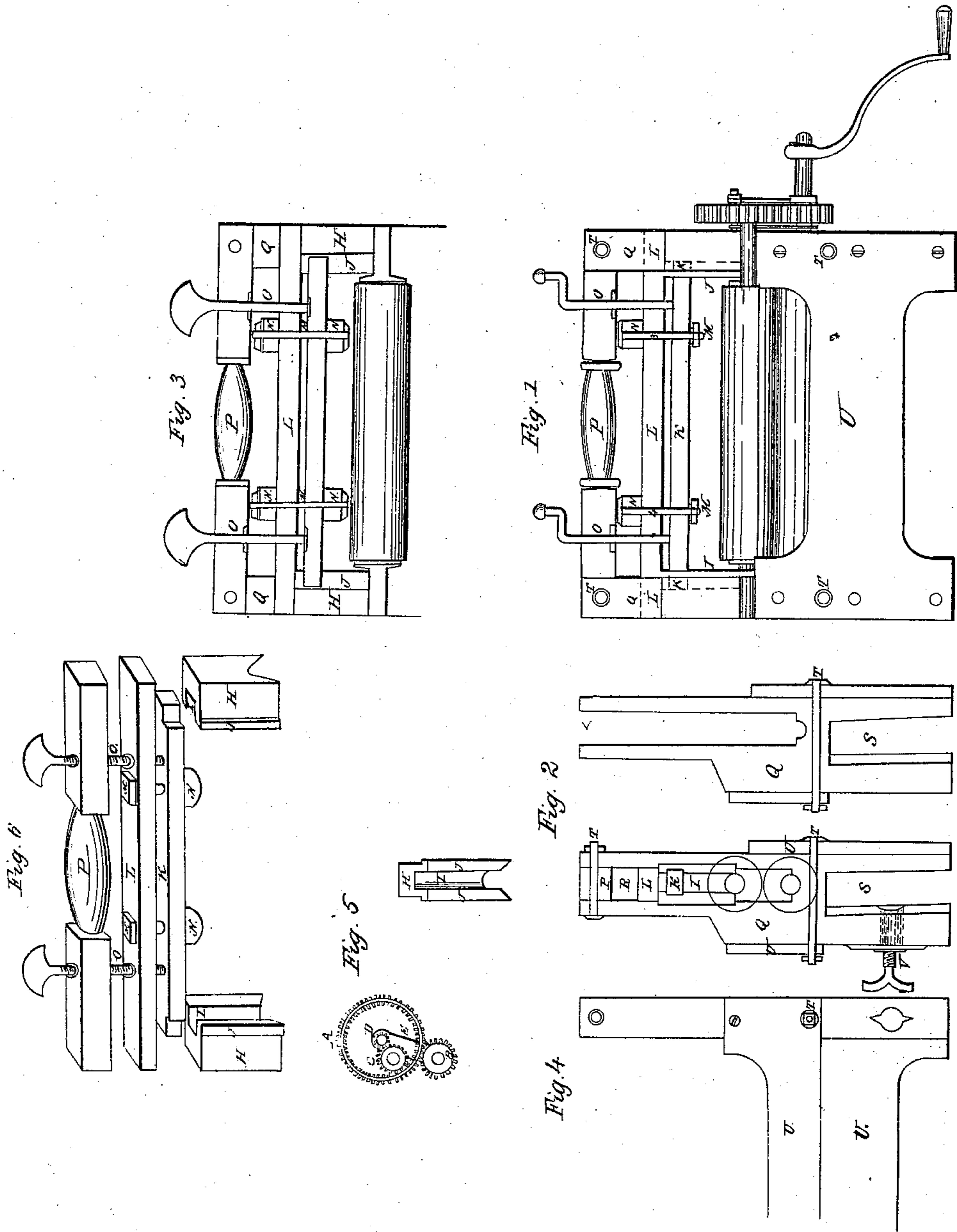


*R. B. Huganin,*

*Wringer,*

*No 62,851,*

*Patented Mar. 12, 1867.*



*Witnesses:*

*J. H. Hamilton*  
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# United States Patent Office.

ROBERT B. HUGUNIN. OF CLEVELAND, OHIO.

*Letters Patent No. 62,851, dated March 12, 1867.*

## IMPROVED WRINGING MACHINE.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ROBERT B. HUGUNIN, of the city of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Clothes-Wringers: and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification.

This invention consists in the arrangement and combination of three single and one double gear-wheel, arranged as follows: One single-gear wheel on the shafts of each of the rubber rollers, the lower one moving on the outer surface and the upper one on the inner surface of the rim of the double-gear wheel. The double-gear wheel is secured to the lower shaft by toggles, or their equivalents, passing over the pivot shaft, passing through its centre, thence over the lower shaft. On the pivot shaft between these toggles a single cog-wheel, or its equivalent, a roller, runs loosely. This cog acting on the back of the cog on the upper shaft keeps it in constant adjustment with the teeth on the double-gear wheel when the rubber rollers are pressed apart. The toggles keep the double gear in adjustment with the cog on the lower shaft. Also, in the arrangement and combination of two wooden or other bars attached together near their centres by two bolts with rubber spring collars under the heads and nuts of the same, and grooved journal blocks and two adjusting screws. The upper bar when in position in the frame rests its ends on the tops of the journal blocks, which are grooved on their inner sides to correspond with the ends of the lower bar, which ends move up and down in said grooves. These grooves steady the lower bar, which, in turn, steadies the journal blocks and prevents them from falling in at the top. In use, two adjusting screws are used, passing down through the stiffening piece passing across the top of the frame, then down, loosely, clear through the upper spring bar, resting their points on the top of the lower spring bar, which, being pressed down at each end, pulls down, by means of the two bolts, the upper bar on to the journal blocks, which in turn press the elastic rollers together. The elasticity of the rubber collars and wooden bars, as arranged and combined, give to the rollers power to accommodate themselves to the thickness of cloth passing between them in wringing. In the drawings—

Figure 1 shows my wringer arrangement and combination complete as in use.

Figure 2 shows an end view of the elastic rollers, spring bars, journal block, &c.

Figure 3 shows the front side of the upper part of one of my wringers, also arrangement of the spring bars, bolts, rubber collars under their heads and nuts, journal blocks, and two adjusting screws.

Figure 4 shows a section of the back part of the frame.

Figure 5 shows my self-adjusting gear-wheels and toggles.

Figure 6, view of spring bars and journal blocks disconnected from the frame.

To enable those skilled in the art to fully understand my invention, I will proceed to describe its construction and operation.

Similar letters of reference indicate corresponding parts in all the figures.

In the drawings, A represents a double-gear wheel, or one with teeth on the inner and outer surface of its rim. B is a single-gear wheel firmly secured to the shaft of the driving or lower roller, and working on the outer surface of the rim of the wheel A. C is a similar wheel to B, only smaller than it in proportion as the outer diameters of the wheels A and B, &c., so that uniform rapidity may be obtained in turning the two rollers. The wheel C is secured firmly to the end of the shaft of the upper roll. D is a small single-gear wheel running loosely on the pivot passing through the centre of the wheel A. It acts as a backing to the wheel C, keeping it in constant adjustment with the wheel A, without toggles from the wheel A to the upper shaft. E E, toggles for keeping the wheel A in position, as well as in adjustment with the wheel B, on the lower shaft. F, pivot shaft of wheel A; one end of the toggles is secured to this shaft. G, upper or driven shaft. H H, journal blocks. I I, grooves on the inner sides of the same. J J, projections of the journal blocks, to prevent them from working outwards through the slots of the end pieces of the frame in which they move. K, lower bar or spring-piece, made narrower at its ends to fit the grooves I I in the journal blocks, in which its ends move, and by which they are guided. This bar also steadies the journal blocks and keeps them in an upright position. L, upper bar or spring-piece, narrowed down at its ends to fit loosely the slots in the end pieces of the frame. This upper bar rests on the tops of the journal blocks, directly under the stiffening piece going across the top of the

frame, and through which the adjusting screws pass. M M, ordinary bolts and nuts used to loosely attach together the two bars K and L. These bolts pass clear through these bars, about half way from their ends to their centres. N N, small rubber spring collars used under the heads or nuts of the bolts M M, on the upper side of the bar L, and lower side of the bar K. O O, adjusting screws passing down through the stiffening piece, and loosely through the bar L to the bar K, where the points of these screws rest. The screws O O pass through screw plates on the under side of the stiffening piece; their points rest on a small metal plate on the top side of the lower bar K. In use these screws press down the ends of the lower bar, and by means of the bolts M M this pressure is conveyed to the upper bar L, which in turn, resting on the tops of the journal blocks, gives pressure to the upper roll. For ordinary purposes, perhaps no rubber spring collars, in addition to the bars K L, would be required. P, stiffening bar bolted across the top of the frame. Q Q, end pieces of the frame. R R, straight slots cut in the end pieces of the frame to accommodate the stiffening bar, spring bars, journal blocks, and journal of the rubber rollers. S S, slots cut in the ends of the end pieces Q Q, to fit over the tub or box. T T, strengthening bolts. U U, side pieces for stiffening the frame and guiding the clothes in wringing. V V, movable clamps for fastening the machine to the tub or box.

In operation this machine is used as other wringers.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. I claim the arrangement and combination of the double-gear wheel A and single-gear wheels B, C, and D, and toggles E E, or their equivalents, as described, for the purposes specified.
2. I claim the arrangement and combination of the stiffening bar P, spring bars K and L, bolts M M, spring collars N N, and adjusting screws O O, as described, for the purposes specified.

R. B. HUGUNIN.

Witnesses:

J. K. HAMILTON,  
L. H. SARGENT.