May 3, 1960 D. A. SEILER 2,935,237

CAP COVER STRETCHER

Filed March 28, 1958

FIG. 1

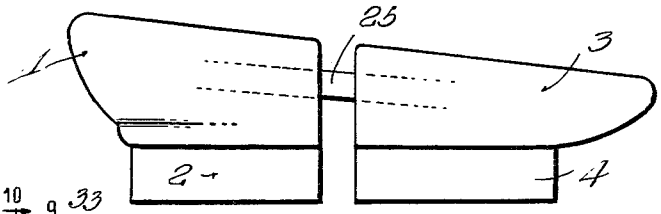


FIG. 2

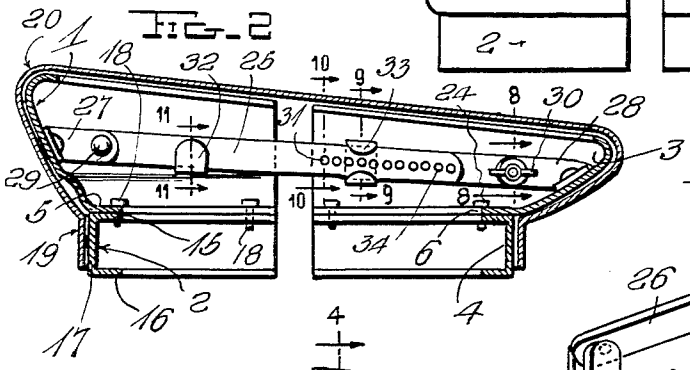


FIG. 6

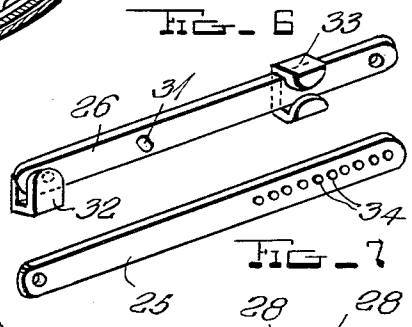


FIG. 7

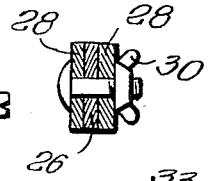


FIG. 8

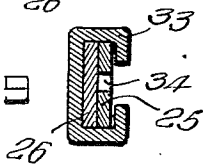


FIG. 9

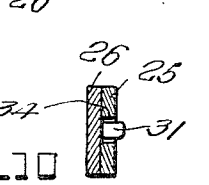


FIG. 10

FIG. 3

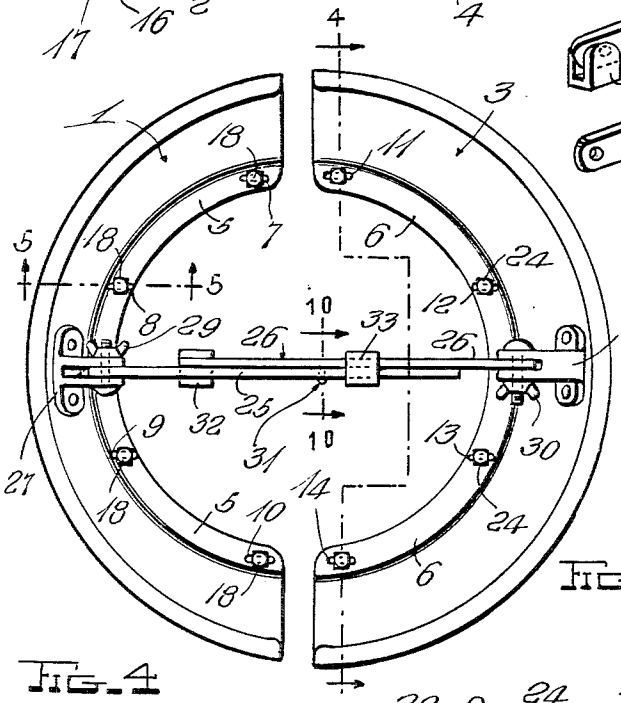


FIG. 4

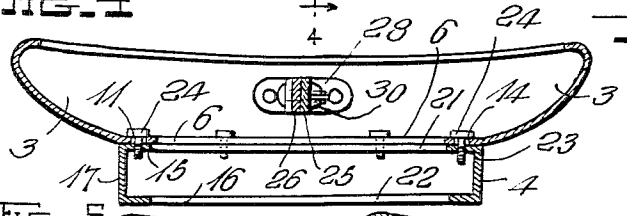


FIG. 12

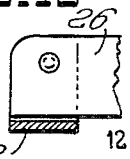


FIG. 11

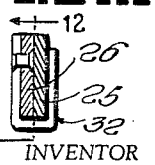


FIG. 5

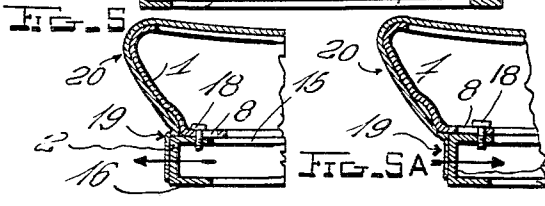
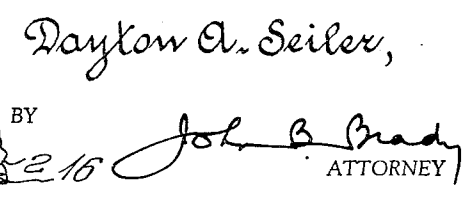


FIG. 5A



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CAP COVER STRETCHER

Dayton Albert Seiler, Elizabethton, Tenn.

Application March 28, 1958, Serial No. 724,665

2 Claims. (Cl. 223—25)

My invention relates broadly to laundry appliances and more particularly to an improved device for stretching cap covers of the type which must be periodically removed from the cap frame for laundering and restoration to the cap frame.

One of the objects of my invention is to provide a construction of laundry device for cap covers which is readily adjustable to various sizes of cap covers and which may be maintained in a set position for stretching a cap cover after washing and during drying.

Another object of my invention is to provide a construction of stretcher for cap covers including an adjustable member for stretching the band of an associated cap cover in addition to the stretching of the cap cover per se.

Still another object of my invention is to provide a construction of cap stretcher which includes a band stretcher which is adjustably mounted on the cap stretcher and adapted to be selectively positioned for stretching the band of a cap cover while drying subsequent to a laundering operation.

A still further object of my invention is to provide an arrangement of mounting means for a band stretcher on the parts of a cap stretcher for stretching cap covers and the depending band portions thereof during a drying operation after laundering.

Other and further objects of my invention reside in the production of a cap stretcher associated with an adjustable band stretcher adjustable to meet various requirements as to size which may be encountered over a wide range of cap sizes as set forth more fully in the specification hereinafter following by reference to the accompanying drawings in which:

Fig. 1 is a side elevational view of the cap stretcher and the associated band stretcher of my invention showing the parts of the cap stretcher and band stretcher slightly separated for stretching a cap cover and the depending band thereof:

Fig. 2 is a longitudinal sectional view taken through the cap and band stretcher of Fig. 1 with the cap cover and depending band shown in position on the cap and band stretcher and illustrating, in side elevational view, the adjustment means for spreading and maintaining the cap stretcher and the associated band stretcher in a position for stretching a cap cover and the depending band thereof according to a selected size;

Fig. 3 is a bottom plan view of the cap stretcher and showing the adjustable means for mounting associated band stretchers in position with respect to the parts of the cap stretcher;

Fig. 4 is a transverse sectional view taken substantially on line 4—4 of Fig. 3 and showing one of the band stretchers adjustably mounted with respect to the cap stretchers;

Fig. 5 is a fragmentary vertical sectional view through a portion of the cap stretcher and associated band stretcher taken approximately on line 5—5 of Fig. 3 and illustrating the band stretcher adjusted forwardly with respect to the associated cap stretcher for imparting a stretching operation to the band of the cap cover, under conditions where the band is slightly oversize and requires stretching while drying to improve the laundered appearance of the cover and associated band;

Fig. 5A is a view similar to the view shown in Fig. 5, but illustrating the band stretcher in a retracted position with respect to the cover portion of the cap stretcher for stretching the band of a cap cover which may be somewhat undersize in order to insure a neat appearance to the finished laundered cap cover;

Fig. 6 is a perspective view of one of the stretching members fastened to one of the cap cover stretchers;

Fig. 7 is a perspective view of the other of the stretching members which is fastened to the opposite cap cover stretcher, the view showing the stretching member in a position reversed with respect to the position of the stretching member shown in Fig. 6;

Fig. 8 is a vertical sectional view through the stretching members in assembled position, the view being taken on line 8—8 of Fig. 2;

Fig. 9 is a vertical sectional view similar to the view shown in Fig. 8, but taken on line 9—9 of Fig. 2;

Fig. 10 is a cross-sectional view through the stretching members taken on lines 10—10 of Figs. 2 and 3;

Fig. 11 is a transverse sectional view through the cap stretching members in assembled relation on line 11—11 of Fig. 2; and

Fig. 12 is a fragmentary sectional view on line 12—12 of Fig. 11 showing the means for maintaining the stretching members in longitudinal alignment when set in a position selectively spacing the cap stretcher parts from each other.

My invention is directed to a laundering device for cap covers of the type used on caps worn by officers in the Armed Services, State Militia personnel, metropolitan police, firemen, and other specialized services where the cap cover must be removed for washing, drying while stretching, for the subsequent restoration to the cap. I have discovered that there are many variations in sizes of caps over the wide range of application for cap covers of the type herein described, and my invention provides means for meeting and solving this problem. I arrange a pair of band stretching members in adjustable relation to the cap cover stretching members and, wherever conditions require, these band stretching members are advanced or retracted with respect to the cover stretching members for imparting the required tension to the band of the cap cover to insure the stretching of the band taut while the cap cover and associated band is drying on the stretching device. I provide means for selectively spacing the parts of the cap stretching device so that, when once set, in a desired predetermined spatial relation, the parts may be maintained in such relation to insure the stretching of the cap cover and associated band while drying. The means for maintaining the cap cover in stretched position are readily retracted with respect to each other to enable the dried or laundered cap cover to be removed from the stretcher for restoration to the cap.

Referring to the drawings in more detail, reference character 1 designates the forward portion of the cap cover stretcher suitably formed to impart the desired shape to the cap cover when stretched thereover for purposes of drying after washing. A band stretcher portion 2 is mounted directly beneath the forward portion 1 of the cap cover stretcher shown more clearly in Figs. 2, 4, 5, and5A. The rearward portion of the cap cover stretcher is shown at 3, which is also shaped to form the cap cover in the desired manner to satisfy the required appearance when restored to the cap. A depending adjustable band stretcher portion 4 is mounted directly beneath the rearward portion of the cap cover stretcher 3 as shown more clearly in Figs. 2 and 4. Both the for-

ward and rearward portions 1 and 3 of the cap cover stretcher terminate in a flat flange which, for forward portion 1, is indicated at 5, and, for the rearward portion 3, is indicated at 6. These flat flanges are each provided with a multiplicity of lineal slots which, in the instance of the forward portion 1 of the cap cover stretcher, are located at 7, 8, 9, and 10. In the instance of the rearward portion 3 of the cap cover stretcher, these slots are located at 11, 12, 13 and 14. When the parts of the cap cover stretcher are assembled in relation to each other for stretching a cap cover as represented in Figs. 2 and 3, slots 7 and 11 are colinear; slots 8 and 12 are similarly colinear on an axis parallel to the colinear axis on which slots 7 and 11 are aligned; slots 9 and 13 are colinear on an axis parallel to the axis on which slots 8 and 12 are aligned; and slots 10 and 14 are colinear on an axis parallel to the axis on which slots 9 and 13 extend.

The band stretcher 2 is substantially channel-shaped in transverse section, and includes a pair of parallel extending side flanges 15 and 16 interconnected by a vertical web or intermediate connecting member 17. The band stretcher 2 is substantially semicircular in contour or is curved to conform with the curvature of flat flange 5 of the forward portion 1 of the cap cover stretcher. Fastening screws 18 having headed ends adjacent the forward portion 1 of the cap cover stretcher pass through the slots 7, 8, 9 and 10 in flange 5, and enter screw threaded apertures in the side flange 15 of the band stretcher 2. When the headed ends of screws 18 are loosened, the band stretcher 2 may be advanced or retracted with respect to the forward portion 1 of the cap cover stretcher as shown more clearly in Figs. 5 and 5A. When it is desired to place the band portion 19 of the cap cover 20 under tension where conditions are such that the band 19 must be stretched to meet the requirements of a particular cap frame then the band stretcher 2 is advanced with respect to the forward portion 1 of the cap cover stretcher by moving screws 18 to their maximum limits afforded by the slots 7, 8, 9, and 10, at which time the headed screws 18 are clamped or tightened to selectively fix band stretcher 2 in relation to forward portion 1 of the cap cover stretcher. Where, however, the band 19 of the cap cover 20 must be laundered to fit a cap frame of smaller size, the headed screws 18 are loosened in the screw threads formed in side flange 15 of the band stretcher 2, and the band stretcher 2 is displaced rearwardly to the maximum rearward position permitted by screws 18 and the slots 7, 8, 9, and 10.

Similarly, the band stretcher 4, which is associated with the rearward portion 3 of the cap stretcher, is channel-shaped and has parallel extending side flanges 21 and 22 inter-connected by an intermediate portion or web 23. The flange 21 is provided with a plurality of spaced screw threaded apertures through which headed screws 24 extend passing through the slots 11, 12, 13, and 14 of the flat flange 6 of the rearward portion 3 of the cap stretcher. Thus the band stretcher 4 may be advanced or retracted with respect to flat flange 6 of the rearward portion 3 of the cap cover stretcher in a manner similar to the movement described with reference to Figs. 5 and 5A.

The mechanism for spreading or retracting the forward portion 1 of the cap cover stretcher with respect to the rearward portion 3 thereof comprises the stretching bars 25 and 26 respectively pivoted in brackets 27 and 28 mounted on the inner wall of the forward portion 1 and the inner wall of the rearward portion 3 of the cap stretcher. Adjustable wingnuts 29 and 30 clamp securing bolts through the ends of bars 25 and 26 and through the brackets 27 and 28 providing pivot means therefor. Bar 26 carries a pintle 31 at one side thereof and a hook-shaped member 32 on the end thereof and provides a guideway for the slidable member 33 adapted to engage the coacting bar 25 when in a selected position. The

bar 25 carries a multiplicity of spaced apertures 34 therein adapted to be engaged over pintle 31 in a selected position and, when thus set, locked in position by movement of slide 33 over the bars. Thus the bars are prevented from moving apart and the device is maintained in a stretching position. The fact that the bars may be pivotally moved with respect to each other before being locked in position greatly facilitates the assembly of the cloth cap cover 20 over the parts of the stretcher and thereafter enables the two bars to be slid lineally with respect to each other to a position in which the cap cover is properly stretched while drying. Similarly, when the drying operation is completed, the slide 33 is readily moved to a position beyond the end of the bar 25 and onto bar 26 whereupon the two bars may be pivoted around the pintle 31, thus retracting the cap cover stretcher portions 1 and 3 and enabling the cap cover stretcher to be withdrawn from the laundered cap cover. The cap cover is then in stretched, laundered condition, ready to be restored over the cap frame.

The band stretchers 2 and 4 are selectively set in position with respect to the respective cap cover stretcher portions 1 and 3 to meet the variety of conditions encountered in stretching the bands of cap covers of various sizes.

While I have described my invention in one of its preferred embodiments, I realize that modifications may be made, and I desire that it be understood that no limitations upon my invention are intended other than may be imposed by the appended claims.

What I claim as new and desire to secure by Letters Patent of the United States is as follows:

1. A form for shaping cap covers comprising a pair of cap cover stretching members having a substantially semi-circular contour and terminating in flat substantially semi-circular flanges on one side thereof, means secured midway of each of said members and extending diametrically between said members equidistant from the opposite ends of said flanges for adjusting the spatial relation of said members, curved band stretching means constituted by semi-circular members of channel-shaped section each having a web portion terminating in a flange at each side thereof, said web portions having contours substantially conforming with the contours of said flanges of said cap cover stretching members and wherein the flanges on one side of said web portions are disposed in superimposed surface to surface contact with the flat substantially semi-circular flanges of said cap cover stretching members, and means extending through the flanges of said cap cover stretching members and the coacting flanges of said channel-shaped sections of said band stretching means for adjusting the position of said band stretching members with respect to said cap cover stretching members for engaging and stretching both the cover portion and the annular band portion of a cap cover, and in which said flat substantially semicircular flanges are provided with lineally extending slots disposed on axes which extend in parallel spaced relation to a central longitudinal axis extending through said pair of cover stretching members and in which the coacting flanges of said channel shaped sections of said band stretching means are slidable over the surface of the aforesaid flanges of said cover stretching members and in which said means for adjusting the position of said band stretching means with respect to said cover stretching members extend through the slots in said substantially semicircular flat flanges and into said flanges of said sections of said band stretching means and establish adjustable clamping connection therebetween.

2. A form for shaping cap covers comprising a pair of cap cover stretching members having a substantially semi-circular contour and terminating in flat substantially semi-circular flanges on one side thereof, means secured midway of each of said members and extending diametrically between said members equidistant from the opposite

ends of said flanges for adjusting the spatial relation of said members, curved band stretching means constituted by semi-circular members of channel-shaped section each having a web portion terminating in a flange at each side thereof, said web portions having contours substantially conforming with the contours of said flanges of said cap cover stretching members and wherein the flanges on one side of said web portions are disposed in superimposed surface to surface contact with the flat substantially semi-circular flanges of said cap cover stretching members, and means extending through the flanges of said cap cover stretching members and the coacting flanges of said channel-shaped sections of said band stretching means for adjusting the position of said band stretching members with respect to said cap cover stretching members for engaging and stretching both the cover portion and the annular band portion of a cap cover, and in which said flat substantially semi-circular flanges of said cap cover stretching members are provided with lineally extending slots disposed on axes extending in spaced parallel relation to a central axis between said cap cover stretching members and in which said coacting flanges of said channel shaped sections of said band

stretching means have screw-threaded apertures therein aligned with the slots in the flat substantially semi-circular flanges of said cap cover stretching members and wherein the means extending through the flanges of said cap cover stretching members and the coacting flanges of said cap cover stretching members are headed screws extending through the slots in the flat substantially semi-circular flanges of said cap cover stretching members and engaging the screw-threaded apertures in the flat flanges of said channel shaped sections means in a selected position forwardly or rearwardly of said cap cover stretching members within the limits provided by the slots in the flat substantially semicircular flanges of said cap cover stretching members.

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