(No Model.)

W. M. BRINKERHOFF.

CLOTHES WRINGER.

No. 377,545. Patented Feb. 7, 1888.

Fig. 1.

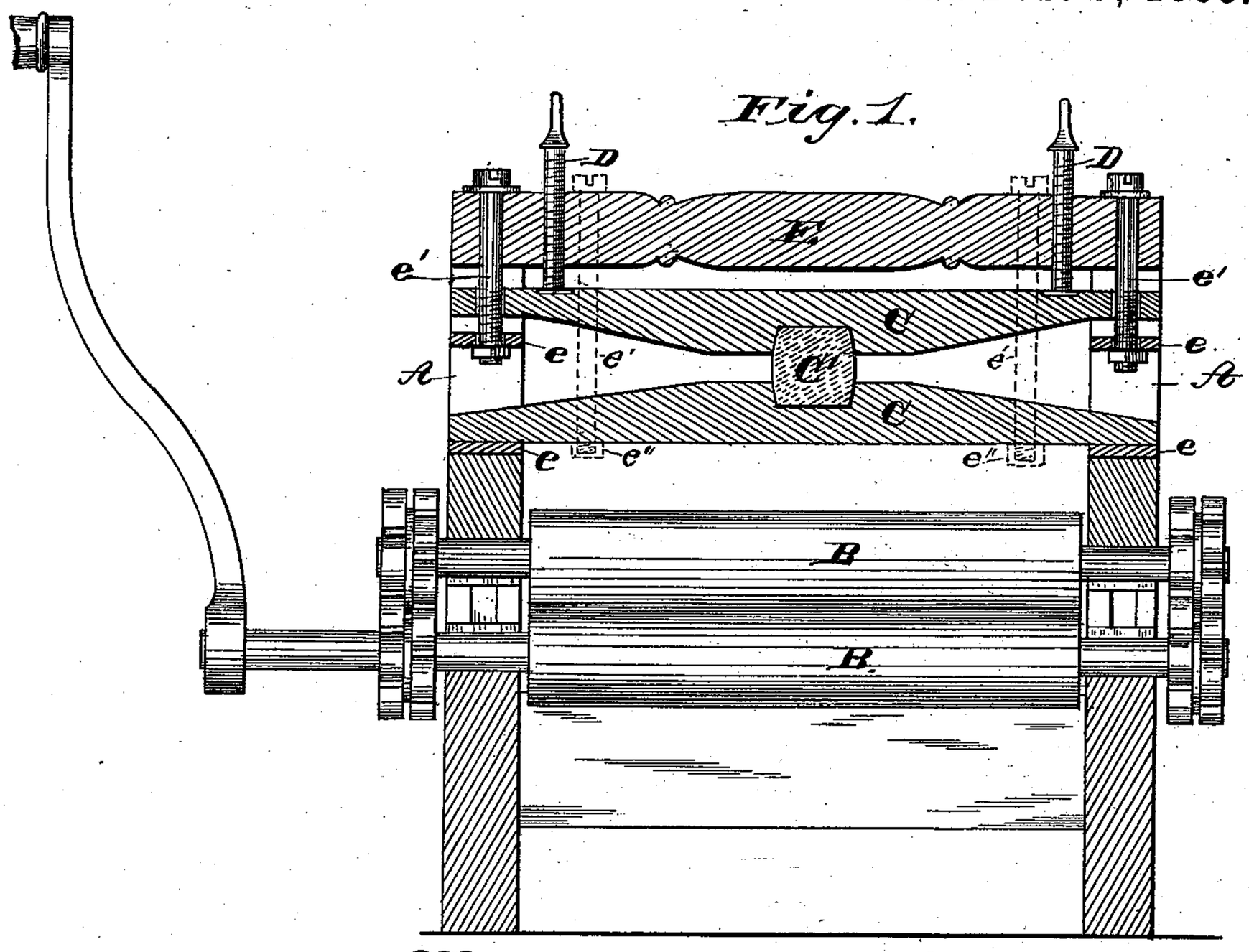


Fig. 3

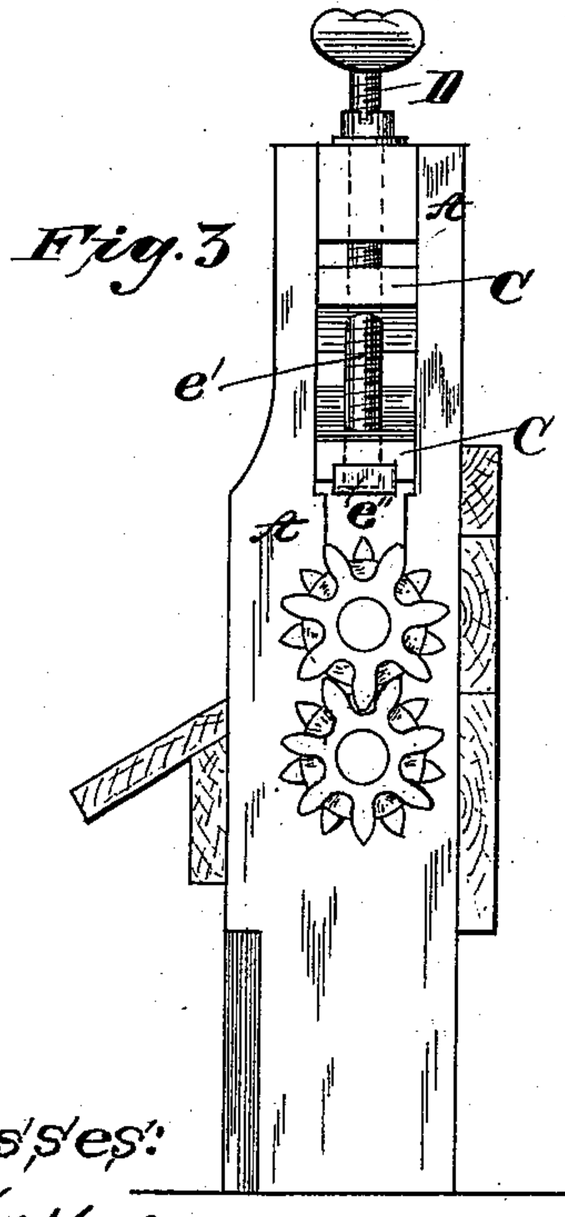
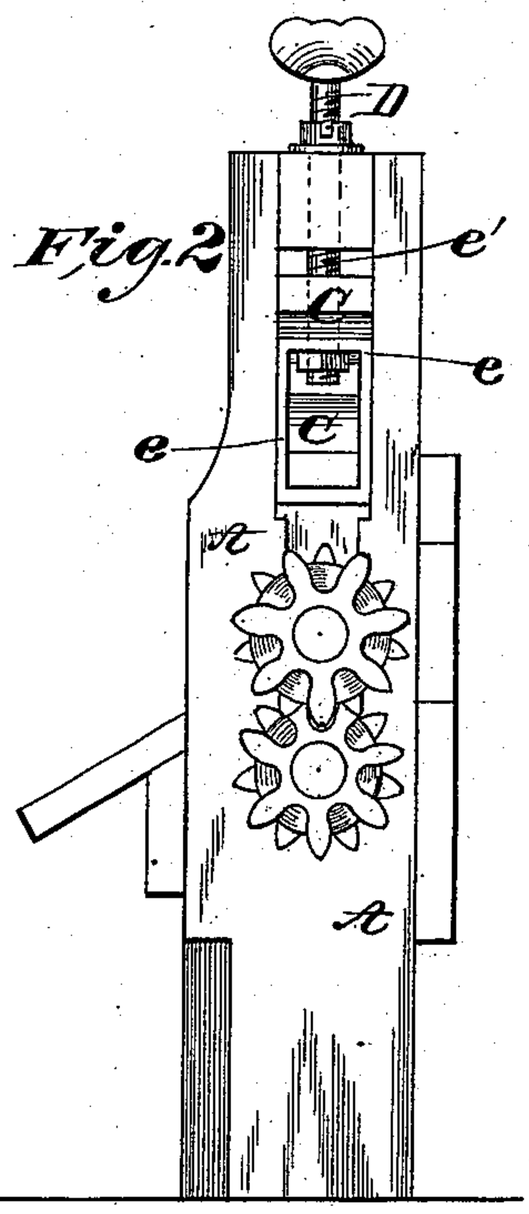


Fig. 2



Witnesses:
C. T. Watkins
L. P. Whitaker,

Inventor:
Warren M. Brinkerhoff
by his atty's
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UNITED STATES PATENT OFFICE.

WARREN M. BRINKERHOFF, OF AUBURN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO JACOB BRINKERHOFF, OF SAME PLACE.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 377,545, dated February 7, 1888.

Application filed June 23, 1886. Serial No. 206,013. (No model.)

To all whom it may concern:

Be it known that I, WARREN M. BRINKERHOFF, a citizen of the United States, residing at Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Clothes-Wringers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in stops for clothes-wringers, and the object of the same is to provide an efficient stop for the class of wringers provided with pressure-regulating devices.

In the drawings I have shown two forms in which I have contemplated applying my invention, and have fully disclosed such invention in the specification and claims.

In the drawings, Figure 1 is a longitudinal vertical section of a wooden-frame wringer with one form of my stop attached thereto. Fig. 2 is an end elevation of such wringer. Fig. 3 is an end elevation showing a modified construction.

The frame A is of the ordinary or usual construction, and the rollers B B are mounted as usual, the lower roll in rigid and the upper in movable bearings. The springs C C are in this case also of wood, with an auxiliary rubber spring, C′, interposed between them. The end standards of the frame are provided with slots, within which are the movable bearings for the upper roll, and into which the ends of the springs C C project. The springs are forced downward and the pressure applied to the rolls and their bearings is increased and diminished by the set-screws D D, or in any other suitable manner. In order to provide a stop which will arrest the pressure exerted at such point as to produce the result desired, I employ in this instance two rectangular frames, *e*, one of which is placed at each end of the wringer within the slot of the standard, and the ends of the lower spring are passed into such frames and rest upon the lower cross-bar of the same. A bolt, *e′*, passes through the upper cross-bar of each frame and is provided with a nut at its lower end. This bolt may be reversed and the nut placed at the upper end instead of the lower, if desired. The opening in the upper cross bar of the frame is large enough to permit said frame to move easily upon the bolt *e′*.

The movable bearings of the upper roll being immediately beneath the frames *e*, such bearings and the roll with them are forced downward as far as the adjustment of the bolt *e′* will permit. This adjustment is such that the rolls are brought firmly in contact, but without any injurious pressure upon each other or upon their bearings. In this position the slightest upward movement of the movable bearings of the upper roll will cause them to receive the arrested pressure, thereby insuring the full measure of efficiency in the operation of the machine.

In Fig. 3, instead of employing the rectangular frame, I construct the bolts *e′* in such manner as to effect the same results. The bolts *e′* in this case are made longer and pass through the ends of both springs C C, the lower end of each bolt entering a nut, *e″*, beneath the lower spring, said nuts forming stops in this instance; or the head of the bolt may be placed beneath the spring and have its nut at its upper end above the cross-bar of the wringer-frame. I prefer to place such bolts inside the end standards of the wringer, as clearly shown in dotted lines in Fig. 1; but they may be placed in the same position as in the other construction by making them capable of a vertical movement through the upper spring and cross-bar. In some cases the frame *e* and the movable bearings are made integral or in one piece. If made separate, they may, if desired, be connected together.

In practice it is designed that the stop shall be adjusted by the maker and the article sold and used as it leaves the manufactory until the wear of the rolls or other parts shall require a new adjustment.

My improved stop is effective in protecting the rolls and their bearings from undue wear and the frame from much injurious strain, is durable, and by its means great nicety of adjustment is secured.

I do not confine myself to the exact con-

structions herein shown and described, as great variations may be made in the same without departing from the spirit of my invention.

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

1. The combination, with a wringer-frame, of rolls mounted therein, pressure-regulating devices for said rolls, a stop interposed between said pressure-regulating devices and said rolls or their journals, and a bolt extending from and connecting the said stop with a stationary part of the wringer, substantially as described.

2. The combination, with a wringer-frame, of the rolls therein, a movable bearing for one of said rolls, a stop having a part engaging said bearing, pressure-regulating devices engaging said stop, and a screw-threaded bolt and nut connecting said stop with a stationary part of the frame, substantially as described.

3. The combination, with a wringer-frame, of rolls therein and pressure devices for said rolls, a frame, *e*, engaged by the pressure devices, and a bolt connecting the frame *e* with a stationary part of the wringer-frame, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WARREN M. BRINKERHOFF.

Witnesses:
J. BRINKERHOFF,
E. T. WALKER.