

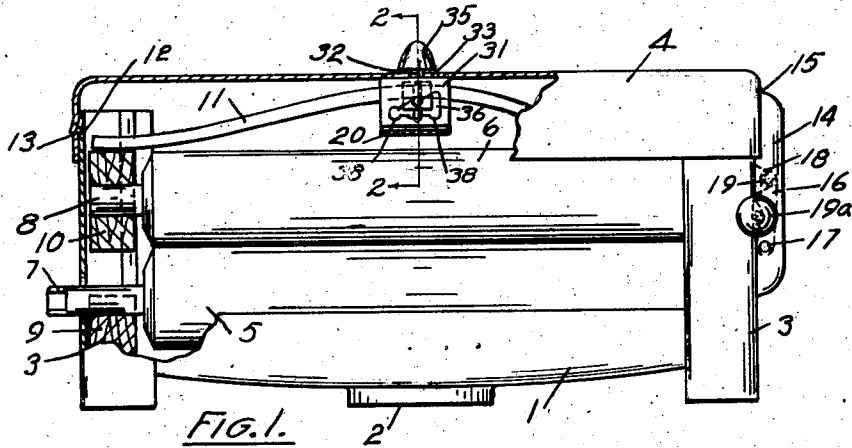
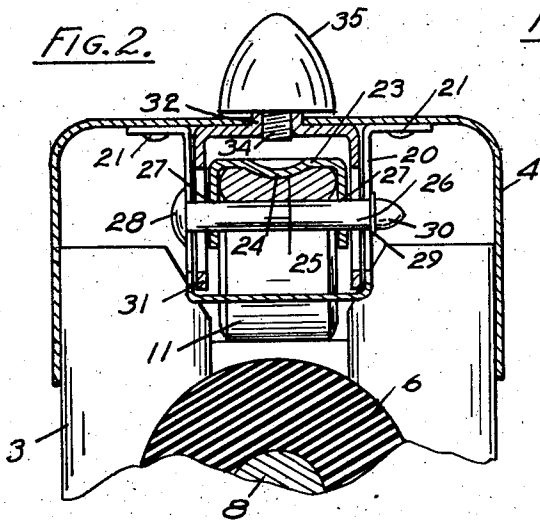
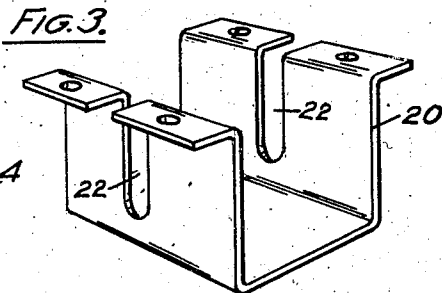
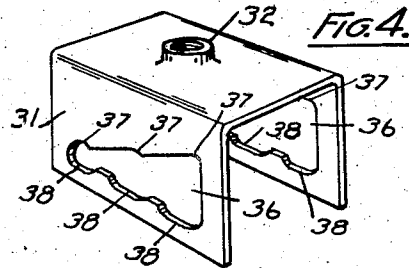
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2,256,162

WRINGER AND THE LIKE

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## UNITED STATES PATENT OFFICE

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## WRINGER AND THE LIKE

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6 Claims. (Cl. 68—263)

Wringers and the like are usually provided with yielding pressure means for the rolls and devices for adjusting this pressure. The present invention is designed to improve the mechanism for adjusting the pressure. Features and details of the invention will appear from the specification and claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing as follows:

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

Fig. 2 an enlarged section on the line 2—2 in Fig. 1.

Fig. 3 a perspective view of a guide plate for the adjusting mechanism.

Fig. 4 an adjusting plate for the adjusting mechanism.

1 marks a base of the wringer. This is trough shaped and has a discharge opening 2 at its opening. 3—3 mark the stiles of the wringer frame, these being secured to the base. A top bar 4 is arranged over the stiles. 5 and 6 mark the rolls of the wringer. These have the shafts 7 and 8 respectively. Bearings 9 are provided for the shaft 7, these being anchored in the lower part of the stiles. Bearings 10 are provided for the shaft 8. These bearings are slidingly mounted in the stiles. A spring 11 rests on the upper bearings and exerts pressure from the top bar. One of the stiles has shoulders 12 struck up in it which engage shoulders 13 in one end of the top bar.

A resetting and release lever 14 is hinged at 15 on the top bar. A link 16 (see dotted line) is pivotally connected by pin 17 with the lever 14 and is pivotally connected with ears 18 extending from the face of the stile by a pin 19. The lever and link form a toggle which, when the lever is on the stiles, is moved to position against the stile, draws down the top bar, and holds it in set position. A handle 19a is arranged on the lever 14 by which it may be easily operated for release.

The adjusting mechanism comprises the U-shaped guide plate 20, the upper end of this plate being flanged and secured to the top bar by rivets 21. The side walls of this guide plate are provided with vertical slots 22. A clip 23 is arranged on the spring. It has a depression 24 which extends into a depression 25 in the spring. The clip has downwardly extending sides. A pin 26 extends through perforations 27 in the downwardly extending sides and locks the clip with the spring. The pin has the head 28 at one

end which engages the face of the guide plate 20 and a washer 29 at the opposite end secured by heading the pin at 30, the washer engaging the face of the guide plate 20. Through this pin, the head and washer, the vertical travel of the spring is controlled, the center of the spring being free to move up and down but is maintained in its central position.

The adjusting device comprises an adjusting plate 31 which is U-shaped and has a slight extension 32 on its top which extends through a slot 33 in the top bar. A handle 35 is secured by screw 34 in the extension 32. By means of this handle the adjusting device may be moved longitudinally in the slot. The adjusting device 31 is in the form of a U-shaped plate which plate straddles the spring 11 and the clip 23. The sides of this plate is slotted at 36 and the upper edge of the slot has stepped surfaces 37—37 and these different surfaces may be interposed between the top bar and the pin 26 so as to change or vary the spacing between the spring and the top bar, a greater spacing providing greater pressure for the spring and a lesser spacing a lesser pressure for the spring. As shown, this provides three adjustments. When, therefore, it is desired to change the pressure the top bar is loosened by the operation of the lever 14 and the adjusting device moved to the center on the ends of the slot 33 bringing either the end stepped surfaces or the middle surface into position to give the desired adjustment.

In order that the adjustment may be retained for the purpose of release rather than adjustment, the lower edge of the slot 36 has notches 38 which are arranged opposite the stepped surfaces 37. As the top bar is released, the spring and with it the pin 26 drops down by gravity into the notches 38 and is thus located in these notches sufficiently to maintain the adjustment, but the adjusting device may be moved, the spring rising over the projections between the notches as the device is moved. In other words, this mechanism forms a yielding gravity held positioning arrangement that yieldingly holds the adjustment when the top bar is released but permits the adjustment through a sufficient force on the adjusting member 35.

What I claim as new is:

1. In a wringer or the like having a frame; and rolls mounted in the frame; the combination therewith of a top bar on the frame; a pressure mechanism for the rolls comprising a pressure means and a pressure adjusting device mounted on the top bar and movable horizontally and

rectilinearly with relation thereto, said device interposing as it is moved stepped spacing surfaces varying the spacing of the pressure means from the top bar.

2. In a wringer or the like having a frame; and rolls mounted in the frame; the combination therewith of a top bar on the frame, said top bar being slotted; a pressure means for the rolls; a pressure adjusting device having a part extending through the slot and slidably adjustable along the slot, said pressure device interposing as it is moved spacing surfaces varying the spacing of the pressure means from the top bar.

3. In a wringer or the like having a frame; and rolls mounted in the frame; the combination therewith of a top bar on the frame, said top bar having a slot; a pressure spring exerting yielding pressure on the rolls; a pressure adjusting device for the spring comprising a U-shaped plate straddling the spring and having varying spacing surfaces on the sides of the plate; an operating member extending through the slot for moving the plate and adjusting the surfaces; and means on the spring engaging the surfaces.

4. In a wringer or the like having a frame; and rolls mounted in the frame; the combination therewith of a top bar on the frame, said top bar having a slot and being releasable relative to the frame; a pressure spring exerting yielding pressure on the rolls; a pressure adjusting device for the spring comprising a U-shaped plate straddling the spring and having slots in its sides, the upper edges of the last mentioned slots providing stepped surfaces, and the lower edges of the last mentioned slots providing notches opposite the stepped surfaces; a member on the spring extending through the last men-

tioned slots and adapted to engage the stepped surfaces and the notches; and a member extending from the adjusting device through the first mentioned slot for operating the adjusting device.

5. In a wringer or the like having a frame; and rolls mounted in the frame; the combination therewith of a top bar on the frame, said top bar having a slot and being releasable relative to the frame; a pressure spring exerting yielding pressure on the rolls; a pressure adjusting device for the spring comprising a U-shaped plate straddling the spring and having varying spacing surfaces on the sides of the plate; an operating member extending through the slot for moving the plate and adjusting the surfaces; means on the spring engaging the surfaces; and a vertical guide for the spring.

6. In a wringer or the like having a frame; and rolls mounted in the frame; the combination therewith of a top bar on the frame, said top bar having a slot and being releasable relative to the frame; a pressure spring exerting yielding pressure on the rolls; a pressure adjusting device for the spring comprising a U-shaped plate straddling the spring and having slots in its sides, the upper edges of the last mentioned slots providing stepped surfaces, and the lower edges of the last mentioned slots providing notches opposite the stepped surfaces; a member on the spring extending through the last mentioned slots and adapted to engage the stepped surfaces and the notches; a member extending from the adjusting device through the first mentioned slot for operating the adjusting device; and a vertical guide for the spring.

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