Aug. 9, 1949. F. C. GAY ET AL 2,478,262

DAMPENING ROLLER COVER

Filed July 17, 1946

Fig. 1.

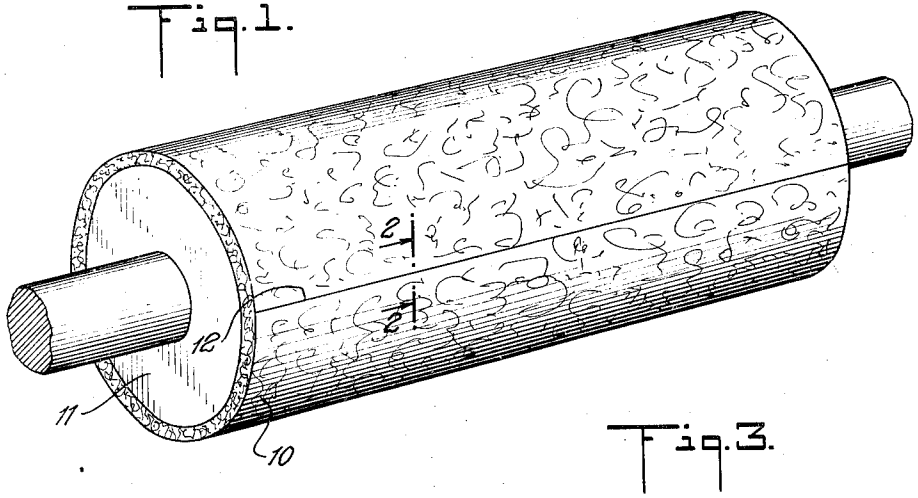
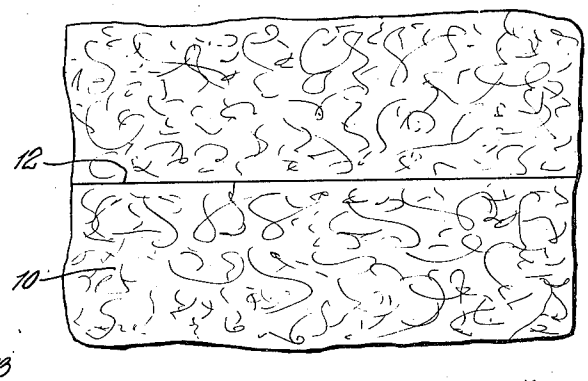



Fig. 3.



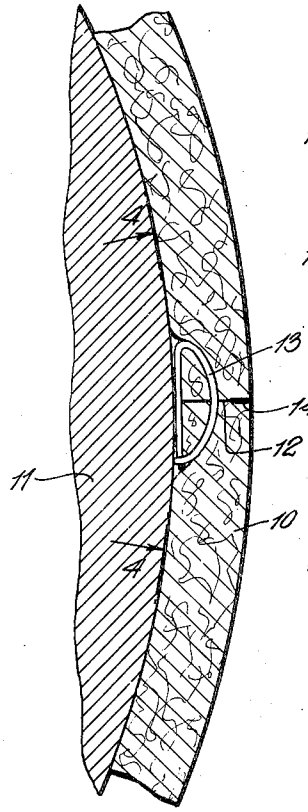




Fig. 2.

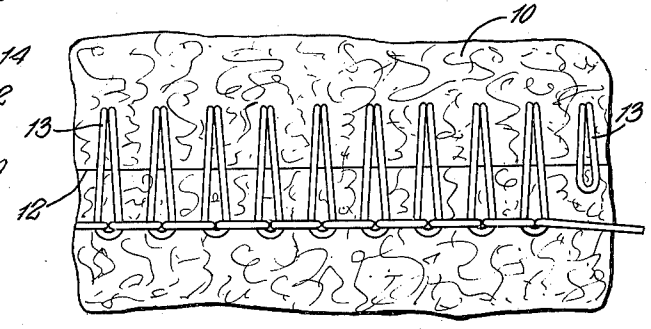



Fig. 4.

INVENTORS
FREDERICK C. GAY
EDWARD J. GAY
BY
Benj. T. Rauber
ATTORNEY

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## DAMPENING ROLLER COVER

Frederick C. Gay, Brooklyn, N. Y., and Edward J. Gay, Westfield, N. J., assignors to Bingham Brothers Co., New York, N. Y., a corporation of New York

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3 Claims. (Cl. 91—67.8)

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Our present invention relates to dampening rollers and covers therefor, such as are used in moistening lithographic plates during printing.

Rollers of the above type are commonly covered with a layer of suitable fabric, such as heavily napped fabrics known as molleton, moleskin, flannel, velveteen, plush, muslin, felt, etc.

In making the cover it is necessary to stitch a strip or sheet of the fabric on a longitudinal seam to form a cylindrical or sleeve-like structure.

The cover is generally mounted on the roller in a tightly stretched condition so as to present a smooth unwrinkled surface.

Heretofore the covers have been formed by stitching through the edge portions of a strip of fabric so that the needle and the thread penetrated through both thicknesses. When the resulting sleeve or cylindrical structure was mounted on the roller the threads were exposed on the outer surface and not only created an unevenness but subject to rapid wear or breakage, which would render the cover unsatisfactory for certain uses.

In our present invention we provide a cover which is free from stitching on the outer exposed surface and in which the stitching threads are protected from wear.

Various features of our invention are illustrated, by way of example, in the accompanying drawings in which

Fig. 1 is a perspective view of a dampening roller covered with the cover of our invention;

Fig. 2 is a section on a larger scale through the cover at the seam showing its position on the roller;

Fig. 3 is a side view of a portion of the cover at the seam, and

Fig. 4 is a view looking through the opposite or inner side of the cover, this view being taken on the line 4—4 of Fig. 2.

In the embodiment of the invention shown in the accompanying drawings, a cover 10 is illustrated as applied to a roller 11. This cover may be made of any suitable material, such as felt, or a fabric with a heavy nap, such as molleton or moleskin, or may be a piled fabric, such as velveteen or plush. It comprises a sheet or strip of the fabric wrapped tightly about the roller and joined on a longitudinal seam 12. The seam is held tightly together by stitching 13 extending through the inner part of the fabric from the under face, that is, the face adjacent the surface of the roller 11. The stitching comprises loops extending across the under or inner face of the fabric and entering the fabric part way

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between the inner and outer surface but without penetrating the outermost surface. This stitching is not exposed to wear and therefore leaves the outer surface of the cover smooth and uninterrupted. The seam may be further closed at its outer surface by an adhesive applied to the opposed edges of the fabric at the seam as indicated at 14.

In forming the fabric into a cylindrical sheath or covering two edges of the fabric may be placed in abutment and the stitches formed by a needle passing through the exposed surface part way into the fabric from one side of the seam and thence across the other and back on the outer surface of the fabric to form the loops 13. When the seam is completed the cylinder or sheath thus formed is turned inside out, whereupon the stitching will be on the inner surface and free from the outer surface of the sheath. Or the strip may be folded double lengthwise with the longitudinal edges in alignment and the stitching made by passing a needle into the fabric midway of its thickness, thence through the contacting surfaces and back outwardly through the opopsite layer at a mid-position. The abutting edges of the fabric outwardly of the stitching will thus be brought into tight smooth contact particularly when the sheath or cylinder is tightened or slightly stretched over the roller.

It will be understood that the stitching may be done by hand or by a suitable machine.

In order to insure the closing of the edges of the seam to the outer surface of the finished cylinder the abutting edges may be tipped lightly with an adhesive before or after the cylinder is turned inside out.

Through the above invention we have provided a fabric cover for moistening rollers and similar apparatus in which a seam is formed without exposing stitching threads to wear, in which the stitching is entirely concealed below the outer surface of the cover, and in which the surface of the fabric at the seam is left smooth and uniform.

What we claim is:

1. The method of making a covering for dampening rollers which comprises placing the longitudinal edges of a strip of fabric into abutment, stitching said abutting edges into a seam with stitches passing part way into the thickness of said fabric from one side of said seam to the other and then turning the cylinder of fabric thus formed inside out to bring the stitches on the inner surface of said fabric and to leave the outer surface free of stitches.

2. The method of claim 1 in which adhesive is applied to the abutting edges of said fabric.

3. A dampening roller having a fabric covering, said covering comprising a sheet of fabric formed into a cylinder with the longitudinal edges of said sheet abutting to form a longitudinal seam, loop stitches on the inner face of said fabric extending partway into the thickness of said fabric and thence through said seam to hold said edges into close contact, the loops of said stitches being secured on the inner face of said cylinder structure.

FREDERICK C. GAY.
EDWARD J. GAY.

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