G. H. JANTZ.

CLOTHES WRINGER, MANGLE, OR OTHER ROLLER MACHINE.

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1,260,905.

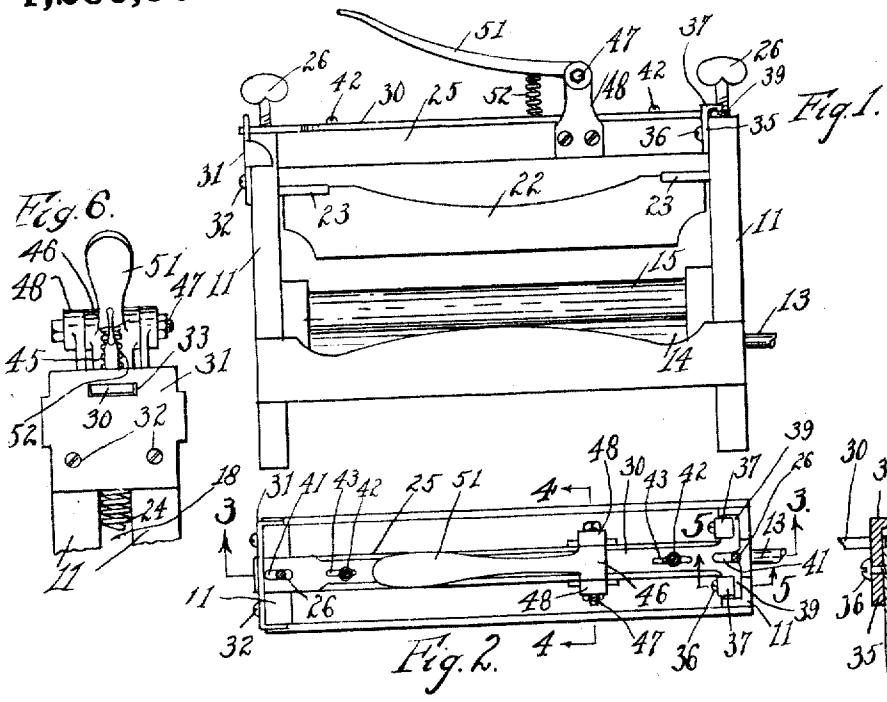


Fig. 1.

Fig. 6.

Fig. 2.

Fig. 5.

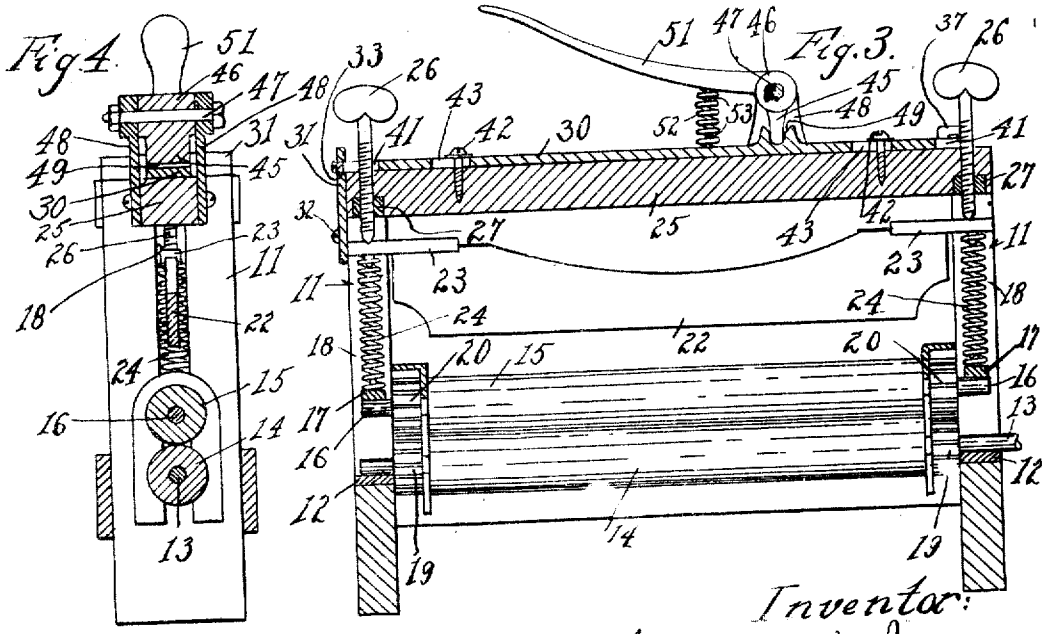


Fig. 4.

Fig. 3.

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UNITED STATES PATENT OFFICE.

GUSTAVE H. JANTZ, OF WYOMING, OHIO.

CLOTHES WRINGER, MANGLE, OR OTHER ROLLER-MACHINE.

1,260,905. Specification of Letters Patent. Patented Mar. 26, 1918.

Application filed January 15, 1917. Serial No. 142,461.

To all whom it may concern:

Be it known that I, GUSTAVE H. JANTZ, a citizen of the United States, residing at Wyoming, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Clothes Wringers, Mangles, or other Roller-Machines, of which the following is a specification.

My invention relates to clothes wringers, mangles, or other roller machines, in which provision is made for quickly releasing the tension upon the rolls of the machine, in case the fingers of the operator, or any other object, becomes accidentally caught between the rolls; and has for its object the provision of releasing means, which will be positive in operation, and of simple construction, whereby the pressure exerted upon both ends of the rolls will be simultaneously released through the movement of a latching medium of novel construction.

The invention will be further readily understood from the following description and claims, and from the drawings, in which latter my invention is exemplified as applied to a clothes wringer.

In the drawings:

Figure 1 represents a side elevation of a wringer embodying my invention.

Fig. 2 is a plan view of the same, with the upper ends of the adjusting screws broken away.

Fig. 3 is a vertical longitudinal section on the line 3—3 of Fig. 2.

Fig. 4 is a vertical transverse section on the line 4—4 of Fig. 2.

Fig. 5 is an enlarged detail section on the line 5—5 of Fig. 2; and,

Fig. 6 is an enlarged fragmentary end view of a wringer embodying my invention.

11 represents the end-stiles of the wringer frame, provided with the usual bearings 12 for drive-shaft 13, supporting the lower roll 14 of the machine, the upper roll 15 which is adapted to coact with roll 14, being provided with stub-shafts 16 which are journaled in bearings 17 arranged to slide up and down in slots 18 in the respective end-stiles 11. The usual gears 19, 20, when employed, are respectively secured to rolls 14, 15, so as to communicate motion from the former to the latter.

A follow-bar 22 is guided in slots 18 as by lugs 23 secured to the follow-bar and projecting into the slots, a spring, instanced as a helical spring 24, being located in each slot between lug 23 and bearing 17 therein. Cross-girt 25 of the wringer frame, which is releasably received at its respective ends in slots 18 of the proximate end-stiles, is provided with the usual adjusting screws 26, which are shown as thumb-screws, the screws being instanced as threaded in nuts 27 received and held against turning in suitable recesses in the cross-girt, the lower ends of the adjusting screws bearing upon the lugs 23, so that adjustment of the screws acts to vary the tension of springs 24 and the consequent pressure between rolls 14, 15.

A latching medium is adapted to releasably retain cross-girt 25 in operative position relative to the end-stiles of the wringer, the latching medium being exemplified as comprising a slide 30, slidable with relation to the cross-girt, the ends of the slide being received under retaining members secured to the respective end-stiles. The retaining member at one end of the wringer is instanced as a plate 31 secured to the outer face of the end-stile, as by screws 32, the plate extending upwardly above the end-stile and being provided with a slot 33 through which the proximate end of slide 30 is adapted to be projected to form a latch, the upper end of the plate above the slot forming a keeper for the end of the slide.

The retaining member at the opposite end of the wringer, is exemplified as comprising clips 35 secured to the inner face of the end-stile, as by screws 36, the clips extending upwardly above the end-stile and then outwardly above the end of the end-stile to form lips 37. The outer ends of the lips are preferably provided with enlargements, such as shown at 38. The proximate end of slide 30 is instanced as provided with laterally projecting tongues 39 adapted to be received under lips 37 for forming a latch.

The adjusting screws 26 of the wringer, are adapted to extend through slide 30, which is exemplified as provided with suitably positioned elongated slots 41 for the purpose, and the slide is preferably adapted to be slidably secured to cross-girt 25 by screws 42, which are received through suitable slots 43 in the slide and are screwed into the upper face of the cross-girt, the walls of slots 41 and 43 forming guiding means for the endwise movement of the slide.

Slide 30 is adapted to be moved endwise relative to cross-girt 25, to withdraw the

ends of the slide from slot 33 and from beneath lips 37 respectively by a movement in the same direction at both ends of the machine, to release the cross-girt from end-stiles 11 and thus release the tension upon springs 24 and the pressure between rolls 14 and 15 throughout the lengths of said rolls, the mechanism for thus moving slide 30, being instanced as comprising a finger 45 pivotally mounted upon the cross-girt of the wringer, and adapted to engage the slide so that when the finger is oscillated, the slide will be moved a sufficient distance to release the cross-girt.

Finger 45 is exemplified for this purpose, as provided with a bearing boss 46, through which extends a shaft 47 journaled at its ends in brackets 48, which are secured to opposite sides of the cross-girt, the parts being so arranged that the swinging end of finger 45 is received in a bearing socket 49 upon slide 30, so that the slide will be moved endwise by the swinging of the finger upon its pivot.

The means for actuating finger 45, preferably comprises a lever-handle 51 extending outwardly from boss 46, upon which the operator may bear in the case of an emergency, to oscillate the finger and consequently release the pressure between the wringer-rolls. The slide 30 is preferably normally held in latching position by means of a spring, tending to hold handle 51 in raised position and instanced as a helical spring 52 interposed between slide 30 and handle 51 and received over projections 53 upon the slide and handle.

By the mechanism as thus described, it will be seen that I provide a simple but efficient construction, whereby both ends of the cross-girt of the machine are released from engagement with the end-stiles, by movement in one direction, of a slidably mounted latching medium, the ends of the latching medium being normally positively engaged by coöperating retaining members.

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

1. In a device of the character described, the combination of a frame, a pressure roll in said frame, means for exerting pressure on said roll including a cross-member received by said frame, means for releasably retaining said cross-member in said frame comprising a slide adapted to engage said frame at opposite ends thereof, said slide being arranged to be disengaged from said frame by an endwise movement of said slide relative to said frame in one direction at both said opposite ends.

2. In a device of the character described, the combination of a frame, a pressure roll in said frame, a cross-member received at its opposite ends by said frame, pressure exerting means between said roll and said cross-member, retaining members upon said frame proximate to the ends of said cross-member, a slide mounted upon said cross-member and movable endwise thereof, one end of said slide being adapted to engage the retaining member proximate to one end of said cross-member, and the other end of said slide being provided with laterally extending tongues adapted to engage the retaining member proximate to the other end of said cross-member, said slide and retaining members being so arranged as to disengage said ends of said slide from said retaining members by endwise movement of said slide in one direction.

3. In a device of the character described, the combination of a frame comprising end-stiles, a pressure roll journaled in said end-stiles, a cross-member received at its opposite ends by said end-stiles, pressure exerting means between said roll and said cross-member, a slide mounted upon said cross-member and movable endwise relative thereto, retaining means upon the outer face of one of said end-stiles adapted to receive an end of said slide, the opposite end of said slide being provided with laterally extending tongues, and retaining means secured to the inner face of the other of said end-stiles and adapted to receive said laterally extending tongues, said slide and retaining means being so arranged as to disengage said slide from said retaining means by endwise movement of said slide relative to said cross-member, and operating means upon said cross-member engaging said slide, and adapted to move said slide relative to said cross-member.

4. In a device of the character described, the combination of a frame, a pressure roll therein, a cross-member for said frame, pressure means between said cross-member and said roll, and releasing means for said cross-member comprising a central retaining member at one end of said frame and laterally separated retaining members at the other end of said frame, a slide provided with a central contact part at one of its ends coacting with said first-named retaining member and laterally separated contact-parts at its other end coacting with said last-named retaining-members, and manual means for operating said slide.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

GUSTAVE H. JANTZ.

Witnesses:
CHARLES E. WEBER,
THERESA M. SILBER.