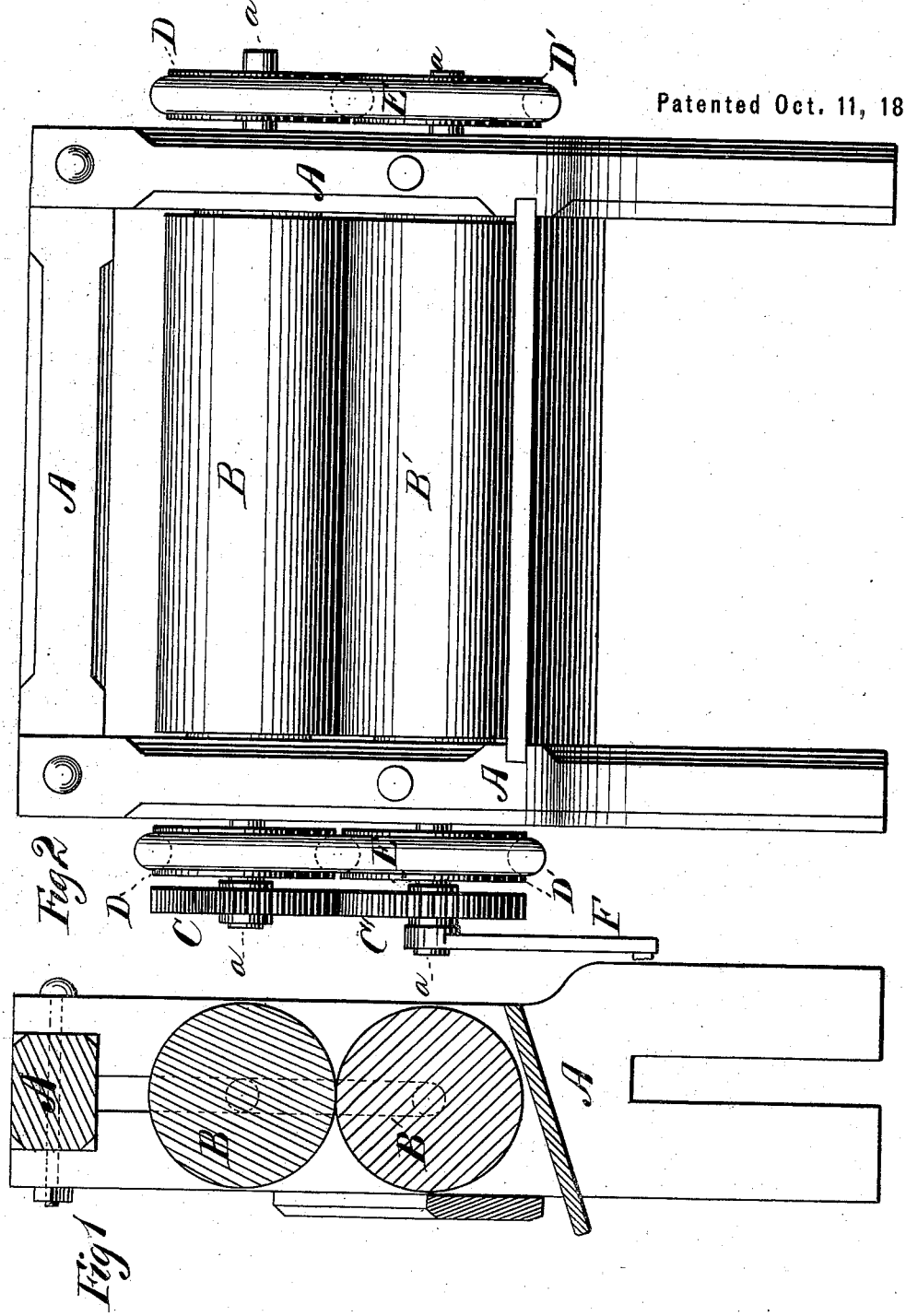
T. J. DICKERSON.
Wringer.

No. 168,727.

Patented Oct. 11, 1875.



WITNESSES
E. H. Bates
Francis J. Mase.

By

INVENTOR
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UNITED STATES PATENT OFFICE.

THEODORE J. DICKERSON, OF AUBURN, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHRISTOPHER G. GIBBARD, OF SAME PLACE.

IMPROVEMENT IN WRINGERS.

Specification forming part of Letters Patent No. **168,727**, dated October 11, 1875; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, THEODORE J. DICKERSON, of Auburn, in the county of Cayuga and State of New York, have invented a new and valuable Improvement in Clothes-Wringers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a transverse vertical section of my clothes-wringer, and Fig. 2 is a plan view of the same.

This invention has relation to improvements in clothes-wringers; and the nature thereof consists in the combination, with the rubber rollers of a wringer, which are caused to rotate in opposite direction by means of suitable gearing, of elastic tension-bands passing over pulley-wheels on the ends of the said rollers, the pulley-wheels of one of these rollers being loosely applied on their spindles, and rotating independently thereof, whereby the movements of the bands during the operation of the rollers produces a rolling frictional contact with the pulleys, thereby greatly lessening the wear and tear of the former, as will be hereinafter more fully explained.

In the annexed drawings, A designates the frame of my improved wringer, supporting two rubber rollers, B B′, which are mounted in the ends of the said frame, with the ends of their spindles *a* projecting through it sufficiently to receive two gear-wheels, C C′, the former of which is upon the upper, and the latter upon the lower roller, as shown in Fig. 2. D D′ represent, preferably, grooved pulley-wheels, the former of which are applied loosely upon the spindles of the upper roller, and the latter rigidly upon those of the lower roller. Over these wheels are stretched elastic tension-bands E, of suitable strength, which, by their contraction and resistance to expansion, supply the expressive force which frees a garment of surplus water previous to drying.

Rollers B B′ are operated in opposite directions by means of a crank-arm, F, applied upon the end of the spindle of the latter, and while they are actuated, the tension-bands E, not being crossed, and the upper pulley-wheels D, not being keyed or otherwise secured upon their spindles, will in no manner perform the function of endless belts, but will be confined to supplying the force for holding the rollers together and expressing the water from a fabric passing between the said rollers.

If the upper rollers were keyed upon their spindles, the effect of the bands E would be that of endless belts, and the power exercised would tend to turn the upper roller in an opposite direction to that imparted to it by gear-wheels C C′. If the power of the crank-arm be sufficient, the rollers would be actuated, and the bands compelled to slip over the periphery of the upper pulley D, thus producing a very great degree of friction, which speedily wears away the surfaces of the said bands, and greatly increases the labor of working the wringer. By applying the upper pulleys loosely upon their spindles, the contact of the bands thereon produces rolling friction, which is barely appreciable.

It will be evident, from the above description, that the bands E are, in the fullest sense, tension-bands, their function being only to produce a force adequate to holding the rollers together and squeezing water out of a garment; also, that this effect, as well as the entire absence of friction, is due to the fact that the upper pulley-wheels D rotate loosely on their spindles, and allow the said roller to be operated independently thereof.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with rollers B B′, operated in opposite directions by suitable gears, of the tension-bands E, pulleys D, loosely applied upon one of the rollers, and pulleys D′, rigidly secured to the other, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

THEODORE J. DICKERSON.

Witnesses:
F. G. DAY,
CHRISTOPHER G. GIBBARD.