Sept. 29, 1925. 1,555,650

A. J. FISHER

IRONING MACHINE ROLL

Filed Feb. 10, 1922 2 Sheets-Sheet 1

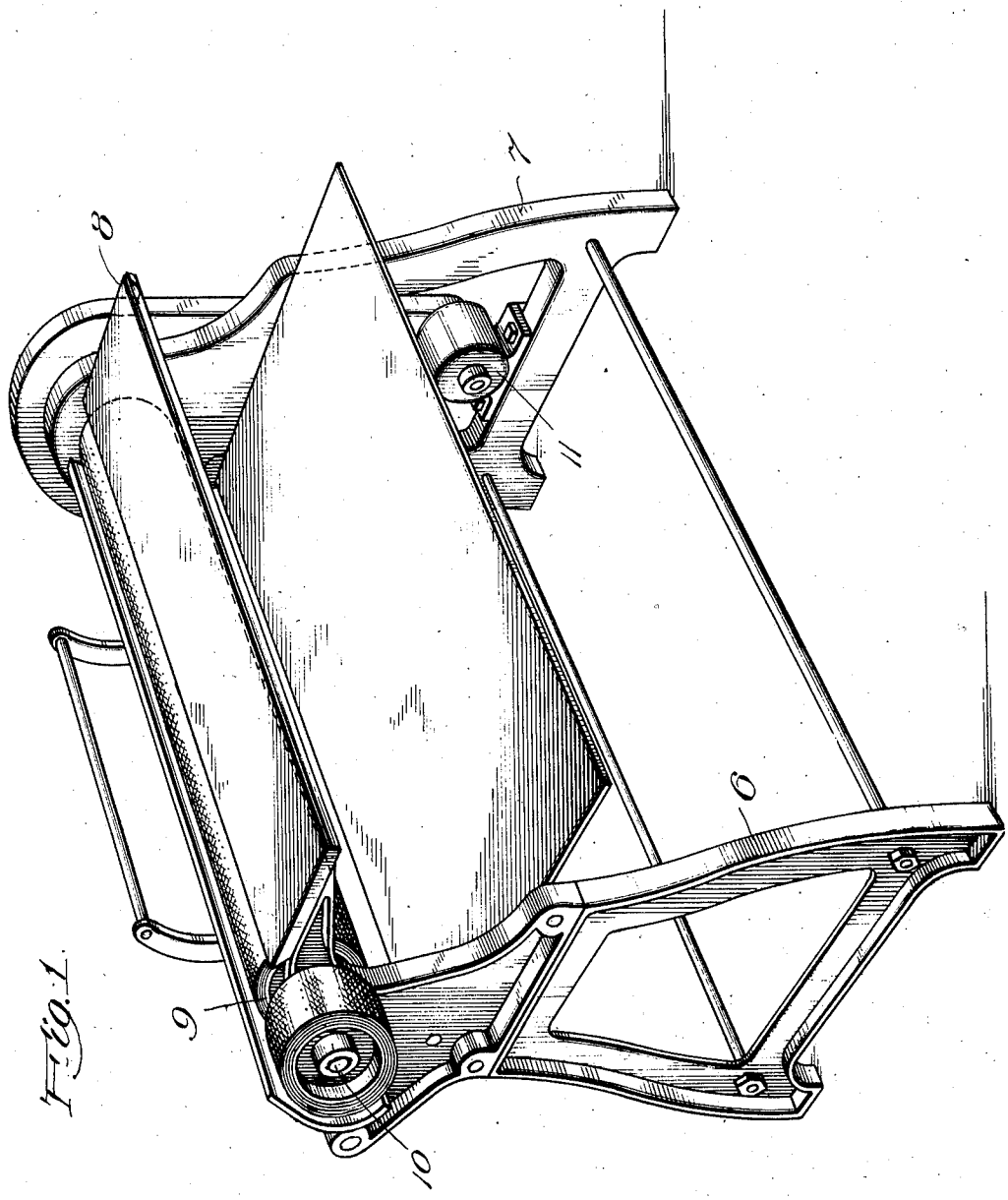


Fig. 1.

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Fig. 2.

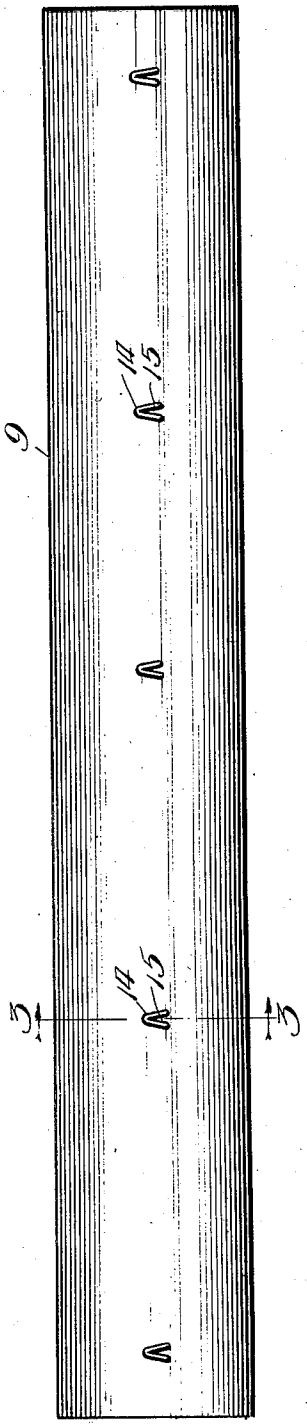


Fig. 6.

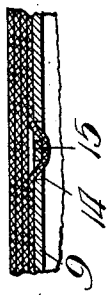


Fig. 5.



Fig. 4.

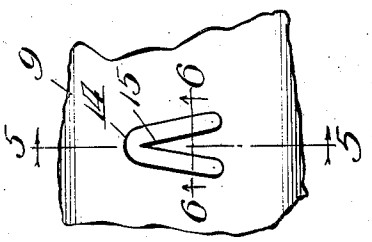
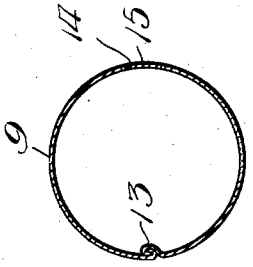


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALVA J. FISHER, OF EVANSTON, ILLINOIS, ASSIGNOR TO HURLEY MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

IRONING-MACHINE ROLL.

Application filed February 10, 1922. Serial No. 535,435.

To all whom it may concern:

Be it known that I, ALVA J. FISHER, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Ironing-Machine Rolls, of which the following is a specification.

My invention relates to ironing machines and the principal object thereof is to provide novel and improved means, which is simple in construction, cheap to make and easy to manipulate, for securing the covering to the ironing roll. Prior to my invention the various kinds of devices for attaching the covering to the ironing roll have been more or less complicated in construction and costly in manufacture, and many of such fastening devices caused bumps, raised portions or ridges in the covering, which are obviously objectionable as the covering should be as smooth and even as possible to perfectly iron the laundry. With my invention, the ironing roll is preferably formed of sheet metal and the fastening means comprises points (preferably integral with the roll) projecting into slots of substantial width, so that after the points have been projected through the covering and bent back flush with the perimeter of the roll and the covering has been wrapped around the roll, the outer surface of the covering is substantially as smooth and even over and in proximity of the securing means as over the rest of the roll.

In the drawings, Fig. 1 is a perspective view of an ironing machine, adapted to embody my invention; Fig. 2 is an elevation of the ironing roll showing my improved invention; Fig. 3 is a cross-section on the line 3—3 of Fig. 2; Fig. 4 is an enlarged fragmentary view showing one of the securing devices; Fig. 5 is an enlarged section taken on the line 5—5 of Fig. 4, and Fig. 6 is an enlarged section taken on the line 6—6 of Fig. 4 and through the covering.

The ironing machine, shown in Fig. 1, comprises, in general, the end frames 6 and 7, a feed table 8, and an ironing roll 9 supported in any suitable manner on a mandrel 10, which is journaled at its ends in the frames 6 and 7, the roll being driven by an electric motor 11 or by any other desired means. It is understood, of course, that my invention may be applied to an ironing machine of any type, and that I have shown a machine designed primarily for household use merely for illustrative purposes and without intent to limit the application of my invention thereto.

The roll 9 is formed of sheet metal which has its abutting edges connected or fastened together by a lock-seam 13 (Fig. 3) or any other desired means. Diametrically opposite the lock-seam is a plurality of V-shaped slots 14, suitably spaced along the roll and preferably in alignment. The slots are of substantial width and form securing points 15.

When it is desired to attach the cloth covering, the points 15 are bent outwardly to the position shown in Fig. 5, for example, and the inner end of the covering is brought down on the points so that the latter project therethrough. Then the points are bent or pressed back to normal position so that they lie approximately flush and within the perimeter of the roll 9, as shown in Fig. 6, and finally the roll 9 is rotated to wrap or wind the covering around the roll, the covering being sufficiently long to provide several layers, as is usual. The slots 14 are substantially wider than the thickness of the material forming the covering, so that the covering is not cut by or pinched between the edges of the points and the opposed edges of the slots. It will also be observed that the portions of the covering in the slots do not extend at right angles to the periphery of the roll and hence there are not sharp breaks or bends in the covering which would tend to cause slight ridges in the covering at the outer edges of the slots due to resistance of the threads of the fabric, forming the covering, to such breaking action. The points 15 extend in the direction of normal rotation of the roll 9, which is also rotated in such direction when the covering is wound thereon.

Although I have described but one form of embodiment of my invention, it will be understood that the invention is susceptible of various changes and modifications, all coming within the scope and spirit of my invention, as described in the following claims.

I claim:

1. An ironing cylinder having a plurality of sharp metal points to which the covering is adapted to be attached and an opening around each point of substantial width.

2. An ironing cylinder of sheet-metal having a plurality of slots of substantial width forming sharp integral points which are adapted to project through the covering and extend flush with the perimeter of the cylinder.

3. In an ironing machine, an ironing cylinder of sheet-metal having slots of substantial width forming sharp points which point in the direction of rotation of the cylinder and are adapted to project through the covering to secure the same to the cylinder.

4. An ironing cylinder of sheet-metal having a plurality of openings, sharp flexible metal points projecting into said openings and forming V-shaped slots wider than the thickness of the covering through which the points are to project to secure the same to the cylinder.

5. In an ironing machine, an ironing cylinder of sheet-metal having a plurality of V-shaped slots of substantial width and forming sharp points extending in the direction of rotation of the cylinder and adapted to be bent outwardly to permit their projection through one end of the covering and to be bent back flush with the perimeter of the cylinder.

ALVA J. FISHER.