

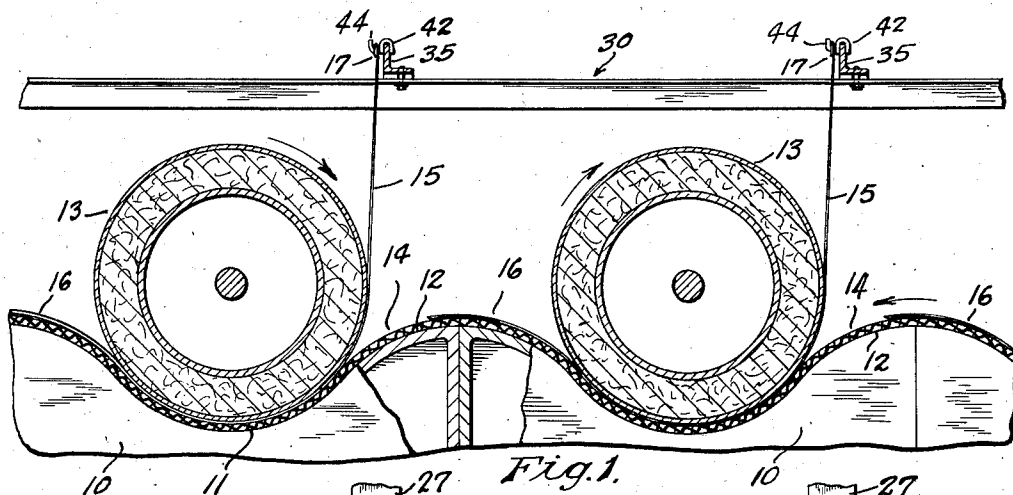
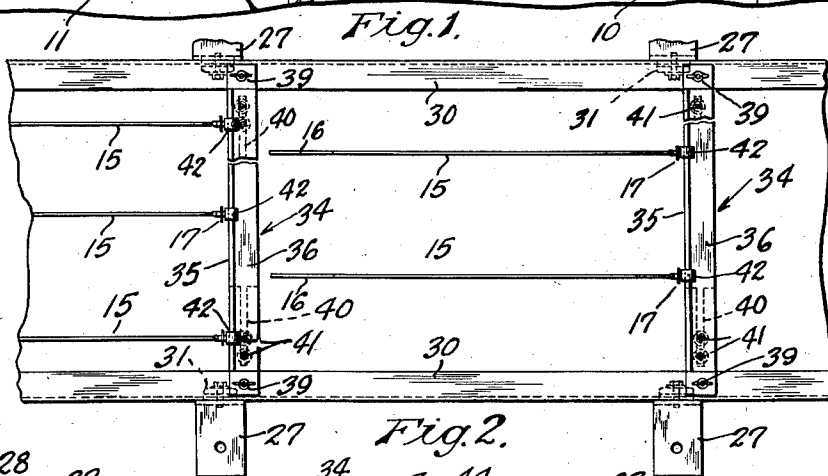
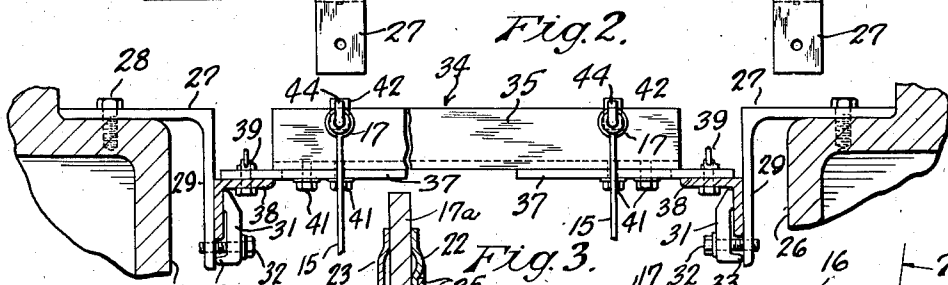
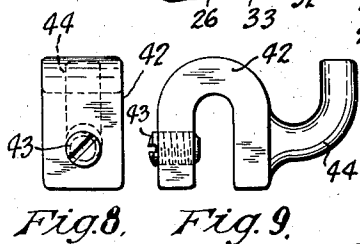
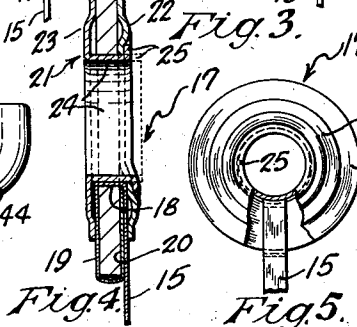
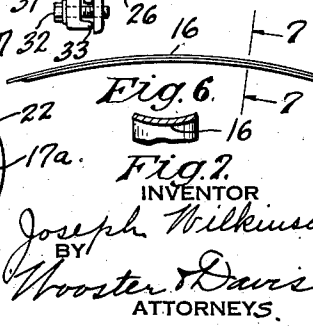
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J. WILKINSON

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IRONING MACHINE STRIPPER

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INVENTOR
Joseph Wilkinson
BY
Wooster Davis
ATTORNEYS.

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IRONING MACHINE STRIPPER

Joseph Wilkinson, Bridgeport, Conn., assignor,
by mesne assignments, to Pullclean Towel Cab-
inet Co., Inc., New York, N. Y., a corporation of
New York

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This invention relates to an ironing machine for flat work, particularly to a stripper and means for mounting the same in the machine, and has for an object to provide an improved stripper construction which will not mar the work or form marks or lines therein, and it is a further object to provide an improved mounting means for the strippers whereby these strippers may be easily and quickly mounted or de-
mounted, and whereby the position of the strip-
pers may be easily and quickly adjusted or
changed for different types of work, thus mak-
ing as short as possible the time in which the
machine must be stopped for changes or ad-
justment for different operations or different
types of work.

With the foregoing and other objects in view I have devised a construction illustrated in the accompanying drawing forming a part of this specification. It is, however, to be understood that I am not confined to the use of the specific construction shown but may employ various changes and modifications within the scope of the invention.

In this drawing:

Fig. 1 is a longitudinal section through a portion of an ironing machine showing my improved construction applied thereto;

Fig. 2 is a top plan view of the improved supporting means for the strippers;

Fig. 3 is a transverse vertical section through a portion of the machine showing the support for the strippers;

Fig. 4 is a detail section of the securing means at the mounting end of the stripper;

Fig. 5 is a side elevation thereof, the parts being broken away to more clearly show the construction;

Fig. 6 is a side elevation of an end portion of a stripper;

Fig. 7 is a transverse section thereof substantially on line 7—7 of Fig. 6;

Fig. 8 is a front elevation of a supporting block for the stripper; and

Fig. 9 is a side view thereof.

The ironing machine shown comprises a steam chest 10, which may be made in sections as shown if preferred. The top wall is shaped to form alternate transverse grooves or depressions 11 and ridges 12, the grooves or depressions being curved to correspond with the curvature of the padded ironing rolls 13 and the intermediate portions 12 being reversely curved as shown. Only two rolls are shown in the drawing but it will be understood any desired number may be

used as desired. The work 14 being ironed passes between the rolls and the top wall of the steam chest in succession from right to left in the arrangement shown, and between each roll and the steam chest are strippers 15 under which the work passes and which prevent the work following around the roll on the outlet side thereof and guides the work over the intermediate surface 12 of the steam chest. There are a plurality of these strippers for each roll and it is desirable that the strippers for one roll be independent of the other rolls, and it is also desirable that they be independently mounted in order that they may be placed in different relative positions so that the stripper of one roll may be out of alignment with the strippers in the next roll so as to prevent forming marks or grooves in the work. It is also desirable that the strippers be as thin as possible to reduce to a minimum the liability of marking the work.

The strippers 15 shown are composed of thin flat flexible strips or wires, preferably of steel and are supported at the work inlet side of the roll only. At the work outlet side of the roll the free end portion 16 extends over the curved surface 12 of the steam chest to guide the work to the next roll, and to add strength and stiffness to this free end portion so that it will have the desired guiding effect this free end portion is transversely curved as shown in Fig. 7. Improved means is provided for suspending the other end of this strip, which is shown in Figs. 4 and 5. This comprises a grommet 17 secured to the end of the strip, this grommet including a washer 17a having a central opening, the end of the strip 15 being extended through this opening at 18 and wrapped around the washer as shown at 19 and 20. This wrapped portion is then clamped and secured to the washer by an eyelet 21 which comprises two members. One member forms a flange 22 positioned at one side of the washer 17a and having a central opening. The other member comprises a flange 23 at the opposite side of the washer and a sleeve portion 24 extending through the washer 17a and the opening in the flange 22, and the free end of this sleeve is folded over onto the flange 22 as shown at 25. This effectively clamps the flanges 22 and 23 to the washer 17a and fastens this strip 15 to the washer.

This device also includes improved means for supporting the strippers 15 in place. The frame of the machine comprises side members 26 at opposite ends of the rolls 13. Supported on these side members are angle brackets 27 secured to

the side members by any suitable means such as screws 28, and they include downwardly projecting portions 29 at the inner sides of the frame. Mounted at the inner sides of these downwardly projecting portions are longitudinal extending bars 30. These bars may be of different shapes but preferably are angle bars having their upright flanges against the inner sides of the portions 29 of the brackets and to which they are clamped by clamps 31 engaging the opposite sides of the flange and clamped against the flange and the bracket portions 29 by screws 32 threaded into the portions 29. The opposite end of the clamp 31 has a rib 33 to engage the surface of the bracket portions 29 and form a pivot on which the clamp 31 will turn to clamp the bar 30 to the bracket portion 29. This mounting means effectively clamps the bars 30 to the brackets and will also permit horizontal adjustment.

Extending transversely between the longitudinal bars 30 are transverse cross bars 34. These may be of different shapes but are also preferably angle bars each arranged to provide an upright flange 35. The horizontal flange 35 rests on supporting plates 37 resting on and supported by the horizontal flange 38 of the longitudinal bars 30 and secured thereto by any suitable means, such as the bolts 39. These plates 37 and the portions extending under the transverse bars 34 have longitudinal slots 40 through which clamping bolts 41 may extend and be threaded into the lower flange 36 of the cross bar. This permits relative adjustment between the cross bars 34 and the longitudinal bars 30.

The flexible strippers 15 are suspended from the cross bars 34, and an improved and simplified means for suspending them from the cross bar is shown in Figs. 8 and 9. This comprises a substantially inverted U-shaped block 42 which is adapted to seat over and embrace the upper edge of the upright flange 35 of the cross bar 34. It is a simple matter to mount this block on the flange as all that is necessary is to seat it over the upper edge thereof, and it may be adjusted to any position desired on the cross bar by merely sliding it along the edge of this flange. It may then be clamped in adjusted position by tightening the set screw 43. This eliminates drilling and tapping holes in the cross bar and also permits easy and quick adjustment which was not possible with the old form. Projecting laterally from the outer side of the block 42 is a stud 44 over which the grommet 21 secured to the end of the flexible strip 15 may be slid to suspend the strip from this block. The free end of the stud 44 is curved upwardly as shown to retain the grommet on the stud. It will be evident that with this construction the flexible stripper is effectively and securely suspended from the block 42 and that it may be quickly and easily applied to or removed therefrom by the simple operation of either sliding the grommet on to the stud 44 or lifting it therefrom.

The position of the strippers with respect to the rolls and to each other may be easily and quickly adjusted or changed for different work by merely sliding the blocks 42 along the flange 35, and, as will be seen from Fig. 2, as the strippers for one roll are independent of and disconnected from the strippers of the next roll, the strippers for one roll may be arranged in staggered relation and therefore out of alignment with the next or other rolls, and thus prevent successive strippers engaging the work at the same point. It is very desirable in this class of devices that there

be easy adjustment of the strippers without detaching. Also that there be allowed quick locating, adding or removing of stripper wires as required to accommodate various kinds of work. This has to be done quickly and easily in order to reduce to a minimum and make as short as possible the time required for repairs, adjustment and changes for different work or different operations on the machine. These advantages are effectively secured with this construction. It will also be seen that by this means of mounting the flexible strippers 15, comprising the block 42 and the stud 44 cooperating with the grommet 17, the pull of the strip 15 on the grommet 17 and the block is in the plane of the grommet so that there is no bending of the strip with consequent liability of breaking it. The grommet also makes it a very easy and simple matter to remove the strippers for any reason.

Having thus set forth the nature of my invention, what I claim is:

1. In an ironing machine of the character described, a steam chest, an ironing roll mounted above the chest to cooperate therewith, a support mounted above the chest on the work inlet side of the roll, a stripper located between the chest and roll and comprising a thin flexible flat strip, means for suspending one end of the stripper from the support, the other end of the stripper being on the work outlet side of the roll arranged to direct the work away from the roll and free and unattached, and said free end portion being transversely curved to add strength and stiffness to this portion of the strip so that it will direct and guide the work.

2. In an ironing machine of the character described, a steam chest, an ironing roll mounted above the chest to cooperate therewith, a supporting bar mounted above the chest at the work inlet side of the roll and having an upright flange extending longitudinally of the roll, a stripper between the roll and chest comprising a thin flat flexible strip, and means for supporting one end of the stripper comprising a block having a downwardly opening recess seating over and embracing the upper edge of the flange so that the block is slidable along the flange to adjust the position of the stripper, and means for attaching the stripper to the block.

3. In an ironing machine of the character described, a steam chest, an ironing roll mounted above the chest to cooperate therewith, a supporting bar mounted above the chest at the work inlet side of the roll and having an upright flange extending longitudinally of the roll, a stripper between the roll and chest comprising a thin flat flexible strip, a grommet having an opening therein secured to one end of the strip, a support for one end of the strip comprising a block having a downwardly opening recess shaped to seat over the upper edge of the flange so that the block is slidable along the flange to adjust its position, and a projection extending laterally from the block adapted to pass through the opening in the grommet to support the grommet on the block.

4. In an ironing machine of the character described, a steam chest, a series of ironing rolls mounted above the chest to cooperate therewith, a supporting means comprising laterally spaced longitudinal bars above the rolls, a transverse bar at the work inlet side of each roll extending between the longitudinal bars and having an upright flange, means for adjustably mounting the transverse bars on the longitu-

dinal bars, a plurality of strippers between each roll and the chest and comprising thin flat flexible strips, and means for suspending one end of the strippers comprising blocks to embrace the upper edge of the flange and slidable along the same to adjust the position of the block.

5. In an ironing machine of the character described, a steam chest, a series of ironing rolls mounted above the chest to cooperate therewith, a frame having side members at opposite ends of the rolls, inwardly extending brackets on said side members, longitudinal side bars, clamps for securing the side bars to the brackets, transverse supporting bars extending between the side bars at the work inlet sides of the rolls, means for adjustably mounting the transverse bars on the side bars, a series of strippers between each roll and the chest, and means secured to one end of a stripper and mounted on a cross bar to suspend the stripper therefrom.

6. A stripper for an ironing machine including a steam chest and a roll mounted above the chest to cooperate therewith, comprising a thin flat flexible strip to extend between the roll and chest, means on one end of the strip to suspend the stripper from a support, and the free end portion of the strip being curved transversely to add strength and stiffness thereto to adapt it to guide the work away from the roll.

7. A stripper for an ironing machine including a steam chest and a roll mounted above the chest to cooperate therewith, comprising a flat flexible strip to extend between the roll and

chest, means on one end of the strip to suspend the stripper from a support comprising a grommet including a washer having an opening there-through, the end of the strip passing through said opening and wrapped around the washer, an eyelet comprising two members, one member forming a flange with a central opening on one side of the washer and the other including a flange on the other side of the washer and a sleeve portion extending through the washer and the first flange, and said sleeve portion having its free end turned over on the first flange to secure the two members together and the wrapped end of the strip to the washer.

8. In an ironing machine of the character described, a steam chest comprising a concave wall with a convex wall at the work outlet side thereof, an ironing roll mounted above the concave wall to cooperate therewith, a support extending longitudinally of the roll at the work inlet side thereof, a plurality of strippers located between the chest and roll each comprising a thin flat flexible strip supported at one end on the support and having a free end portion unattached on the work outlet side of the roll and correspondingly curved to lie over the convex portion of the chest, said curved free end portion being transversely curved to add strength and stiffness to this portion to guide the work over the convex portion of the chest after it leaves the roll.

JOSEPH WILKINSON.