No. 741,911. PATENTED OCT. 20, 1903.

P. KIBBY.

WRINGER.

APPLICATION FILED MAR. 17, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

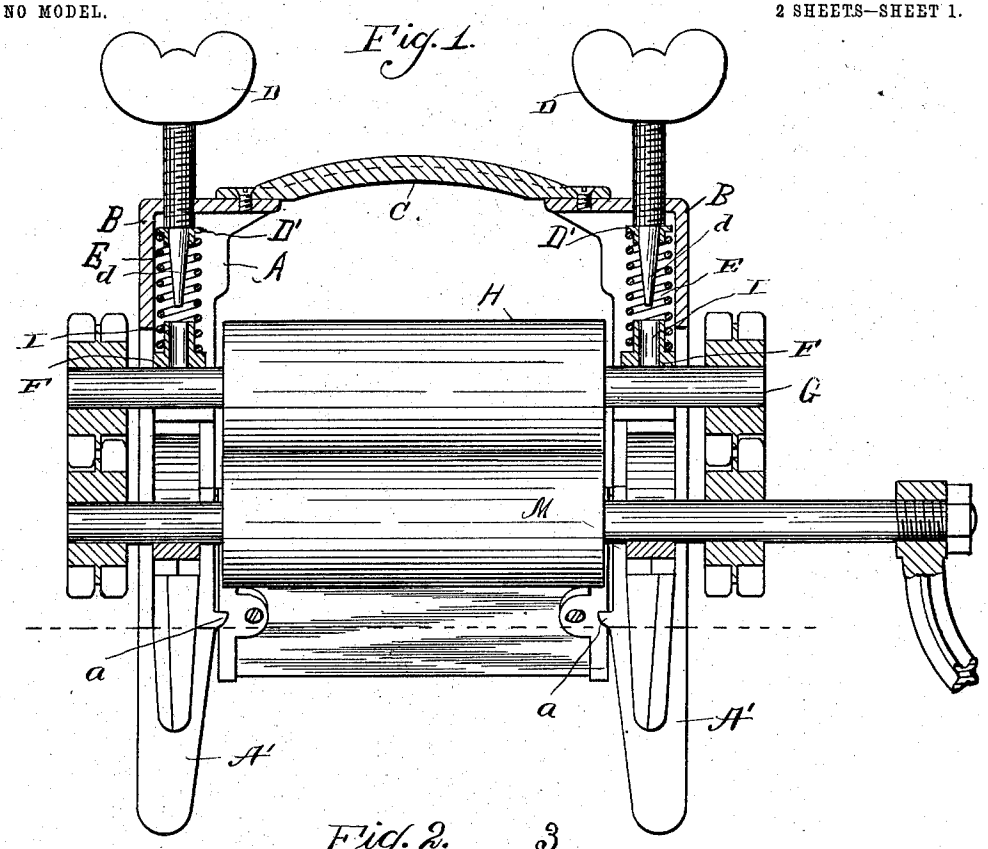
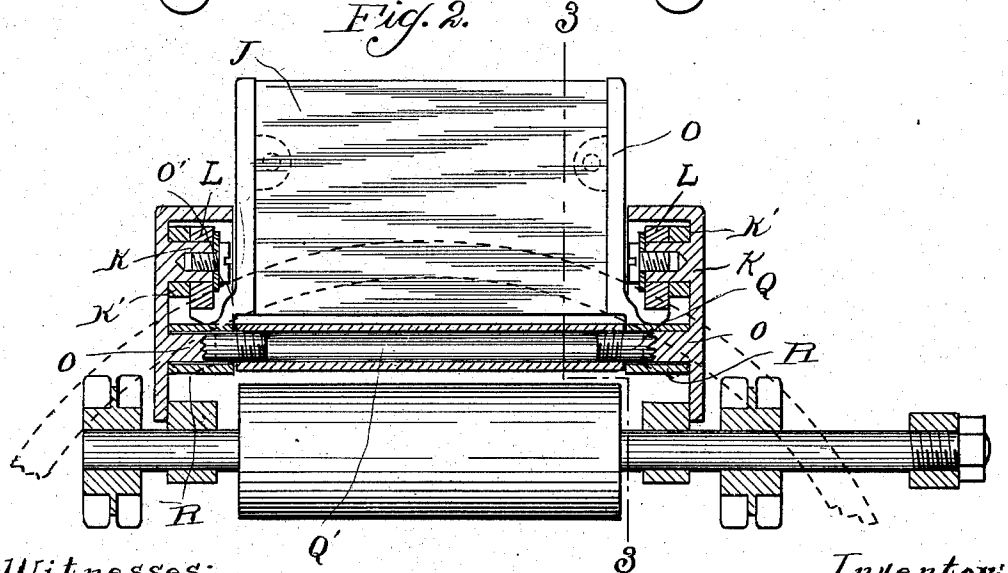


Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

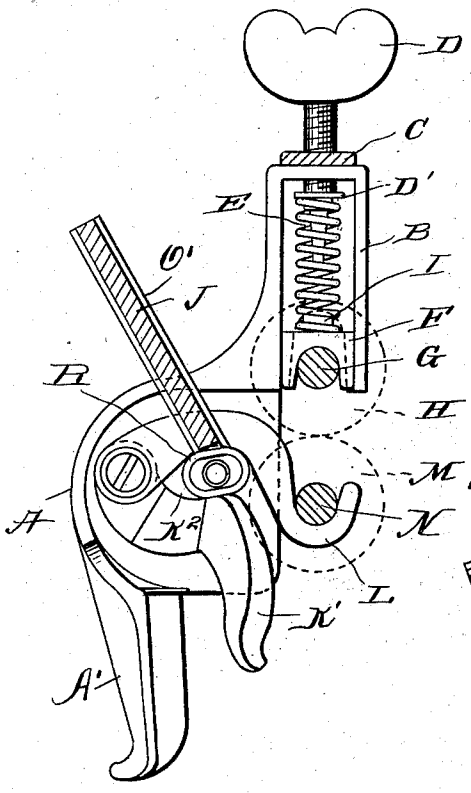
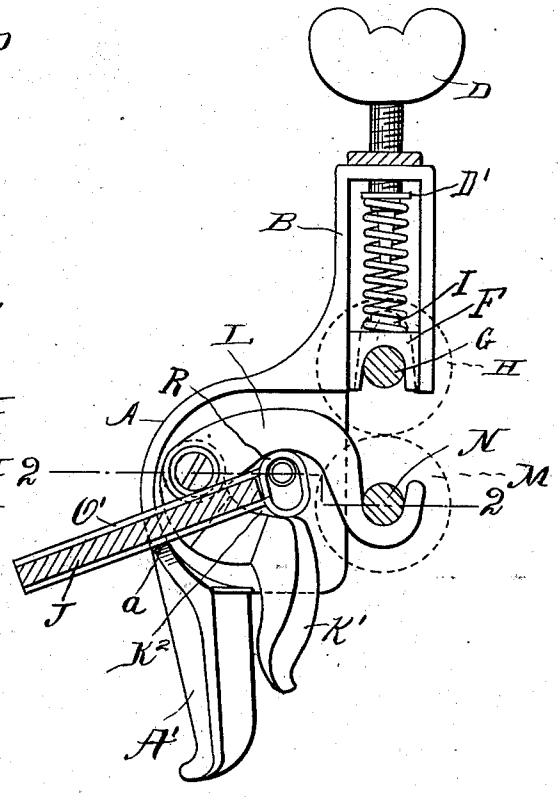


Fig. 4.



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No. 741,911. Patented October 20, 1903.

UNITED STATES PATENT OFFICE.

PALMER KIBBY, OF CHICAGO, ILLINOIS.

WRINGER.

SPECIFICATION forming part of Letters Patent No. 741,911, dated October 20, 1903.

Application filed March 17, 1903. Serial No. 148,245. (No model.)

To all whom it may concern:

Be it known that I, PALMER KIBBY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wringers; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in wringers, in which a movable apron is employed which is provided with a hollow cam connected to each end thereof and so arranged that as the apron is thrown down into position to be used the wringer will be clamped to the tub and the rollers thrown together with a sufficient tension for use.

The invention consists in various details of construction and in combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claim.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a rear elevation of the wringer, parts being in section. Fig. 2 is a cross-sectional view on line 2 2 of Fig. 4. Fig. 3 is a sectional view on line 3 3 of Fig. 2, and Fig. 4 is a vertical section showing the apron in its lowest position.

Reference now being had to the details of the drawings by letter, A designates the frame of the wringer, having downwardly-extending arms A′, adapted to form fixed jaws or clamping-arms for engagement with the tub, and B designates yokes, which are connected together by means of a cross-piece C, and thumb-screws D are fitted in threaded apertures in the upper angled ends of said yokes, and springs E are interposed between the flanges D′ upon the screws and the boxings F, which are concaved on their under surfaces and adapted to engage the spindles G of the roller H. Bosses I rise from said boxings F and are hollowed out and adapted to receive the tapering ends *d* of the screws D as the screws are turned down into said bosses. Pivotally mounted upon the bosses K of the frame A are the movable clamping-jaws K′, there being one on each side of the frame, as illustrated in cross-section in Fig. 2 of the drawings, and one of said clamps being shown in elevation in each of Figs. 3 and 4. Each of said clamping-jaws K′ has a concaved portion K^2. (Shown clearly in Figs. 3 and 4.)

L L designate curved hooked levers, which are pivoted on the bosses K, and in the free ends of which levers the spindles N of the lower roller M are journaled, and the edges of said levers L which are adjacent to the movable jaws K are concaved out at a location opposite the concaved portion K^2, and pivotally mounted upon the bosses O, (shown clearly in Fig. 2 of the drawings,) are the cams R, and integral with each cam is a bracket-arm O′, which are secured to the ends of the apron J. Said cams are formed of substantially elliptical shape in cross-section and are mounted to turn upon the bosses O, while the bracket-arms O′, as stated, are integral with said cams. By the peculiar arrangement of the hollow cams it will be observed that the bosses O, passing through the cams, will be positioned at different locations with relation to the cams when the latter are in different positions, as shown in Figs. 3 and 4 of the drawings. Said cams, which are hollow, are of oblong shape in order to allow the bosses O to have a slight play therein.

In order to limit the downward throw of the apron, I have provided lugs *a* on the frame, which are positioned in the path of the arms carrying the apron and against which the arms of the apron are adapted to contact when in the position illustrated in Fig. 4 of the drawings.

In operation when the apron is in the position shown in Fig. 3 of the drawings the cam will be so positioned that the movable clamping-jaws K′ can be thrown into an open relation and the lower roller M will be at its lowest limit, and when it is desired to attach the wringer to a tub the apron is thrown down to its lowest limit and the cams secured thereto will assume positions illustrated in Fig. 4 of the drawings and the movable jaws and the

hooked levers carrying the roller M will be thrown in opposite directions, causing said jaws to assume clamping positions and the under roller to be thrown into contact with the upper roller.

By the provision of the thumb-screws it will be observed that means will also be provided for increasing the tension upon the rollers, if found necessary.

While I have shown a particular construction of apparatus illustrating my wringer, it will be understood that I may make alterations in the detailed construction of the same without departing from the spirit of the invention.

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

A wringer comprising a frame having yoke members with fixed jaws carrying an upper roller, a lower roller, roller-supporting hooks and movable clamping-jaws, pivots on which the latter are mounted, an apron, arms upon said apron, with hollow oblong cam portions which are journaled on bosses projecting from said yoke members and positioned between said movable jaws and roller-supporting hooks, said cam portions adapted, as the apron is swung, to turn upon said bosses and to throw the roller-supporting hooks and movable jaws in opposite directions, as set forth.

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

PALMER KIBBY.

Witnesses:
ROBERT W. STEWART,
EMANUEL FRIEDLANDER.