

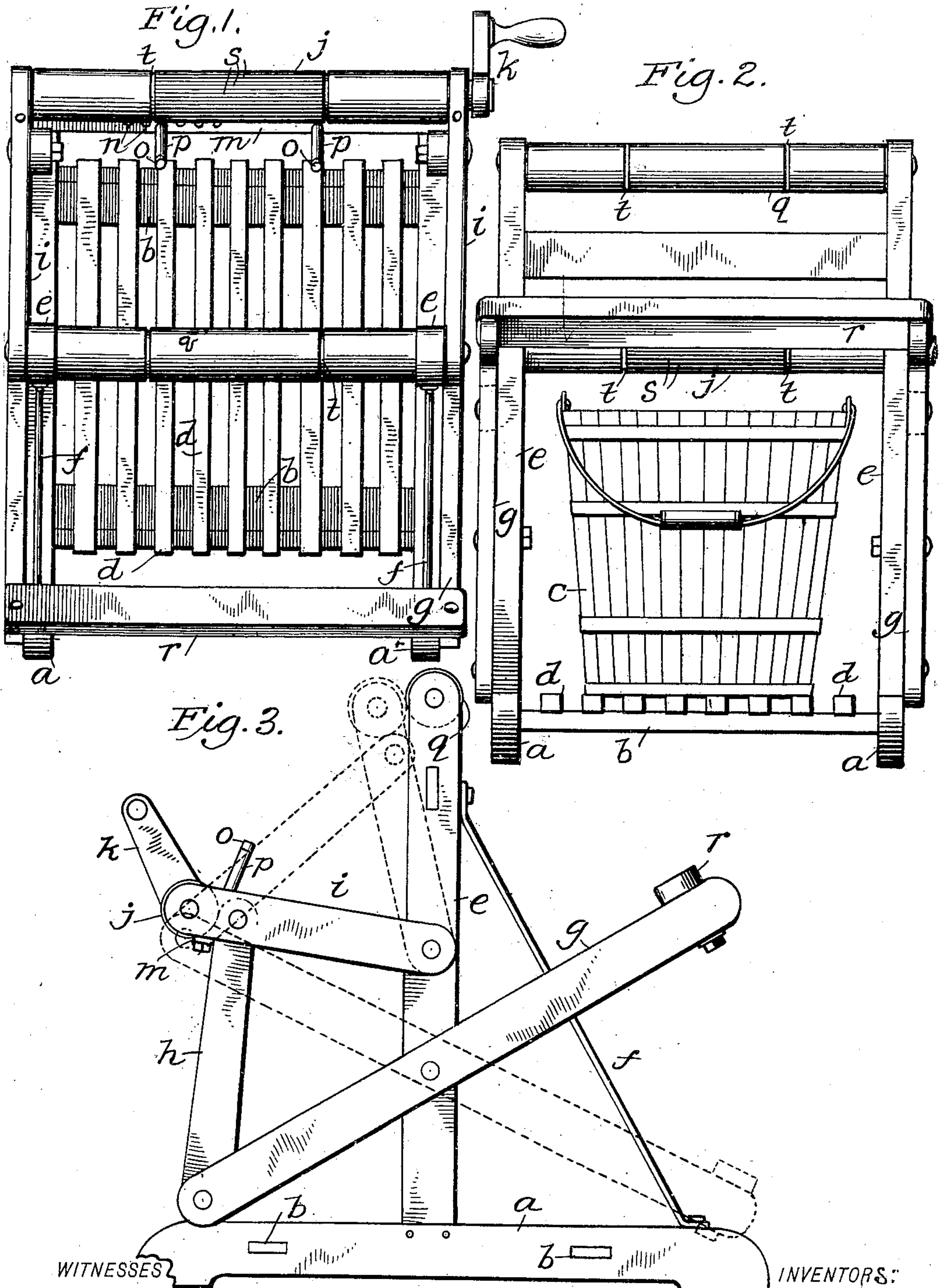
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PATENTED AUG. 6, 1907.

A. J. SMITH, L. THURLOW & J. F. KREMER.

MOP WRINGER.

APPLICATION FILED OCT. 3, 1906.



WITNESSES
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UNITED STATES PATENT OFFICE.

ARTHUR J. SMITH, LOUIS THUROW, AND JOHN F. KREMER, OF WINONA, MINNESOTA.

MOP-WRINGER.

No. 862,207.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed October 3, 1906. Serial No. 337,185.

To all whom it may concern:

Be it known that we, ARTHUR J. SMITH, LOUIS THUROW, and JOHN F. KREMER, citizens of the United States, residing at Winona, in the county of Winona and State of Minnesota, have invented certain new and useful Improvements in Mop-Wringers, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to improvements in devices for removing water from fabrics and like material; and the object of our invention is to provide a device of this class which will be particularly adapted to use as a mop-wringer, which will be comparatively simple and cheap in construction and efficient in operation.

Figure 1 is a top plan view, the rollers being shown separated; Fig. 2 is a front view of the same; and Fig. 3 is a side view, the rollers being shown in contact in dotted lines.

The base-boards *a* are joined by the cross-pieces *b* to which is removably fitted the slatted flooring or platform *d* upon which rests the pail *c*. From each of the base-boards *a* rises a standard *e* braced by a rod *f*; and on each of these standards *e* is fulcrumed a lever *g* connected at one end by a link *h* with an arm *i* mounted free to swing on the standard *e*. In the free end of each swinging arm *i* is formed a bearing within which is journaled one end of the roller *j* which is turned by the handle *k*. Just below the roller *j* is a metal bar *m* secured to the ends of the arms *i* and formed with a series of holes *n*. Mounted in this bar *m* are two pins *o* on each of which is a sleeve *p* free to rotate on the pin itself. By moving one of the pins from hole to hole of the series of holes *n*, the interval between the pins may be varied to adjust it to different sizes of mop-cloths. In the top of the standard *e* is journaled a roller *q*. At the end of the lever *g* which is opposite from the links *h*, the levers are connected by the foot-rest *r*.

The roller *j* is formed with longitudinal channels *s* which leads into a circumferential groove *t* at each end. This fluted surface aids materially in obtaining a grip upon the mop-cloth and forcing it through between the rollers. The roller *q* is provided with circumferential grooves *t* which register with the grooves *t* of the roller *j*.

The operation of the device will now be readily understood: The mop-cloth having been placed between the pins *o*, the operator places his foot upon the foot-rest and brings the rollers *j* and *q* into contact, as is shown by the dotted lines in Fig. 3. The handle *k* is then turned and the corrugated surface on the roller *j*

forces the cloth out from between the rollers. At the same time the water which is squeezed out of the cloth runs along the longitudinal channels and drains from the circumferential grooves *t* into the pail beneath. It is to be noted that the weight is so distributed that the roller *j* falls away from the roller *q* when the pressure is removed from the foot-rest, thereby avoiding the use of springs to separate the rollers.

We claim:

1. In a mop-wringer, the combination with a base, of a pair of standards supported thereby; a pair of levers mounted on said standards; a pair of swinging arms mounted on said standards; a pair of links which connect one end of said levers with the free end of said arms; a roller journaled in the free end of said arms; and a roller journaled in the upper end of said standards; whereby said rollers are brought into contact with each other by depressing one end of said lever and fall apart by gravity when the pressure is removed.

2. The combination in a mop-wringer, of a pair of co-operating rolls one of which is formed with longitudinal grooves which terminate in circumferential grooves for the drainage of the water.

3. The combination in a mop-wringer, of a pair of co-operating rolls one of which is formed with longitudinal grooves which terminate in circumferential grooves; and the other of which is formed with a pair of circumferential grooves which register with the circumferential grooves of the first-named roller.

4. The combination of a pair of coöperating rollers; supporting means therefor; a bar formed with a series of holes; and a pair of pins mounted in said bar for guiding the mop, one of said pins being adjustable from hole to hole of said series to vary the interval between said pins.

5. The combination in a mop-wringer of a pair of co-operating rollers, one of which is mounted in a stationary frame and the other of which is mounted in a frame movable to bring said rollers into contact; said frames; a bar carried by said movable frame and formed with a series of holes; and a pair of pins mounted in said bar, one of said pins being adjustable from hole to hole of said series to vary the interval between the pins.

6. The combination in a mop-wringer of a pair of co-operating rollers, one of which is mounted in a stationary frame and the other of which is mounted in a frame movable to bring said rollers into contact; said frames; a pair of pins carried by said movable frame; and a pair of sleeves one of which is mounted free to rotate upon each of said pins.

In testimony whereof we hereunto set our hands this 26th day of September, 1906, at said Winona in the presence of two witnesses.

ARTHUR J. SMITH.
LOUIS THUROW.
JOHN F. KREMER.

Witnesses:
WM. CODMAN,
J. E. KREMER.