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PROTECTIVE ASSEMBLY FOR FLATWORK IRONER ROLLS

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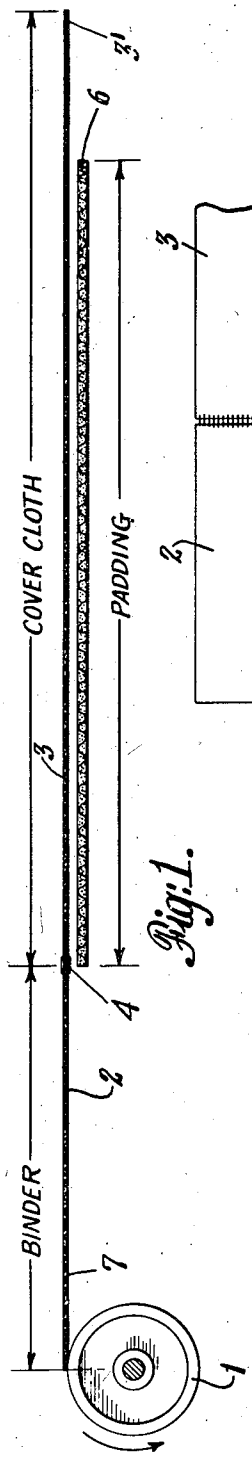


Fig. 1.

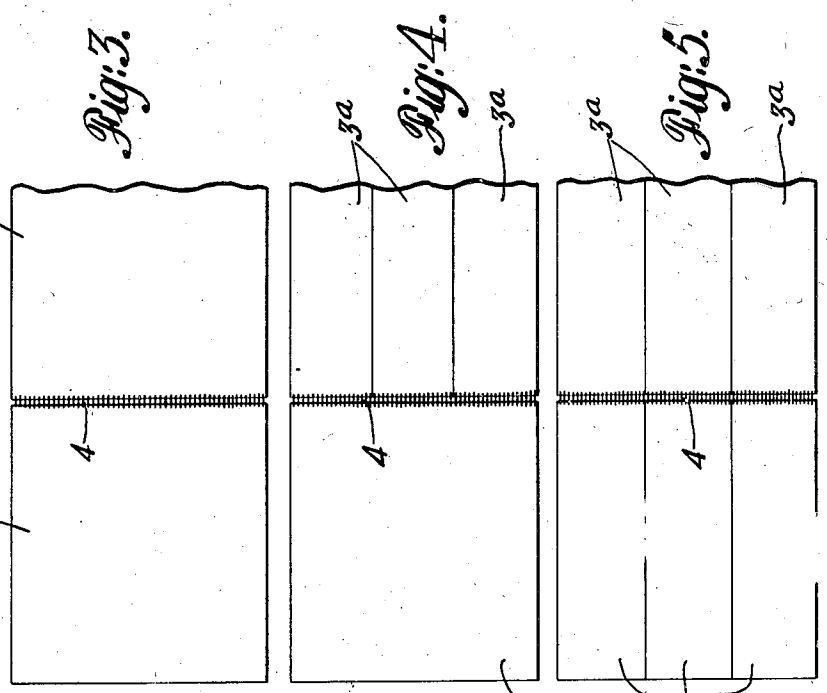


Fig. 3.

Fig. 4.

Fig. 5.

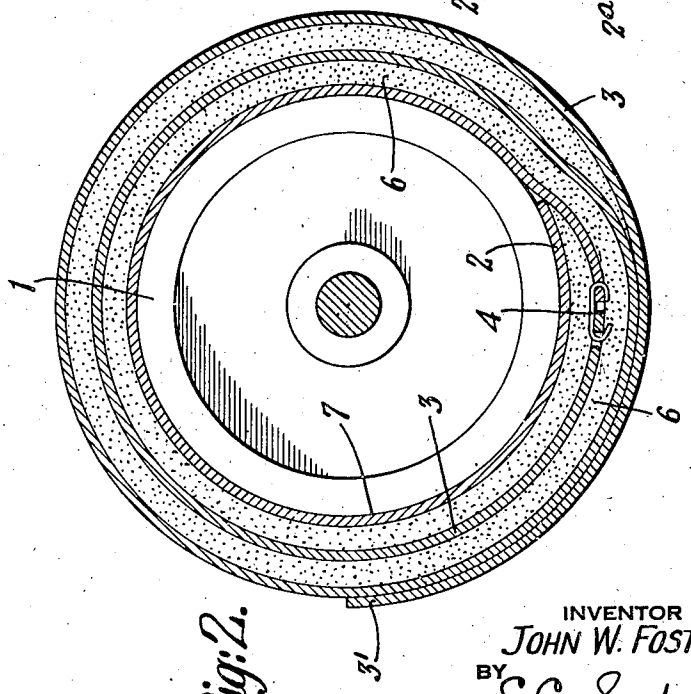


Fig. 2.

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PROTECTIVE ASSEMBLY FOR FLATWORK IRONER ROLLS

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3 Claims. (Cl. 38—65)

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This invention relates to protective assemblies for the rolls of flatwork ironers.

It has been customary for many years to dress the rolls of flatwork ironers with different types of padding and covers. In one type, two or more covers were used in addition to the binder, and to replace a cover it was necessary to insert the new cover back under the original cover for at least one-half of the circumference of the roll to secure anchorage and prevent slippage. This resulted in substantial waste of fabrics.

Another type of protective assembly involved forming the binder and top cover in a continuous piece, as the result of which, when the top cover failed, it was necessary to discard the entire covering assembly.

An object of my invention is the provision of a novel protective assembly for the rolls of flatwork ironers which shall avoid the foregoing disadvantages. The invention provides a new and simple assembly which fulfills its protective function efficiently and at the same time enables replacement of cover cloths to be accomplished with a minimum expenditure of time and effort and with substantial saving of material.

Other features and advantages of the invention will be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a sectional view illustrating a protective assembly embodying my invention, prior to its application to an ironer roll.

Fig. 2 is a sectional view of an ironer roll with the assembly applied.

Fig. 3 is a plan view showing the binder and a portion of the cover.

Fig. 4 is a plan view of a modified form of the invention.

Fig. 5 is a plan view of a further modification.

The embodiment of my invention illustrated in Figs. 1–3 comprises a binder 2, which may be of any suitable material, preferably wire woven cloth combined with asbestos or any suitable fabric which will not fail in the presence of heat and moisture, as generally encountered in laundry equipment. At one end, the binder 2 is glued or otherwise suitably attached to an ironer roll 1.

The cover cloth 3 may be of any desired fabric material, such as cotton, wool, asbestos, fiber glass, synthetic fibers, or other highly durable material. It may, if desired, be coated with a synthetic resin or other suitable substance for increasing its resistance to the destructive action of heat and moisture.

The free edge of the binder 2 and the adjacent edge of the cover cloth 3 are provided with coacting separable fastener elements 4 whereby said binder and cover cloth may be firmly united but may be readily separated whenever desired. The fastening elements 4 may be of any well-known type, such, for instance, as hooks in the cover engaging eyelets in the binder; or flat metal staples engaging eyelets in the binder and cover cloth and having their ends bent over after insertion through said eyelets; or the well known hinge-type fasteners for detachably securing sections of power-transmitting belts to each other.

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Other examples of fastening means which may be employed are conventional lacings passing through eyelets or grommets in the adjacent edges of the binder and cover cloth, or the well-known hookless or zipper type fasteners.

If desired, the cover cloth 3 may comprise padding material formed as part thereof or integral therewith, so as to replace the separate padding usually employed. I have, however, shown a separate padding element 6 of the type customarily used with ironer rolls.

To apply the above-described elements to the roll 1, the edge portion of the binder 2 remote from the cover cloth 3 is permanently anchored to said roll, as by gluing or otherwise. The cover cloth having been attached to the binder through the elements 4, the roll is turned counter-clockwise, as indicated by the arrow in Fig. 1. The binder is preferably of a length slightly exceeding the circumference of the roll 1.

As the cover cloth 3 approaches the roll 1 during turning of the latter, an end of the padding element 6 is inserted between said cover cloth and the binder 2, so as to pass therewith onto said roll. Preferably, as shown in Fig. 2, the leading end portion of said padding element covers the joint between the cover cloth and the binder.

On continuing the turning of the roll 1, the cover cloth and padding are rolled therearound until the entire assembly is wound completely around the roll, as shown in Fig. 2. The cover cloth is substantially longer than the padding, to completely cover the latter, as shown. The trailing end portion 3' of the cover cloth may, as in conventional practice, either flow freely, or when desired, be held against the preceding lap of cover cloth by a string, tape, or other fastening means, as will be readily understood.

In the drawings, the length of the padding element 6 is shown as approximately twice the circumference of the roll 1, the installation illustrated in Fig. 2 being of the "two-lap" type. It will, of course, be understood that the lengths

of the binder, cover cloth, and padding may be varied as desired.

It will be seen that, whenever replacement of the cover cloth 3 is desired, the latter, together with the padding, may be unwound from the roll and the cover cloth readily detached from the binder 2. A new cover cloth may then be quickly attached to the binder and wound upon the roll, together with the padding. Removal of the binder is unnecessary, nor need a plurality of covers be employed in extensive overlapping relation as in prior arrangements.

Preferably, the binder is glued or cemented to the roll over a substantial area, extending, for example, from the leading edge of the binder to a parallel line, a point in which is indicated at 7 in Fig. 1. When the binder comprises woven wire cloth and attached asbestos or other fabric the portion between the leading edge and the line containing said point 7 may, if desired, omit the wire cloth, and may consist simply of fabric glued or cemented to the roll 1 and extending from the wire cloth portion.

In the modification shown in Fig. 4, the cover cloth comprises a plurality of strips 3*a*, adapted to extend circumferentially of the roll. In this way, if damage or injury occurs in any one of the strips, only that strip need be removed and replaced.

In Fig. 5, both the cover cloth and the binder are formed of strips adapted to extend around the roll, the binder strips being designated 2*a*.

The binder and cover cloth may, if desired, be applied with their warp threads running around the roll, to take advantage of the strength of said threads.

The terms and expressions which I have employed are used as terms of description and not of limitation, and I have no intention, in the use of such terms and expressions, of excluding any equivalent of the features shown and described or portions thereof, but recognize that various modifications are possible within the scope of the invention claimed.

I claim:

1. In combination, an ironer roll, a binding strip attached to said roll and wound around substantially the circumference thereof, a covering strip having an end adjacent an end of said binding strip, said covering strip overlying said binding strip and extending at least once around the circumference of said roll, separable fastener means for uniting said ends of said strips, and padding inserted between said binder strip and said covering strip and extending at least once around the circumference of said roll, a portion of said padding also extending beneath said fastening means.

2. In combination, an ironer roll, a binding strip attached to said roll, a covering strip having an end adjacent an end of said binding strip, said covering strip overlying said binding strip and extending at least once around the circumference of said roll, separable fastener means uniting said ends of said strips, and padding cooperating with said binder strip and said covering strip and extending at least once around the circumference of said roll with an end of said padding overlapping said fastening means.

3. A protective assembly for an ironer roll, comprising a binding strip adapted for attachment to said roll, a covering strip having an end adjacent an end of said binding strip, said covering strip being of such length as to overlie said binding strip and to extend at least once around the circumference of said roll, separable fastener means uniting said ends of said strips, and padding adapted for cooperation with said binder strip and said covering strip and adapted to extend at least once around the circumference of said roll with an end of said padding overlapping said fastening means.

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