

H. J. BURR.
Clothes-Wringers.

No. 143,220.

Patented September 30, 1873.

Fig. 1

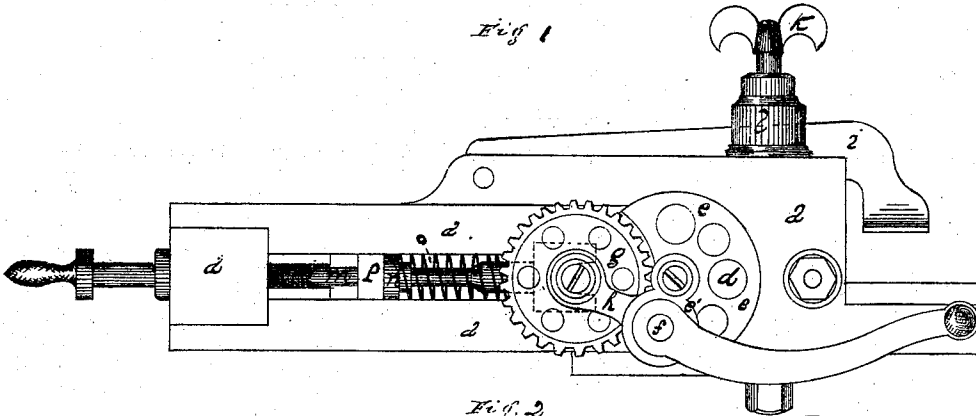


Fig. 2

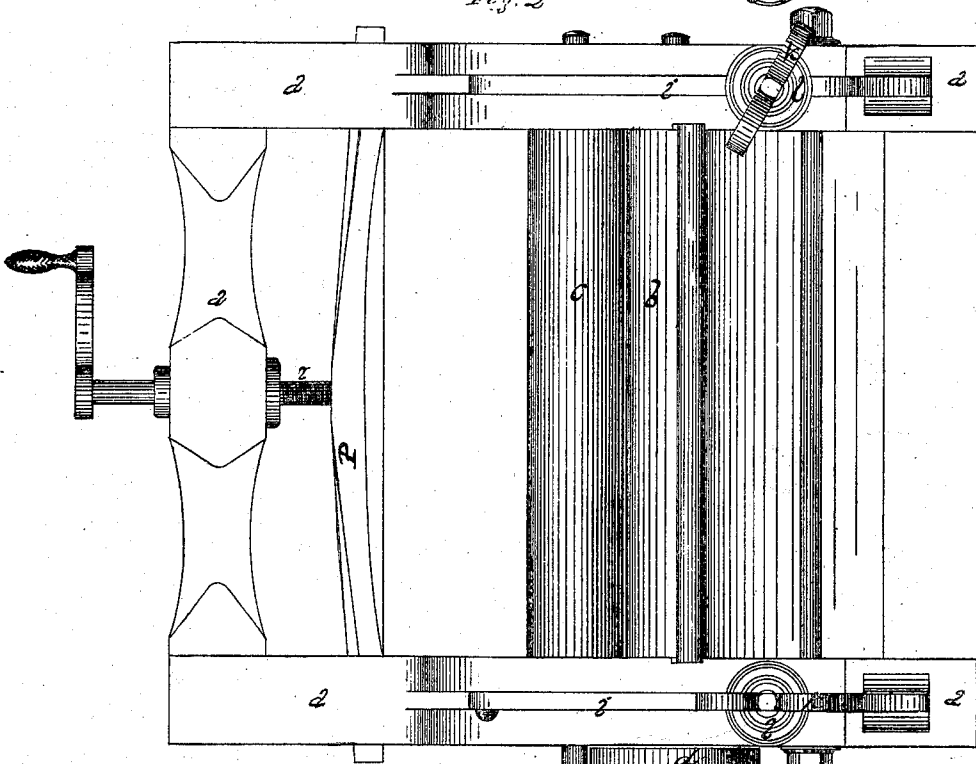
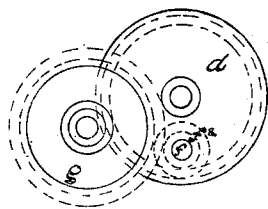


Fig. 3



Witnesses.

L. H. H. H.
George G. Sill

Inventor.

H. Jerome Burr.
by Wm. E. Simonds
Solicitor

UNITED STATES PATENT OFFICE.

H. JEROME BURR, OF BLOOMFIELD, ASSIGNOR TO HIMSELF AND WM. E. SIMONDS, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. **143,220**, dated September 30, 1873; application filed July 31, 1873.

To all whom it may concern:

Be it known that I, H. JEROME BURR, of Bloomfield, in the county of Hartford and State of Connecticut, have invented certain Improvements in Clothes-Wringers, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is an end view; Fig. 2 is a (rear) side view; and Fig. 3 is a detached view, showing the relative position of the gear-wheels. (To be turned to the right in reading.)

The invention consists in the construction and arrangement of the gears which connect the rolls, being such that, however far apart (within limits) the rolls may be, the gears will still and always be in connection; further, in a new method and arrangement for clamping the wringer to a wash-tub; further, in a new arrangement of, and attachments for, the springs which bear upon the upper roller.

The letter *a* indicates the frame of the wringer, made of wood, metal, or other material. *b* is the lower stationary roll; *c*, the upper movable roll. On the end of the axle of the lower roll is fixed the inside gear-wheel *d*—that is, a wheel having a gear cut on the inside of its circumferential band. On the same axle is hung—so that it can turn thereon—the covering-plate *e*, from which projects the pillar *e'*, which is hollow, and forms a bearing for the crank-shaft *f*, which runs through it, having fixed upon its inner end a small pinion-gear, *f*², which is broad enough on its face so that it meshes into the inside gear of the wheel *c*, and also into the common gear-wheel *g*, which is fast upon the axle of the upper roll. The arm *h* connects the axle of the upper roll and the crank-shaft *f*, turning upon both of them, as occasion requires. Power is applied to the wringer by means of the crank *f*¹.

The effect of this arrangement of gears is such that they may be pulled apart till the small pinion-gear is directly in line between the shafts of the upper and the lower roll, and the gears will still mesh.

The main purpose served by the plate *e* is

that of an arm to connect the shaft of the lower roll and the crank-shaft; it, however, serves the additional purpose of covering the inside gear. This arrangement of gears can be put upon both ends of the rolls, if desired. On the rear of the wringer are pivoted the clamps *i*, pressed outward by springs which underlie them, and pressed inward to make the faces of the clamps take hold upon the wash-tub, by the thumb-screws *k* working in the pillar-sockets *l*. The bearings for the axles at the ends of the upper roll are formed by forks in the lower ends of the cylindrical bars *m*, which lower ends are headed for that purpose, and they slide up and down, as occasion may require, in cylindrical grooves made on either side of the opening in the frame. (Seen in Fig. 1.) The upper ends of these bars *m* slide through circular plates *n*, which rest upon springs *o*, the lower ends of which springs rest upon the headed lower ends of the bars *m*. A cross-bar, *p*, rests by its ends upon the plates *n*, being pierced for the passage through of the bars *m*. By means of the screw *r* pressure is put upon the cross-bar *p*, and consequently upon the upper roll.

The parts not hereinafter claimed are supposed to be old.

I claim as my invention—

1. The combination of the two larger gears with the smaller pinion, the axles of the former being connected with the axle of the latter by arms (or plate) turning upon said axles, substantially as described, and for the purpose set forth.

2. The combination of the wringer-frame *a*, the pivoted clamps *i*, the thumb-screws *k*, and the pillar-sockets *l*, constructed, arranged, and operated substantially as described, for the purpose set forth.

3. The combination and arrangement of the screw *r*, the cross-bar *p*, the circular plates *n*, the springs *o*, and the bars *m* with the axle ends of the upper wringer-roll.

Dated October 26, 1871.

H. JEROME BURR.

Witnesses:

WM. EDGAR SIMONDS,
SARAH J. SIMONDS.