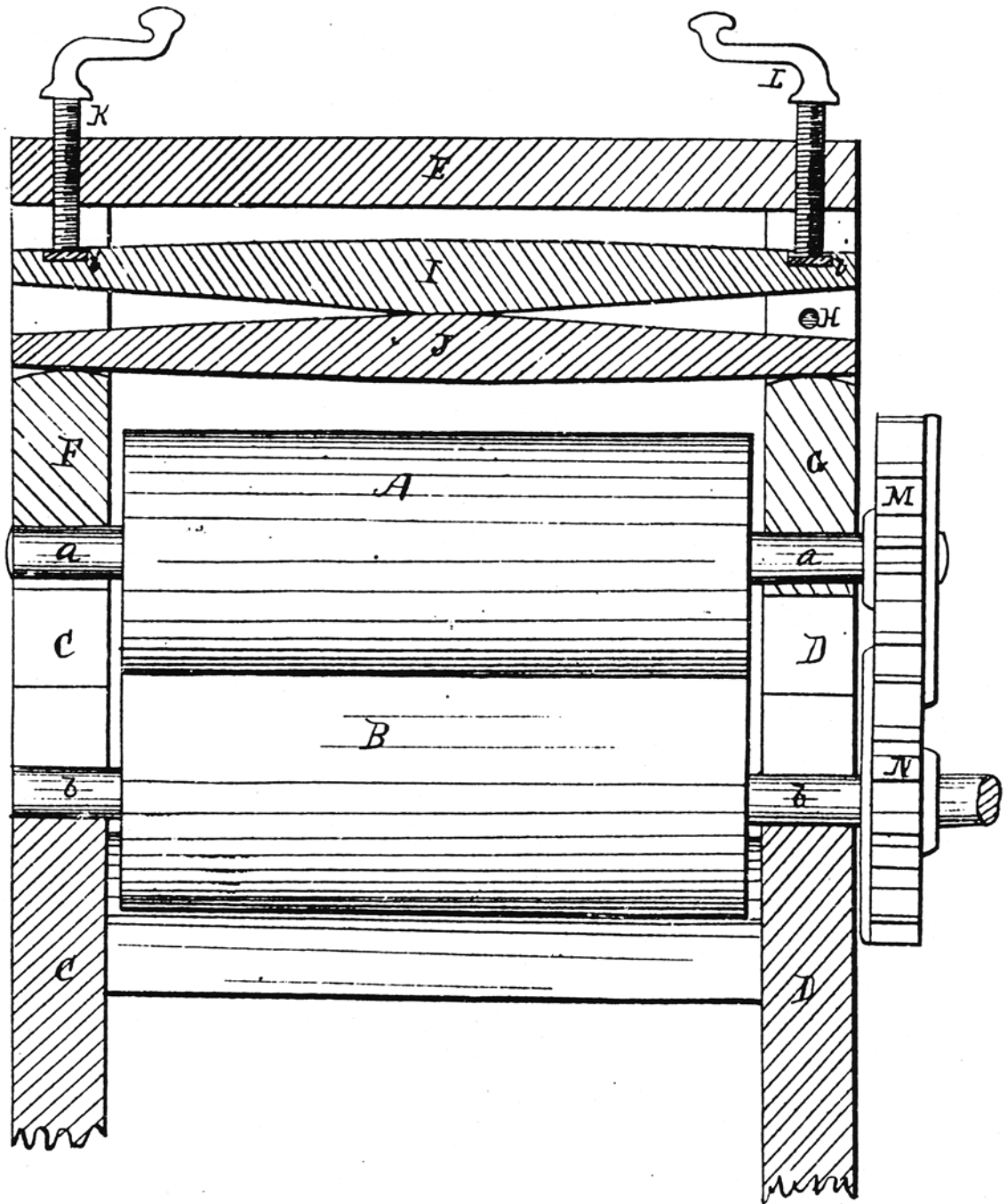


Bailey & Couch. Clothes Wringer.

No 34,178.

Patented Jan 14, 1862.



Witnesses
J. L. Bailey

J. A. Matthews

Inventor
A. M. Bailey
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UNITED STATES PATENT OFFICE.

ALFRED M. BAILEY AND JOHN O. COUCH, OF MIDDLEFIELD, CONNECTICUT,
ASSIGNORS TO THE METROPOLITAN WASHING MACHINE COMPANY.

IMPROVED CLOTHES-WRINGER.

Specification forming part of Letters Patent No. 34,178, dated January 14, 1862.

To all whom it may concern:

Be it known that we, ALFRED M. BAILEY and JOHN O. COUCH, both of Middlefield, in the county of Middlesex and State of Connecticut, have invented a certain, new, useful, and important Improvement in Clothes-Wringing Machines; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, and which is a vertical section through our machine in the plane of the axis of the rollers.

Our improvement relates to the motions of the axes of the rollers when subject to a strain in consequence of the reception of large masses of clothing between them. It allows the use of gearing at one end of the rolls to compel both to be turned simultaneously and allows at the same time a very complete and perfect action of elastic strips or springs of any desired form, so that when the machine is acting upon thin masses of clothing it may operate very perfectly, and exactly as if our invention were not applied, and that when the machine is acting upon very thick masses it may not disengage its gear-wheels one from the other, while it may still be able to render available the effect of the whole or a portion of its springs.

The drawing represents the form in which we prefer to construct our invention.

A and B are the two rollers of rubber or other suitable material, and D E is the framing which supports them. The lower roller B rests directly on the bottom of suitable slots in the framing, and is immovable, except to simply rotate on its axis. The upper roller A rests upon B, and is guided and pressed down by boxes F G, which are guided in the said slot, so as to be capable of a vertical motion only. The shafts of these rollers project beyond the framing on the right-hand side and carry two suitable gear-wheels M N, the teeth of which are so formed and so braced by a stout flange at the edge of each that they will allow the axes *a* and *b* to separate to a moderate extent without disconnecting the gear.

J is a spring of elastic wood, having the form represented and resting on the boxes F G at each end. I is a corresponding spring in the reverse position and armed with metal plates *i i* at the points designated.

K L are screws, turning in threads in the

top of the framing, adapted to press with a desired degree of force upon the plates *i i*, and thus, through the action of the springs I J and the boxes F G, to hold both ends of the roller A down upon B. The shortness and central position of the bearing-surface presented by the springs I J each to the other makes the elastic pressure of the springs upon the boxes F G very nearly equal, even when one of the screws K or L is turned down more than the other.

II is a stop or small pin inserted in D at the point represented. It stands directly across the slot in which the box G slides and serves as a stop to limit its rise. When out of contact therewith, the box G slides under the action of the elastic force of the springs; but when elevated by any sufficient mass of clothing into contact with this pin its motion is suddenly and rigidly stopped. The excess of the force, if any there be, elevating the axis *a*, is relieved only by a further upward motion of the box F, which motion is facilitated by the further elastic action not alone of that end of I and J nearest to F, but of the entire length of both these springs.

The effect of our invention is to produce a novel and very desirable action of the machine, the gears fulfilling their proper function perfectly under all conditions, and the springs acting with full perfection on both ends up to the limit determined by the position of II, and beyond that limit yielding very efficiently by the further rise of the box F at the end opposite the gear, while the box G is rigidly held and the contact of the gears maintained.

Having now fully described our invention, what we claim as new, and desire to secure by Letters Patent, is as follows:

In clothes-wringing machines having rollers A B, geared together at one end by gear-wheels M N, constructing and arranging the spring or springs, and the stop II or its equivalent, substantially as and for the purposes herein set forth.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

A. M. BAILEY.
J. O. COUCH.

Witnesses:

L. A. MATHEWS,
F. L. BAILEY.