

July 6, 1943.

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2,323,331

WRINGER AND THE LIKE

Filed May 9, 1938

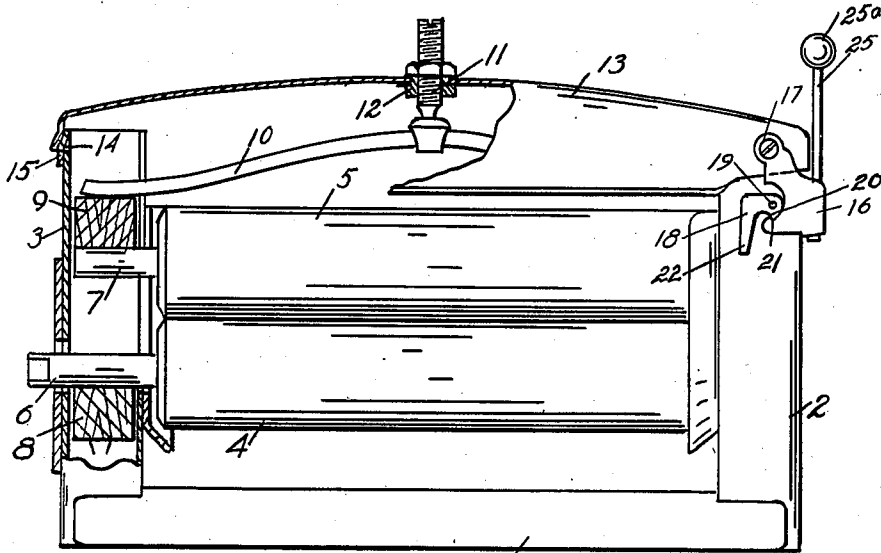


FIG. 1.

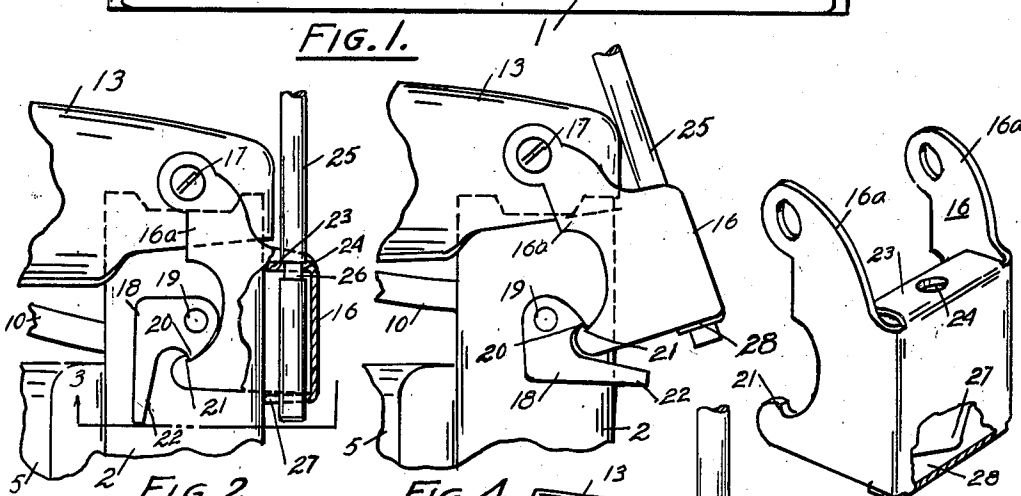


FIG. 2.

FIG. 4.

FIG. 5.

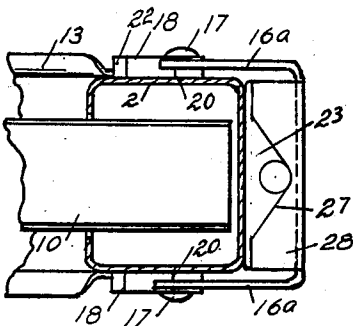


FIG. 3.

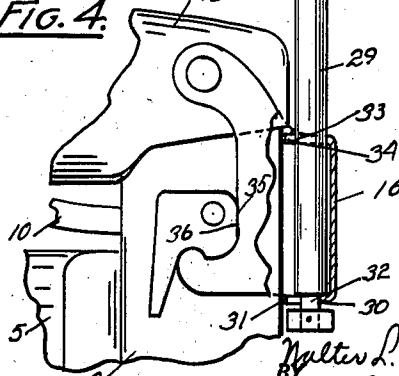


FIG. 6.

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2,323,331

WRINGER AND THE LIKE

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Application May 9, 1938, Serial No. 206,747

6 Claims. (Cl. 68—263)

Wringers and similar devices having squeezing rolls into which clothes are passed involve the hazard of drawing in the hand or fingers of the operator, and various means have been supplied for alleviating this hazard.

Means have also been provided for resetting the pressure on a wringer or like device after the pressure has been released, and in the present invention this resetting device is utilized as a means of releasing the pressure as a safety measure. Features and details of the invention will appear more fully from the specification and claims.

Preferred embodiments of the invention are exemplified in the accompanying drawing as follows:

Fig. 1 shows a front elevation of a wringer partly in section.

Fig. 2 an enlarged view of a resetting and release device in set position.

Fig. 3 a section on the line 3—3 in Fig. 2.

Fig. 4 a view similar to Fig. 2 with the parts in release position.

Fig. 5 a perspective view of one of the resetting toggle links.

Fig. 6 an enlarged view of a modified releasing and setting device.

1 marks a bottom of a wringer frame; 2 and 3 side stiles extending from the bottom; 4 and 5 lower and upper rolls; 6 and 7 shafts for the lower and upper rolls respectively; 8 bearings for the lower shaft fixed in the stiles; 9 bearings for the upper shaft, these bearings being slidably mounted in the stiles; 10 a spring resting on the upper bearings and exerting yielding pressure on the rolls; 11 an adjusting screw; 12 a nut for the screw, the nut being arranged in a top bar 13. A shoulder 14 is formed by striking up a lip in the outer face of the stile 3. A shoulder 15 is formed in the top bar by striking out a portion of the end of the bar, the shoulders 14 and 15 forming a detachable securing means for the top bar at the stile 3. These parts are or may be of common construction.

A toggle resetting device has the toggle link 16 which has sides 16a extending along the sides of the top and the stile 2. The link is pivoted by pin 17 extending through sides 16a and the top. Companion links 18 are pivoted on the sides of the stile 2, the pivot being arranged on a pin 19 extending through the stile 2. The links 18 have the hinge hooks 20 which engage hinge hooks 21 on the plate 16a. The links 18 have projections 22 which through gravity position the links 18 to receive the hinge hooks of the

link 16 as the top bar is placed in position. Upon the engagement of the hooks the pressure is exerted on the link 16 forcing it from the position in Fig. 4 to that of Fig. 2 and this through the toggle action of the links resets pressure on the spring 10 and consequently on the rolls. The outer face of the stile 2 engages an intumed lip 23 on the link 16 and prevents the continued movement of the links to a release position. This carries the hinge 20—21 slightly beyond the centers 17 and 19 so that the set position is maintained for the ordinary running.

A release handle 25 extends through a perforation 24 in the lip 23. The handle has a groove 26 which retains it in the opening 24, the walls of the opening being contracted into the groove to retain it against axial displacement and being closed to limit its movement laterally in the opening. The lower end of the handle 25 extends into a notch 27 in a lip 28, the sides of the lip extending from the notch being inclined. The handle ordinarily is provided with a knob 25a for more convenient operation.

When it is desired to release the top bar the handle 25 is actuated. It may be moved in any direction and with such movement will force the link 16 outwardly so as to bring the hinge joint between the links past the centers 17 and 19 and the pressure of the spring will then continue the release movement of the links and lift the top. The desired pressure may be adjusted by the screw 11 in the usual manner.

In the modified construction the parts of the wringer are the same as those of Fig. 1. The links differ in the following respects: A rod 29 extends into an opening 30 in a bottom lip 31 in the link. The rod 29 is provided with a groove 32 and the opening is closed on this groove, thus securing the rod or handle 29 in the bottom lip against axial or lateral displacement. The upper end of the link 16 has a lip 33 which is slotted at 34 in a manner similar to that of the lip 28. With this structure the rod may be forced forward or back or in toward the top for effecting a release. When the wringer is being reset not only may pressure be exerted on the face of the link 16 for effecting a toggle movement of the links to reset the pressure but the handle 29 may be used as a lever forcing the links to reset position.

Also in this structure the links are formed with surfaces 35 and 36 which come into engagement at the termination of the resetting action and prevent a continued swinging of the toggles past centers to a release position.

What I claim as new is:

1. In a wringer having a frame, rolls mounted in the frame, a top for the frame, pressure means exerting pressure from the top on the rolls, and a toggle connection swinging on axes extending from front to rear of the wringer between the frame and top and extending, when set, downwardly along the end of the wringer, said top being releasable by the release of the toggle connection; the combination with the toggle connection and top of means movable with the top for actuating the toggle connection to effect a release of the top and with it the pressure due to said pressure means.
2. In a wringer having a frame, rolls mounted in the frame, a top for the frame, pressure means exerting pressure from the top on the rolls, and a toggle connection swinging on axes extending from front to rear of the wringer between the frame and top and extending, when set, downwardly along the end of the wringer, said top being releasable by the release of the toggle connection; the combination with the toggle connection and top of means movable with the top and extending in the direction of the links of the toggle connection when in set position and acting through the toggle connection to reset the pressure and adapted to act on the toggle to effect a release.
3. In a wringer having a frame, rolls mounted in the frame, said frame having a base and stiles, a top for the frame, pressure means exerting pressure from the top on the rolls, and a toggle connection comprising links swingable on axes extending from front to rear of the wringer between the frame and top and extending, when set, downwardly along the end of the wringer, said top being releasable by the release of the toggle connection; the combination with the toggle connection and top of means movable with the top operating on the toggle connection to effect a release of the top and with it the pressure due to said pressure means, one of the links being of channel form, the open side of the channel facing and closing on one of the stiles and

housing at least a portion of the last-named means.

4. In a wringer having a frame, rolls mounted in the frame, a top for the frame, and pressure means exerting pressure from the top on the rolls; the combination with the frame and top of a toggle having links, one link being connected by a joint with the top, the other link by a joint with the bottom, and the links being connected together by a joint, the axes of the joints extending from front to rear of the wringer and the links being swingable lengthwise of the wringer, said top being releasable by the release of the toggle, one joint of the links of the toggle being separable; and means movable with the top and adapted to operate on the toggle for releasing the separable joint to release the top and with it the pressure due to said pressure means.

5. In a wringer having a frame, rolls mounted in the frame, a top for the frame, and pressure means exerting pressure from the top on the rolls; the combination with the frame and top of a toggle connection between the frame and top, said top being releasable by the release of the toggle connection, said toggle connection having one link pivoted to the top, another link pivoted to the frame, said links being pivotally connected together and the connection between said links being separable, and means movable with the top and adapted to operate on the separable joint of the toggle to effect a release of the top and with it the pressure due to said pressure means.

6. In a wringer having a frame provided with a bottom and side stiles, an upper and a lower roll mounted in the side stiles, a spring exerting pressure on the rolls, a top bar on which the spring thrusts, and a resetting and release device connecting the top bar and the stile comprising toggle links, one on the top bar and one on the stile, one of the links being operable through pressure to reset pressure on the rolls; the combination with said toggle links of handle means operable in all horizontal directions to cause the release of the toggle links.

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