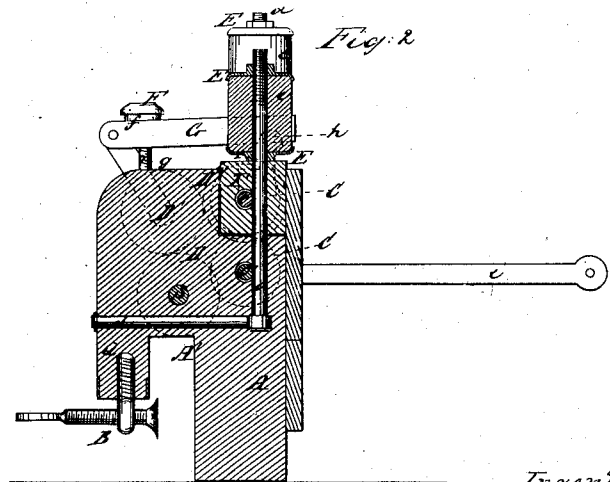
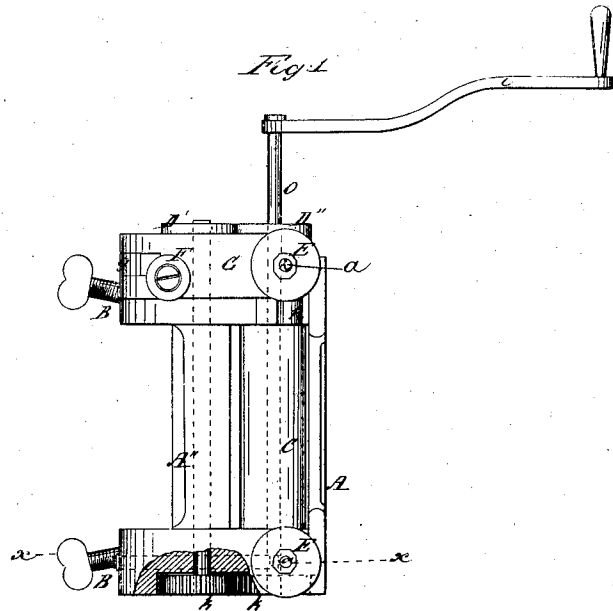


Blakeman & Gill,

Wringer,

N^o 44,779,

Patented Oct. 25, 1864.



Witnesses
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James P. Hall

Inventor
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UNITED STATES PATENT OFFICE.

EBEN BLAKEMAN AND JOSEPH R. GILL, OF CHARLESTON, ILLINOIS.

IMPROVED CLOTHES-WRINGER.

Specification forming part of Letters Patent No. 44,779, dated October 25, 1864.

To all whom it may concern:

Be it known that we, EBEN BLAKEMAN and JOSEPH R. GILL, of Charleston, in the county of Coles and State of Illinois, have invented a new and useful Improvement in Clothes-Wringers; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable any person skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of the wringer; Fig. 2, a view of a section of the same taken on the line *x* of Fig. 1.

Similar letters of reference indicate like parts.

The general object of our improvements is to produce a wringer which shall be more convenient for use than those now made, as well as cheaper in its construction, less liable to give way under the strain to which such articles are usually subjected, and which shall be self-adjusting while in operation.

A represents the frame of the machine, which is to be made strong and of any suitable material, and of the shape shown in the drawings, or of any other shape that shall be consistent with my improvements hereinafter described. The back part of the sides of the frame at A' is so formed as to allow it to fit over the edge of the tub which contains the clothes to be wrung, and clamps B are secured in the feet of the short legs Q in such a manner as to be capable of turning to any angle and so embrace a tub with straight or curved sides with equal ease. The legs Q should be covered with ferrules and made strong, so as to contain the sockets for holding the clamps. The crank *i* is secured to the end of the shaft *o'* of the lower pressure-roller, C.

The pressure-rollers C, the upper one of which is shown in Fig. 1, are made of rubber or other elastic material. A gear, *k*, is placed on the opposite end of the shaft *o'* of the lower roller, C, meshing into a gear, *h*, on shaft S, which runs through the spring-piece A'' of the frame. The opposite end of this shaft carries a friction-wheel, D, shown in blue outline in the sectional view, which wheel D is in constant contact with a wheel, D', which runs upon a pin-shaft on that end of the frame, and this again in contact with a similar wheel, D'', on the end of the shaft O of the upper press-

ure-roller, C. The shaft of the upper roller, C, is journaled in a box, *h*, which is free to move vertically in the side framing. The pin-shaft of the friction-wheel D' passes through the lower end of an arm, *g*, which is suspended by a free joint from the top piece, G, which rests upon the crank end of the frame. A screw-pin, *r*, running down into the frame, secures the piece G so as it shall be kept in its proper position, and the piece G is free to move vertically upon the pin *r*, being controlled in the extent of its movement by the rubber spring *f*, resting upon the piece G, and which spring is held in place by the cap F. That end of the shaft O of the roller C which is seen in Fig. 2 is journaled in a sliding box, T. The rods *a*, which carry the rubber springs *e* and their caps E, are carried down through the sliding journal-boxes *h* and T, as shown clearly in the sectional view, and lie in grooves cut in the periphery of the shafts O and O' of the pressure-rollers, and at each end of these shafts, so as to bind those shafts in their place and prevent end-play. The lower ends of the rods *a* are secured in place by means of rods *d*.

The operation of the wringer is as follows: Motion being given to the shaft O' by the crank *i*, the lower roller, C, will cause the upper roller, C, to revolve. The gear *h* on the shaft O' will move the shaft S and its friction-wheel D, which is on the crank end of the machine and beneath the friction-wheel D', and thereby the wheel D' is set in motion. The hanging journal-box *g*, which carries the wheel D', is set in such a position by means of the screw-pin *r* as that the wheel D' shall be in contact with the wheels D and D'', all of which are covered with rubber or other elastic material. Whenever a large body of clothing or any thick material is carried through the pressure-roller C, they are forced apart and the crank-shaft is subjected to a great strain, and is liable to be twisted and the eye of the crank to be broken. By means of our arrangement of the friction-wheels this danger is removed, for when the upper roller, C, is raised by the material beneath it the sliding box *h* raises the piece G, whose fulcrum is the pin *r*, and thereby the journal-box *g* is depressed, forcing the wheel D' more firmly against the wheels D and D'', thus equalizing the strain upon both ends of the shaft O of the upper roller, C.

It is evident that the frame is made very

stiff by means of the rods *a* and *d*, which furnish the chief means of securing the frame together.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. Holding the main parts of the frame of the wringer together by means of the rods *a*, which sustain the springs *e* and the rods *d* and the grooves in the roller-shafts, substantially as described.

2. The combination of the friction-wheel *D'*, its hanging journal-box *g*, and top piece, *G*, with the friction-wheels *D* and *D''* and the pressure-roller *C*, substantially as described.

3. The gear *k* and shaft *S*, in connection with the lower friction-wheel, *D*, as set forth.

EBEN BLAKEMAN.
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Witnesses:

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