

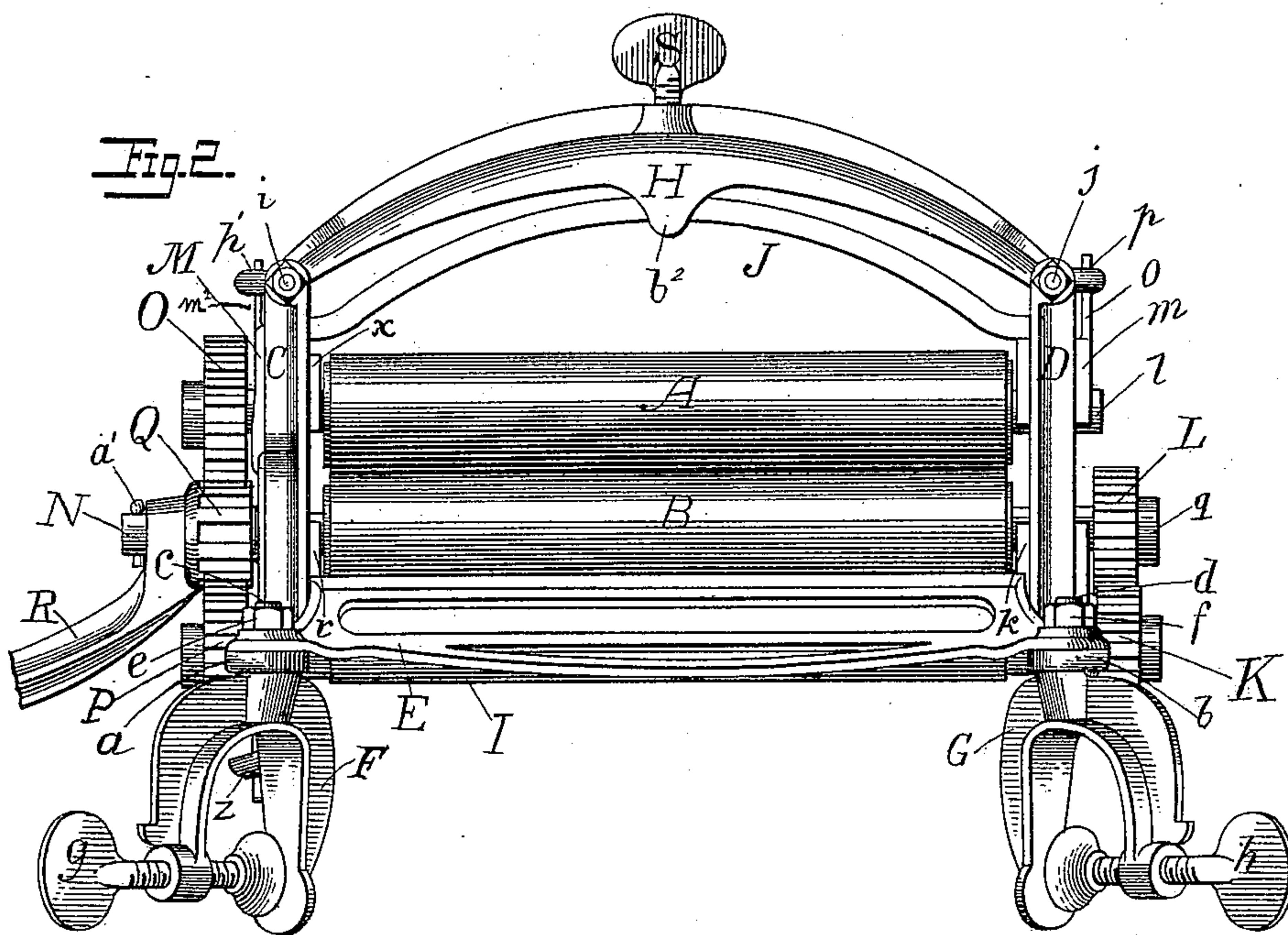
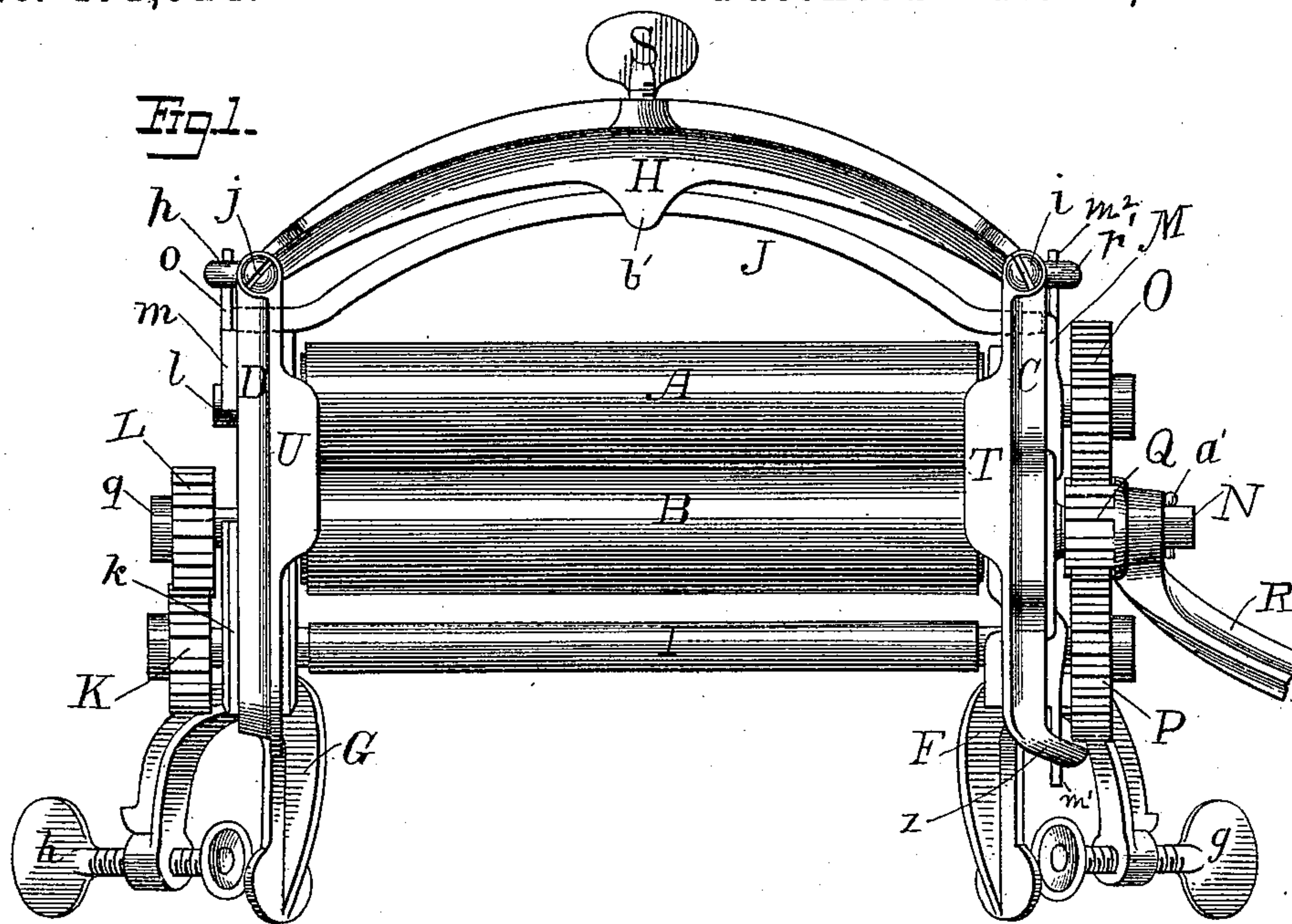
(No Model.)

2 Sheets—Sheet 1.

C. WHEELER, Jr.
CLOTHES WRINGER.

No. 471,924.

Patented Mar. 29, 1892.



WITNESSES

John G. Hinkel
Mary A. Morris

INVENTOR

Cyrenus Wheeler

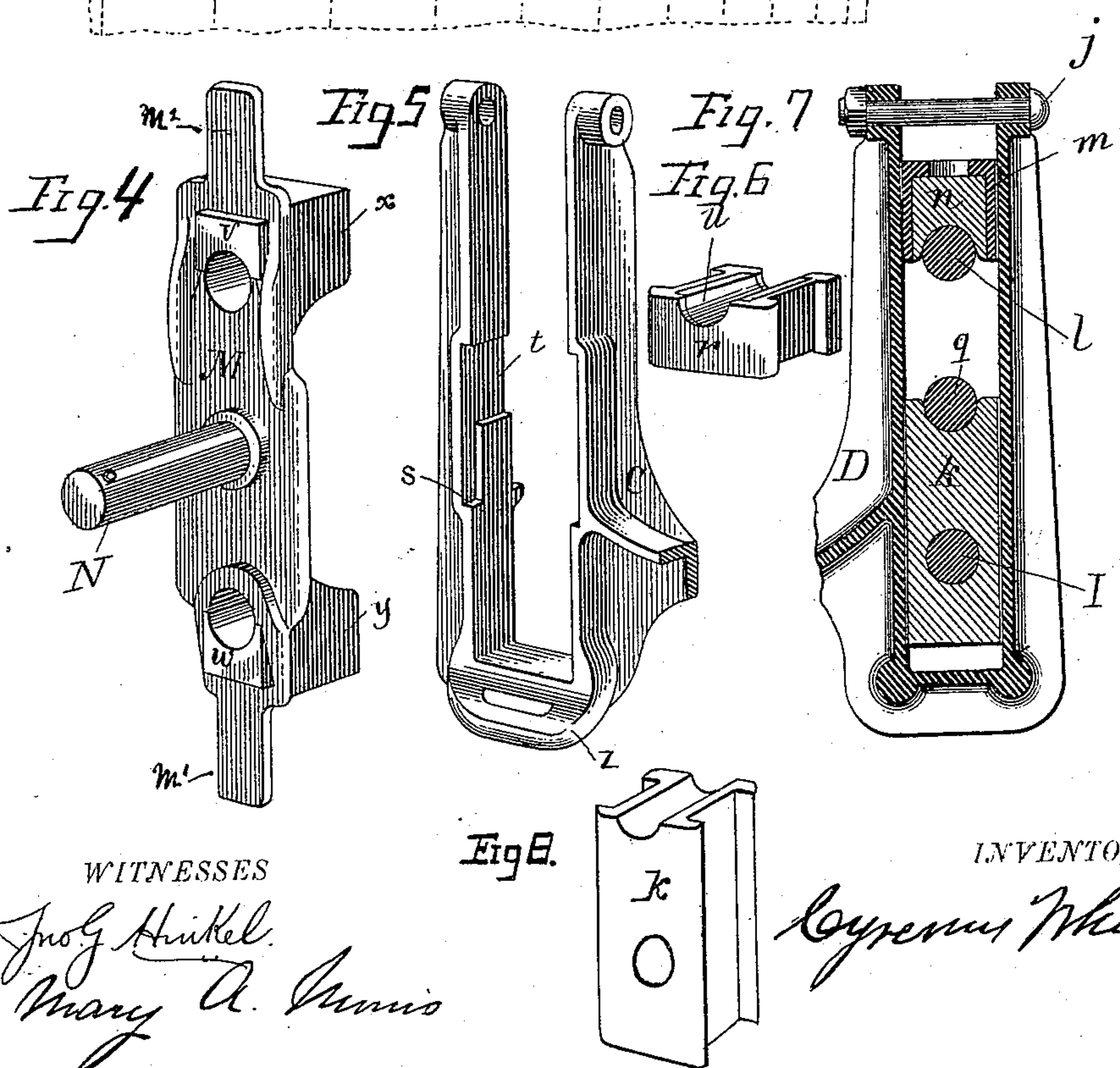
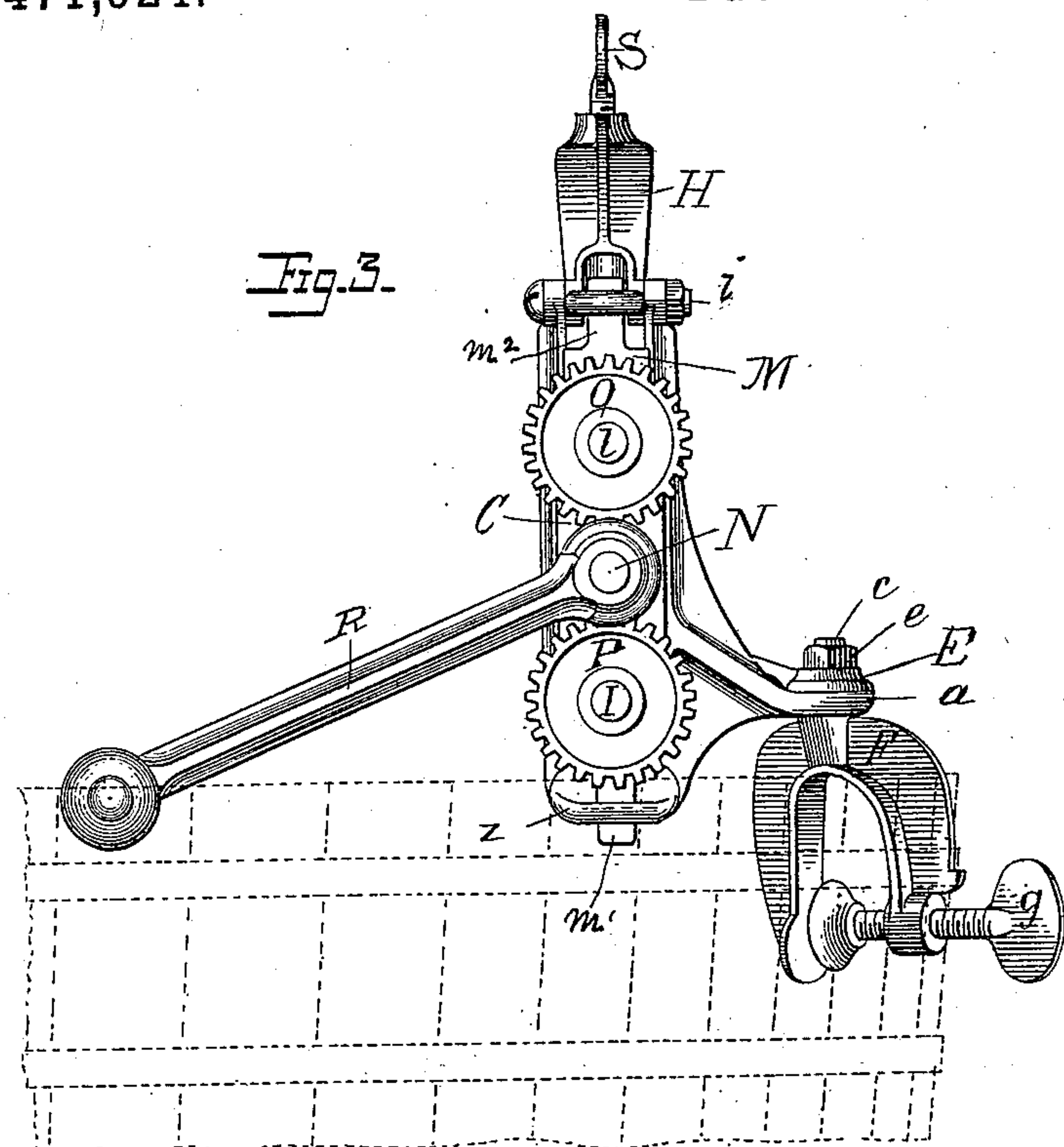
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Cyrus Wheeler

UNITED STATES PATENT OFFICE.

CYRENUS WHEELER, JR., OF AUBURN, NEW YORK.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 471,924, dated March 29, 1892.

Application filed September 18, 1890. Serial No. 365,370. (No model.)

To all whom it may concern:

Be it known that I, CYRENUS WHEELER, Jr., a citizen of the United States, residing at the city of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Clothes-Wringers, of which the following is a specification.

My improvements relate to clothes-wringers and are improvements upon the machine patented to Jacob Brinkerhoff December 26, 1871, No. 122,220, the object being to cheapen and simplify its construction and increase its effectiveness and durability, as will be hereinafter pointed out.

In the following description of the machine the crank end will be called the "right-hand" end, and the other end the "left-hand" end. The side where the material enters the rolls will be called the "front" side, and where it leaves the rolls the "back" side.

In the accompanying drawings, Figure 1 is a front view, and Fig. 2 a rear view. Fig. 3 is a view of the right-hand end of the machine. Fig. 4 is a view of the journal-box carrier. Fig. 5 is a view of the right-hand end piece, showing seat for the lower roll journal-box; Fig. 6, a view of the journal-box for lower roll. Fig. 7 is a view of the left-hand end in section, showing position of journal-boxes. Fig. 8 is a perspective view of the lower journal-box shown in Fig. 7.

The same letters indicate like parts in all the figures.

A is the upper and B the lower roll. These rolls have metal shafts with a covering of elastic rubber. The shafts extend beyond the rubber covering and serve as journals and for attaching the gear-wheels. A slotted metal end piece C for the right hand and end piece D for the left-hand end is provided. These end pieces have foot-pieces *a* and *b* formed with them. These foot-pieces project backward from the end pieces and are opposite the center of the counter-shaft. By this arrangement the frame-work and rolls, when in working position, are lower down on the tub or reservoir to which they are attached than they would be with the foot-pieces connected at the base of the end pieces. The cross-piece E is placed with its ends upon the foot-pieces *a* and *b*, and is securely fastened to them by means of the spindles *c* and *d* and nuts *e* and

f of the clamping-jaws F and G. These clamping-jaws have thumb-screws *g* and *h* for gripping the tub or reservoir. By this arrangement the rolls are far enough within the tub or receptacle and low enough, so that the water from the rolls will fall in the tub without the use of an apron or drip-board. An arched bar H is provided and inserted in the slots at the top of the end pieces C and D and securely fastened to them by bolts *i* and *j* passed through both. In this frame-work the rolls A B and counter-shaft I are held in operative position and in proper working relation to each other, as hereinafter described.

At the left-hand end in the slot of the end piece D a box *k* is inserted. This box is preferably made of wood, but may be of metal with wood linings, if desired. This box is made wider than the slot in the end piece, and is recessed or grooved so as to receive the edges of the metal end piece. This box has in it bearings for the left-hand ends of the counter-shaft and lower roll. The left-hand end of the upper roll A has its shaft *l* retained in working position by a box *m*, which has a wood lining *n*. This box has an extension-piece *o*, the upper end of which extends through the loop or opening *p* in the end of arched bar H, in which it is free to slide up and down with the rise and fall of roll A. This extension-piece serves to keep the box vertical in its movements and prevents the spring J, which rests loosely upon it, from being displaced. The counter-shaft I and the shaft *q* of the lower roll B have on their left-hand projecting ends gear-wheels K and L of the same size that work together. The right-hand end of the shaft *q* is supported by the removable box *r*, which is supported in a seat *s* formed in the right-hand end piece C, as clearly shown in Fig. 5. The end piece C is cut away or recessed at *t* to permit the insertion and removal of the box from its seat. This box *r* has a wood lining *u*.

For supporting the upper roll A and counter-shaft I at their right-hand ends a journal-box carrier M is provided, which has on its outward face a fixed axle N and on its inner face boxes *x* for the shaft of upper roll and *y* for the counter-shaft. (See Fig. 4.) These boxes are formed with the carrier M, and when it is in position project into the slot of the end

piece C. The boxes have wood linings *v* and *w*. The carrier M is shaped to permit the passage of the shafts *l* and *I*, so that their bearings will be upon the wood lining of the boxes.

5 The carrier M is arranged outside of and parallel to the end piece C and is retained in that position by its lower end *m'* passing through the opening or loop *z*, formed in the bottom of the end piece C, and its upper end *m*² being inserted in the opening or loop *p'* in the right-hand end of arched bar H. By this arrangement the carrier M is free to rise and fall vertically with the movements of the upper roll A.

15 To the projecting end of the shaft *l* of the upper roll is fastened gear-wheel O, and to the projecting end of counter-shaft I is fastened a gear-wheel P of the same size. On the fixed axle N is a small gear-wheel Q, which
20 has a crank R formed with it which is held in position on axle N by a pin *a'*. Under the arched bar H is placed the spring J, with its ends resting on the tops of the boxes *x* and *m*, and is prevented from displacement by lips or flanges *b'* and *b*² on the arched bar H, and
25 the extension-piece *o* of the left-hand end box of upper roll and the extension-piece of carrier M. The arched bar H has in its center a thumb-screw S by which the pressure of the
30 spring J on the bearings of the upper roll can be increased or diminished at the pleasure of the operator.

To keep the fabric in place while passing between the rolls, shield-pieces T and U are
35 formed with the end pieces on their front edges and prevent the fabric from lapping over the ends of the rolls.

Having fully described my invention, what I claim as new, and desire to obtain Letters
40 Patent for, is—

1. In combination with the rolls of a clothes-wringer and the slotted end frame-pieces, the arched bar uniting the tops of the end pieces and provided with openings in its projecting
45 ends, the bearing-boxes for the upper roll provided with extended pieces which slide in the openings in the ends of the arched bar, the arched spring resting loosely on the bearing-boxes in the upper ends of the slotted end
50 frame-pieces and retained in place by the extended pieces of the bearing-boxes, and the pressure-screw in the arched bar, substantially as described.

2. In combination with the rolls of a clothes-wringer which has a counter-shaft located below the lower roll and is geared with it at one end and with the upper roll at its other end by means of a train of gearing operated by a hand-crank and intermediate gear-pinion,
60 which are supported by a journal-box carrier, the supporting-frame consisting of the slotted metal end pieces provided with foot-pieces united to them above the bottoms of their slots and projecting backward from them, the
65 cross-bar united to said foot-pieces by the

spindles of the clamping-jaws, the arched bar united to the tops of the end pieces and provided with the openings in its projecting ends, the bearing-box of the upper roll at its left-hand end provided with an extension-piece to
70 slide in the opening of the arched bar, and the journal-box carrier at the right-hand end provided with an extension-piece at its upper end to slide in the opening at the end of the arched bar, the lower end of said carrier also
75 provided with a similar extension-piece to slide in the loop at the bottom of the right-hand end piece, substantially as shown and described.

3. In a clothes-wringer, the combination, 80 with the rolls, the counter-shaft I, and the gearing for driving the rolls, of the slotted end pieces, the right-hand one being provided with an opening or loop at its lower end, the stationary bearings for the lower roll, and the
85 sliding journal-box carrier at the right-hand end of the wringer, in which the journals of the upper roll and the shaft I have bearing provided with a projecting end *m'*, which enters the opening or loop in the said end piece
90 and is held and guided thereby, substantially as set forth.

4. In a clothes-wringer, the combination of the slotted metallic end frame-pieces, the walls of the slot in the right-hand end frame-
95 piece being recessed at *t*, the rolls and their driving-gearing, and a removable bearing *r* for the right-hand end of the lower roller adapted to be inserted into and removed from the said recess *t* from the side of the frame-
100 piece, substantially as described.

5. In a clothes-wringer, the combination, with the slotted end frame-pieces, the rolls, the counter-shaft arranged below the lower roll and geared with it at one end, and a train
105 of gearing uniting the shaft with the upper roll at the other end, of the sliding journal-box carrier arranged outside of the end frame-piece and provided with boxes which enter the slot of the frame-piece, substantially as
110 set forth.

6. In a clothes-wringer, the combination, with the slotted end frame-pieces, the rolls, the counter-shaft arranged below the lower roll and geared with it at one end, and a train
115 of gearing uniting the counter-shaft with the upper roll at the other end, of the sliding journal-box carrier M, arranged outside of the end frame-piece and provided with the boxes *x* and *y*, the stud N, the projecting ends
120 *m'* and *m*², and the wooden bearing-linings *v* and *w*, the frame-piece being provided with loops in which the said projecting ends of the journal-box carrier are confined, substantially as described.

CYRENUS WHEELER, JR.

Witnesses:

JOHN D. TELLER,

WM. HORACE HOTCHKISS.