(No Model.)

L. C. PARKER & B. VOGES.

CLOTHES WRINGER.

No. 404,653. Patented June 4, 1889.

Fig. 1.

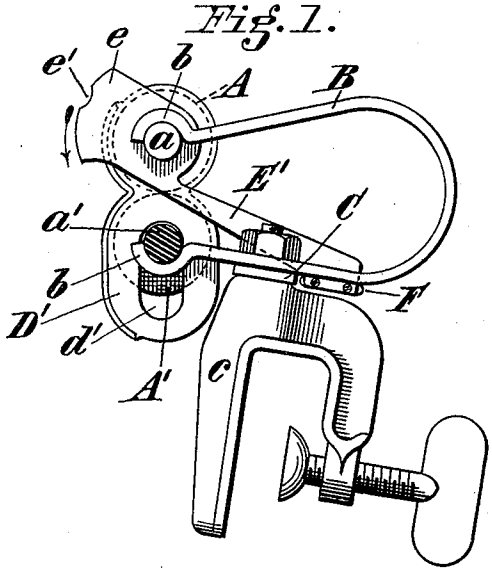


Fig. 2.

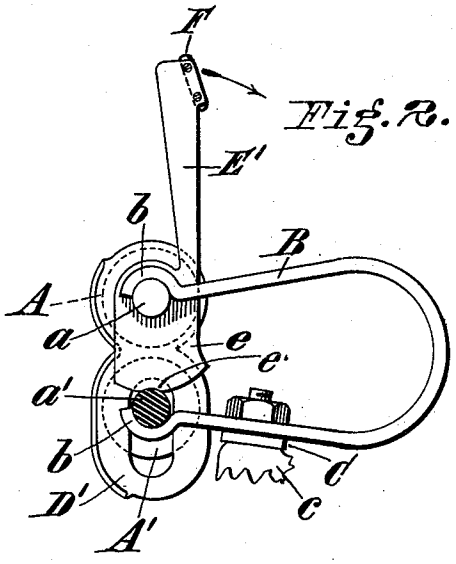


Fig. 3.

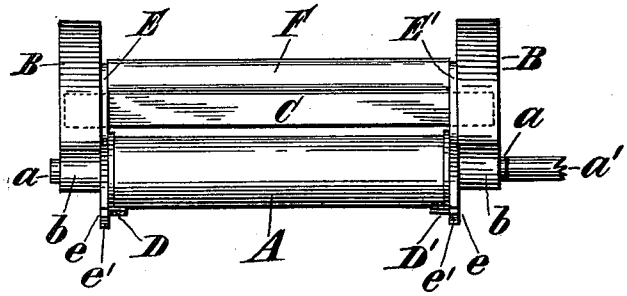


Fig. 4.

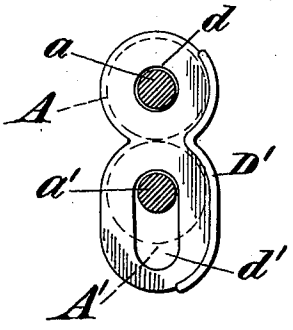


Fig. 5.



Attest

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UNITED STATES PATENT OFFICE.

LEWIS C. PARKER AND BERNHARD VOGES, OF CINCINNATI, OHIO.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 404,653, dated June 4, 1889.

Application filed February 11, 1889. Serial No. 299,470. (No model.)

To all whom it may concern:

Be it known that we, LEWIS C. PARKER and BERNHARD VOGES, both citizens of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Clothes-Wringers, of which the following is a specification.

Our invention relates to that class of clothes-wringers known as "U-spring" wringers, in which horizontally-disposed U-shaped springs are used to support and press the rolls together for the clothes-feeding operation, and suitable devices provided for spreading them apart when not in use; and our invention consists in the provision, in connection with one of the shafts of the wringer-rolls, of a pair of short levers or gravitating arms pivotally mounted thereon, one at either end said rolls, a longitudinal connecting-bar or cross-piece secured at its opposite ends to the outer ends of said levers, and a pair of cams or eccentrics formed on the inner ends of said levers, said connecting-bar when down forming an apron for the support of the clothes while being fed to the rolls, and when up as a handle or top bar by which to carry the wringer, and said cams or eccentrics, when brought into engagement with the adjacent roll-shaft, forming wedges by which to spread the two rolls apart or out of intimate contact, all as hereinafter fully described, and shown in the accompanying drawings, in which—

Figure 1 is an end elevation of a U-spring clothes-wringer, showing our improvements applied thereto, the position of the parts being that assumed by them when the wringer is in use, the lower shaft, on which the driving-handle is placed, being shown in section; Fig. 2, a similar end elevation showing the position the parts assume when the wringer is not in use, with the rolls (shown in dotted lines) spread apart and the connecting-bar and cam-levers up or raised to form a carrying handle or bail; Fig. 3, a plan view of the wringer shown in Fig. 1, omitting its attaching-clamps; Fig. 4, an inside elevation of one of the roll-shields or end plates, showing the relative diameters of the holes or openings therein with the diameters of the roll-shafts, said shafts being shown in cross-section and the rolls in dotted lines; and Fig. 5, a transverse section of the lever-connecting bar or apron in its preferred form.

A A′ represent two ordinary wringer-rolls, having shafts *a a′*, whose outwardly-projecting portions are mounted in the outer socketed ends *b b* of the U-springs B B.

C represents a horizontal bracing or tie bar connecting the springs B B in rear of said rolls.

c c represent the customary clamps for attaching the wringer in place for use.

D D′ represent a pair of shields or housings, one at either end said rolls, and provided with circular openings *d* in their upper portions for the accommodation of the upper roll-shaft *a*, and elongated openings or slots *d′* in their lower portions for the lower roll-shaft *a′*. The diameters of the openings *d d′* are slightly larger than those of the said shafts to allow a slight play, and thereby reduce the friction between them to a minimum.

E E′ represent two stiff gravitating levers or arms, pivotally and preferably mounted at their inner ends upon the upper roll-shaft *a* intermediate the shields D D′ and the U-springs B B, and having longitudinally or outwardly projecting cams or eccentrics *e* at said inner ends, and a flat cross-bar F connecting their two outer ends, so that they move simultaneously.

e′ represents a concave or curved notch in the periphery of each of the cams *e*.

In the operation of our wringer the levers E E′ and their cams *e* lie in the position shown in Figs. 1 and 3, with the cross-bar F flush with the tie-bar C, so as to furnish a broad and suitable surface or apron for the clothes to ride upon in feeding them to the rolls, the said cams being entirely out of engagement with any of the parts.

When the wringer is not in use, it is desired and proper to relieve the rubber rolls of the great strain upon them caused by the pressure of springs B B, and in order to accomplish this the cams *e* are brought into frictional engagement with the lower roll-shaft *a′* by raising the levers by means of cross-piece or apron F and simultaneously turning the driving-handle of the wringer backward, thereby causing the said cams to wedge the two shafts and their coverings or rolls apart, free from contact or compression. When the

cams are wedged apart in the position shown in Fig. 2, their peripheral notches *e'* engage the lower roll-shaft and prevent their accidental disengagement or slipping in either direction.

We claim—

1. In a clothes-wringer, the combination, with the rubber rolls A A', having shafts *a a'*, and U-springs B B, having outer sockets or bearings *b b* for said shafts, of the inflexible or stiff levers E E', having longitudinal projections or cams *e* at their inner ends, and a flat cross-bar F, connecting their outer ends, the said levers being pivotally mounted upon the upper roll-shaft intermediate the opposite ends of the rubber roll and the U-springs, with their cams *e* normally out of engagement with any of the parts and readily brought into engagement with the periphery or face of the lower roll-shaft to spread the two rolls apart and relieve them of unnecessary pressure when not in use, substantially as herein set forth.

2. In a clothes-wringer, the combination, with the rolls A A', shafts *a a'*, U-springs B B, shields D D', and the bracing or tie bar C, of the levers E E', having cams *e*, and cross-bar or apron F, journaled to one of said shafts, said cams having concave notches *e e'*, which engage the other of said shafts, substantially as and for the purpose specified.

In testimony of which invention we have hereunto set our hands.

LEWIS C. PARKER.
BERNHARD VOGES.

Witnesses:
JOHN E. JONES,
B. DONALDSON.