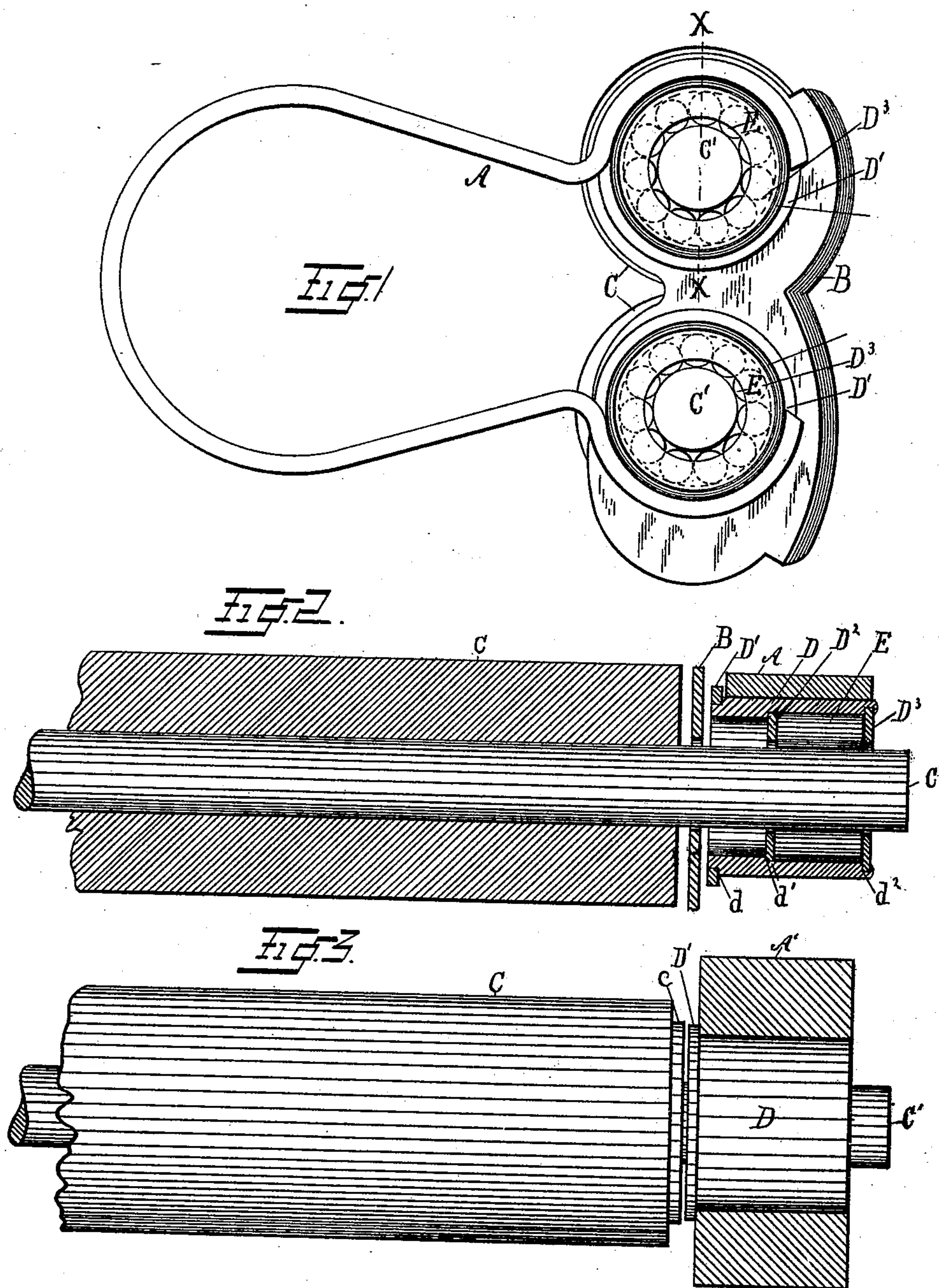


(No Model.)

A. W. WALKER.  
CLOTHES WRINGER.

No. 465,419.

Patented Dec. 15, 1891.



WITNESSES-  
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# UNITED STATES PATENT OFFICE.

ADDISON W. WALKER, OF ERIE, PENNSYLVANIA, ASSIGNOR TO THE LOVELL MANUFACTURING COMPANY, LIMITED, OF SAME PLACE.

## CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 465,419, dated December 15, 1891.

Application filed January 26, 1891. Serial No. 379,202. (No model.)

*To all whom it may concern:*

Be it known that I, ADDISON W. WALKER, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, 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.

This invention relates to clothes-wringers; and it consists in improvements on the construction of the journal-bearings thereof, as will be hereinafter fully set forth, and pointed out in the subjoined claims.

The invention is illustrated in the accompanying drawings, as follows:

Figure 1 is a side elevation of a common C-spring clothes-wringer with my invention applied thereto. Fig. 2 is a vertical section of one of the wringer-rolls and bearing on the line  $x x$  in Fig. 1. Fig. 3 is a top view of one of the rolls and bearing of a wringer having a wooden frame, and shows my invention applied to that type of wringer.

A marks the C-spring of the wringer shown in Fig. 1; A', the frame-post of a wooden-frame wringer, as shown in Fig. 3; B, the shield or guard commonly used in wringers of the type shown in Fig. 1; C, the rubber rolls, and C' the shafts of the rolls. These parts are all substantially the same as in common use.

D marks the case of the journal-box. This is a metal cylinder, preferably formed of common iron tubing. It is provided with an external shoulder  $d$  at one end, an internal shoulder  $d'$  near its middle, and an internal shoulder  $d^2$  at its opposite end. Seated on the shoulder  $d$  is an external ring  $D'$ , on the internal shoulder  $d'$  an internal ring  $D^2$ , and on the internal shoulder  $d^2$  an internal ring  $D^3$ . The internal shoulder  $d'$  is formed by reaming out the case D, and this gives the walls of the chamber between the rings  $D^2$  and  $D^3$  a smooth finished surface, and this space is of greater diameter than the space to the left of the ring  $D^2$ . In the chamber between the rings  $D^2$  and  $D^3$  are placed anti-friction rollers E, which fill the space between the shaft C' and the walls of the chamber.

When the journal-box is in place in the wringer, the external ring or rim  $D'$  is placed inside of the spring A or the post A', as the case may be, and next to the guard B, as in Figs. 1 and 2, or next to the collar c on the end of the roll C, as in Fig. 3. This rim or ring  $D'$  serves to hold the journal-box in place, as it prevents it from working out toward the end of the roll-shaft, and it cannot work inwardly, as the roll prevents it. This rim also serves as a washer-bearing for the roll or the collar on the roll to act upon as the roll moves longitudinally while being operated, which it always does more or less.

In the application of anti-friction-roller bearings to wringers of the type shown in Figs. 1 and 2 it is usual to either flange the springs A where they embrace the journal-boxes or else flange the journal-boxes, so as to prevent the longitudinal movement of the journal-boxes, and in wringers of the type shown in Fig. 3 it is usual to groove the posts and provide the journal-boxes with tongues or make them of such a length as to fit in the grooves. It is desirable that the journal-boxes have considerable length, so as to be held firmly in parallelism with the shafts C' of the rolls C, and it is also desirable that the anti-friction rollers be short. In my construction I effect all of these desirable features in a simple and cheap manner. The journal-box cases are long, and it is not necessary to groove the posts A' or flange the springs A in order to hold them firmly, and at the same time the anti-friction rollers may be made as short as desired; and in the construction shown in Fig. 3 the journal-box, by reason of the rim or ring  $D'$ , serves as a guard to keep the wringer-roll from impinging against the wooden posts A'.

What I claim as new is—

1. In a clothes-wringer, the combination, with the roll-shafts C' and the frame-pieces which embrace the journal-boxes, of journal-boxes consisting of the case D, with an external ring or rim  $D'$  at its inner end, internal rings  $D^2$  and  $D^3$ , so placed as to form an internal chamber of considerably less length than the case D, and anti-friction rollers E, contained within said chamber.

2. In a clothes-wringer, the combination,

with the roll-shafts C' and the frame-work which embraces the journal-boxes, of the journal-box case D, having the external rim or ring D' at its inner end, the internal shoulders  $d'$  and  $d^2$ , facing outwardly from the ring D', a ring D<sup>2</sup>, seated on said shoulder  $d'$ , and a ring D<sup>3</sup>, seated on said shoulder  $d^2$ , and anti-friction rollers E between said rings D<sup>2</sup> and D<sup>3</sup>.

10 3. In a clothes-wringer, the combination, with the roll-shafts C' and the frame-work which embraces the journal-boxes, of the cylindrical journal-box D, having an external annular flange D' at its inner end and an inter-

nal chamber, which is ledged so as to be of 15 greater diameter at the outer end of the case than at the inner end, anti-friction rollers contained within that part of the said chamber which is of greatest diameter, and a ring D<sup>3</sup>, forming an internal flange at the outer 20 end of the enlarged part of said chamber.

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

ADDISON W. WALKER.

Witnesses:

JNO. K. HALLOCK,  
JOHN S. RILLING.