

March 10, 1936.

J. R. CROCKFORD

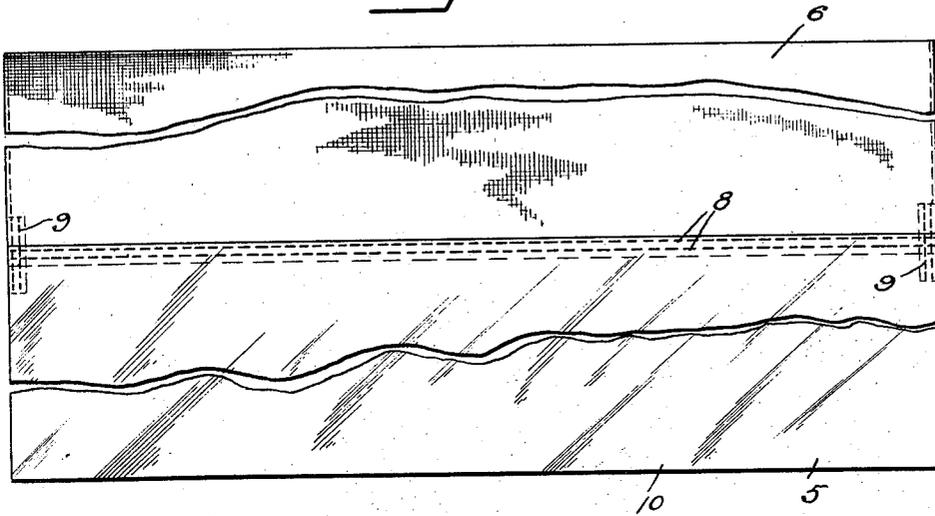
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PADDING PROTECTION FOR FLATWORK IRONERS

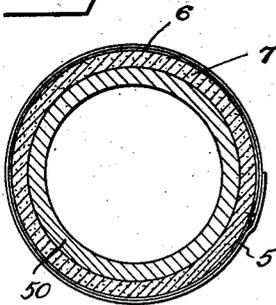
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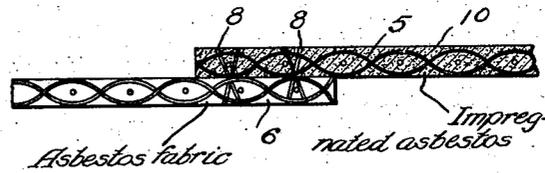
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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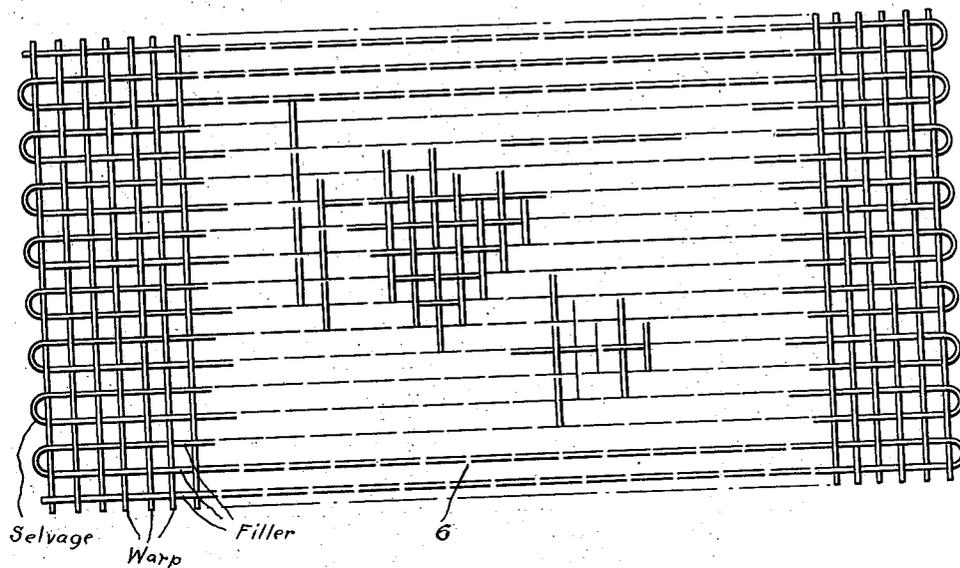
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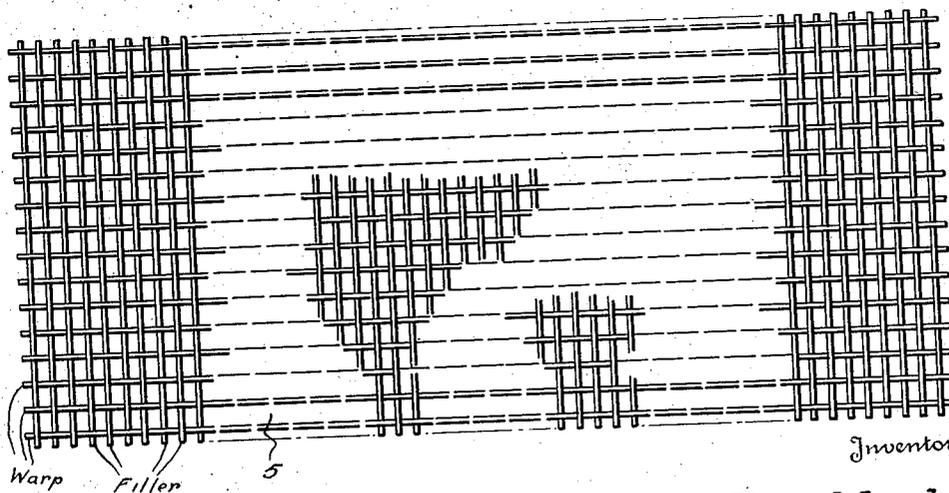
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*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE

2,033,894

## PADDING PROTECTION FOR FLATWORK IRONERS

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to Johnson & Johnson, New Brunswick, N. J.,  
a corporation of New Jersey

Application March 7, 1934, Serial No. 714,526

15 Claims. (Cl. 68—9)

The invention relates to flatwork ironers, and more particularly to protecting ironing roll padding, and provides certain improvements which, summarily, make for simplicity, efficiency and prolonged effective life.

One object of the invention is greatly to prolong the useful life of paddings so as to avoid frequent shutdowns and to provide padding protection which is substantially immune to the deteriorating action of heat and moisture so that its useful life practically may be guaranteed over a stated period of rigorous use.

Another object is to construct padding protection comprising binding and covering strips in the form of a unitary structure which may be applied and removed with facility and dispatch.

Another object is to provide, as a unitary structure, ironing roll covering that occupies little storage space and that is devoid of fire risk.

Another object is to provide a self-contained structure comprising a binding strip for the regular padding and which of itself may be padding either as a replacement in entirety or as a complement of the usual padding, and a covering fabric, said structure having great tensile strength, and the protecting fabric being proof against the destructive action of heat and flame and of reagents, including greases, soaps, etc. and impermeable to the passage of moisture in vapor or other form and, withal, having inherent flexibility and presenting a substantially smooth surface that may be sponged or washed, if necessary or desired, without militating against any of the essential or advantageous qualities stated.

The nature, characteristic features and scope of the invention more readily will be understood from the following detailed description, taken in connection with the accompanying drawings, forming a part hereof, wherein

Figure 1 is a plan view of the protective cover and its binder strip partly broken away.

Fig. 2 is a sectional view of an ironing roll with the padding protection applied.

Fig. 3 is a sectional detail on an enlarged scale of the connected ends of the binding and covering elements.

Figs. 4 and 5 illustrate the preferred weaves of the binding and covering elements.

In the drawings the numeral 5 represents the protective covering and 6 represents a lining or binding strip which is a complement of the covering and the medium whereby the latter is applied to the paddings of ironing rolls. Strip 6 is, in fact, padding material and, under some

conditions, may replace the usual padding in entirety. However, under the preferred practice, it constitutes an addition or complement of the usual padding 7 of the ironing roll.

In accordance with the inventive thought, the protecting covering 5 is a prolongation of the partial padding or binding strip 6, and is integrated therewith as, for example, by lines of stitching 8 which secure the lapped ends. The seam is reinforced at the margins of the elements, as at 9.

It is a merit of the invention that the protecting casing 5 is a flexible woven fabric having an impregnation 10 of a substance that will transform the fabric into insulation well qualified to protect the binder strip and the padding proper from the destructive action of heat and moisture or other deleterious concomitant conditions of flatwork ironers.

In a continuation of the inventive thought to prolong the life of the conventional ironing roll padding, the impregnation 10 represents resinous material such as a heat-hardenable phenolic resin which is knife spread or calendered or otherwise deposited upon and within the vehicle or fabric, whatever it may be, and cured with a substantially smooth and indurated surface which, however, does not seriously impair the flexible properties of the fabric. Preferably both sections, the binding strip and the covering fabric, are constructed of asbestos cloth and, while a uniform weave might well be employed, it is a merit of the invention, and in line with its purpose to insure longevity of the padding, that the binding strip or tail of the covering is so arranged that its warp threads extend in the direction of its length and that the cover cloth is relatively close woven with extra strength in the filling threads which, it will be noted, are directed the same as the warp threads of the binding or tail fabric.

While the preference, as to weave, has proved eminently satisfactory in practice, it is to be understood that it is not of the essence of the invention. Otherwise stated, the binding strip or tail fabric may be any fabric or material qualified to function as a padding addition to or complement of the regular padding wound upon the roll. The roll, shown at 50, may be of usual construction.

Having described the invention, I claim:

1. An ironing roll in combination with padding, and insulation material substantially surrounding the padding, said insulation material being effective to insulate the padding from the

destructive action of heat and moisture and comprising a covering cloth having a surface coating of heat-hardened resinous material.

2. An ironing roll in combination with sheet padding material, and padding protection comprising a porous fabric section formed as a prolongation of the padding material, the prolongation having throughout an area equal at least to one convolution an impregnation of heat-hardened phenolic resinous material.

3. An ironing roll in combination with padding wound thereon, said padding including flexible porous sheets arranged end to end and relatively secured for handling as a unit and whereof one has a coating of flexible heat-hardened resinous material to protect the underlying padding against the entry and destructive action of heat and moisture.

4. An ironing roll in combination with padding including endwise disposed strips of fabric joined by a transverse seam and whereof one is impregnated with a heat-hardened phenolic resin to protect the padding from the destructive action of heat and moisture.

5. An ironing roll and padding therefor, said padding including a covering strip of woven asbestos fabric an effective area of which is provided with a moisture impenetrable heat-resisting impregnation, the impregnation material comprising a heat-hardened phenolic resin.

6. Padding for flatwork ironers comprising the padding proper, and a protecting wrapper comprising complementary lining and covering fabric sections whereof the covering section is impregnated with a heat-hardened flexible resinous material substantially resistant to heat and moisture whereby it is effective substantially to insulate the padding from heat and moisture, the impregnated area being characterized by a flexible and smooth surface substantially devoid of embossing tendency.

7. Padding protection for flatwork ironers, comprising a binding strip, and a covering strip formed as a continuation of the binding strip and having an impregnation of resinous material that is substantially heat-proof and waterproof whereby it is highly resistant to heat and moisture, said impregnation being characterized by a flexible enamel-like surface that is non-scuffing and non-embossing.

8. A heat and moisture resisting non-scuffing and non-embossing covering for ironing rolls, comprising a sheet of flexible porous fabric having a smooth external coat of heat-hardened phenolic resinous material, and an uncoated porous winding sheet in coupled relation with the coated sheet.

9. Padding protection for flatwork ironers, comprising a porous binder sheet, and a sheet of asbestos united thereto and having an impregnation of resinous material in a heat cured state

whereby it is effective to insulate the padding against the destructive action of heat and moisture.

10. Padding protection for flatwork ironers comprising relatively close woven asbestos fabric of a length adequate for several turns about an ironing roll and whereof at least an area of one turn is provided with heat and moisture insulating material defined as a flexible heat-hardened resin.

11. Padding protection for flatwork ironers, comprising sections of fabric disposed end to end and joined for handling as a unit and whereof that section which contacts the work is impregnated with a heat-hardened phenolic resinous material whereby it is effective to protect the padding from the destructive action of heat and moisture, the other section being unimpregnated.

12. Padding protection for flatwork ironers comprising treated and untreated flexible porous fabric sections arranged end to end and joined together for handling as a unit, the treated section comprising asbestos cloth having reinforcing filling threads lengthwise thereof and an impregnation of flexible heat-hardened resinous material whereby it is effective to protect the padding from the destructive action of heat and moisture.

13. Padding protection for flatwork ironers comprising strips of woven asbestos fabric, said strips arranged end to end and stitched together for handling as a unit, one of said strips being of relatively close weave and having extra strong filling threads extending in the same direction as the warp threads of the other strip, the relatively close woven strip having an impregnation of flexible heat cured resinous material substantially confined to one surface for the purpose and with the result of insulating the other strip and the underlying padding material from the destructive action of heat and moisture.

14. An ironing roll in combination with padding wound thereon, and means for protecting the padding from the destructive action of heat and moisture, said means comprising a mineral fabric having an impregnation of a heat-hardened phenolic resin for the purpose and with the result of rendering it impermeable to moisture, said fabric having an unimpregnated tail piece initiating its winding upon the roll.

15. A heat and moisture resisting non-scuffing and non-embossing covering for the padding of ironing rolls, comprising primary and secondary covering sheets joined endwise for handling as a unit and each formed of woven asbestos, the outer or secondary covering having an impregnation of heat-hardened phenolic resinous material manifested as a smooth external coat.

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