to suit the quantity or bulk of clothes being washed and to accommodate the resistance or pressure to the strength of the operator, and so that the fabrics being cleansed will not be torn or strained by undue pressure and friction of the rollers.

In the accompanying drawing, Figure 1 is a longitudinal sectional view of my improved machine; Fig. 2, a side elevation of the same.

A represents an oblong box of any suitable size and proportion, made of any suitable material, preferably with wooden sides and zinc bottom. B represents semicircular plates or frames secured one to each of the long sides of the box. They may be made of galvanized iron or other suitable material, and are perforated with a series of holes which form the journal-bearings of a series of wooden rollers, *b*, which extend across the box between the plates B. B' represents two corresponding frames, in like manner provided with a series of rollers, *b'*, arranged on the convex of the circle, while the series *b* is arranged in concave form. The frames B' with their rollers *b'* are suspended and pivoted on a shaft, H. C C represent two uprights secured to long sides of the box, midway between the ends, and projected a convenient height above the box. These uprights are cut with a central vertical slot or slide-way to receive sliding blocks D D, which slide up and down in the space cut in the uprights C C, the inner sides of which are grooved for that purpose. The ends of the shaft H are journaled in these sliding blocks. E' represents a spring inserted in the space beneath the sliding blocks, and on which the blocks rest. These

springs may be made of coiled metal wire or other suitable material. F F are levers, one on each side of the box, to which they are pivoted. These levers are connected with the shaft H by arms or slats E. G G are ratchet-plates, which engage with the levers F F and retain them in position at any desired height.

The operation of the machine is as follows: By raising one of the levers F the frames B', with their connecting-rollers *b'*, are elevated sufficiently far above the rollers *b* to admit of the clothes to be washed being inserted between the two sets of rollers. The insertion of the washing may also be facilitated by pushing the upper set of rollers half-way around on the shaft H. When the washing is inserted the sustaining-lever is lowered so as to allow the upper set of rollers to come down upon the clothes, the proper distance between the two sets of rollers being adjusted by the levers F F so as not to expose the clothes to unnecessary pressure and friction. The operator then stands at one end of the box, and, taking hold of the upper roller *b'*, moves the frame B' back and forth, the rollers *b'* pressing the clothes upon the rollers *b*, both sets turning freely, and thoroughly agitating and cleansing the clothes without injury to the fabric, while, through the frame carrying the upper set of rollers being pivoted on a shaft journaled in sliding blocks supported on springs, it adjusts itself, and, rising in the slide-ways of the uprights C C, yields to the pressure of any undue accumulation of the clothes being washed, and thereby obviates all danger of tearing or otherwise injuring the washing. When the operation is completed the washing is removed in the same manner as it was inserted in the machine.

What I claim as my invention is—

In combination with box A, the frames B B' and rollers *b b'*, uprights C, blocks D, springs E, and levers F, constructed and operating substantially as and for the purpose specified.

HARVEY C. HORSEY.

Witnesses:

MATTHIAS M. PARCELLS,
PETER MOORE.