Sept. 4, 1962 M. MUTOLESE 3,052,389

UNDERPRESSING APPARATUS AND METHOD FOR UNDERPRESSING GARMENT

Filed Aug. 19, 1959

Fig. 1

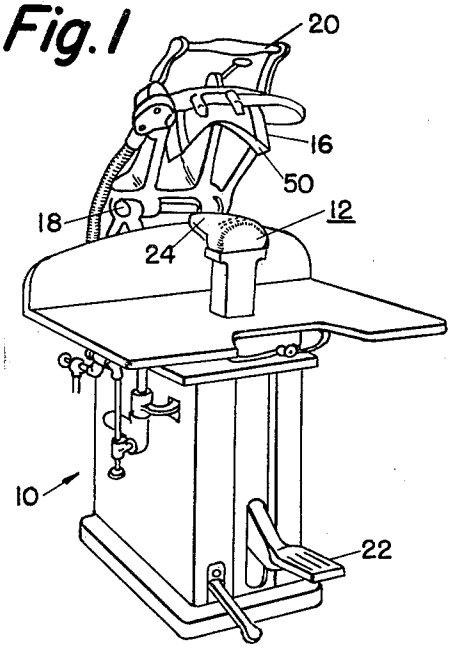


Fig. 2

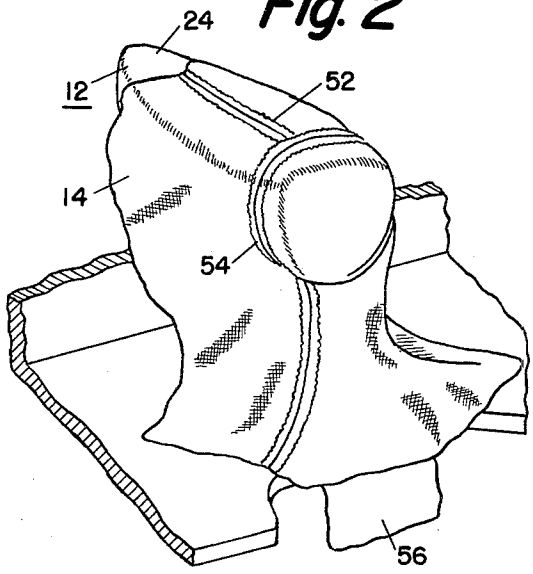


Fig. 3

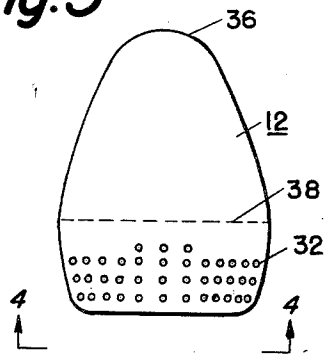


Fig. 4

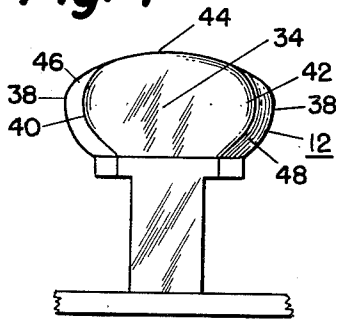
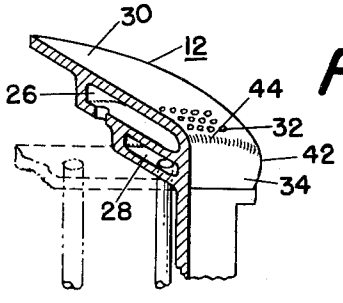


Fig. 5



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UNDERPRESSING APPARATUS AND METHOD FOR UNDERPRESSING GARMENT

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The present invention is directed to an underpressing apparatus and to a method for underpressing a garment.

In the manufacture of jackets and coats, apparatus has been developed for overpressing the upper part of the arm hole seam where the sleeve is attached. Thus, in my United States Letters Patent 2,800,260 I disclose apparatus in which the same may be accomplished.

However, up until the present invention, there has been no machine developed for effecting underpressing of the upper part of the arm hole seam where the sleeve is attached. At the present time, the underpressing of the upper part of the arm hole seam where the sleeve is attached is effected by hand ironing.

Hand ironing for underpressing the upper part of the arm hole seam where the sleeve is attached has proved to be unsatisfactory. Thus, such hand ironing requires a relatively long length of time, and requires the services of a highly skilled operator. Most seriously, any error in the hand ironing will drastically affect the finished coat or jacket, as by scorching the garment and/or stretching and/or distorting it. Thus, poor hand ironing of the upper portion of the arm hole seam is prone to result in the jacket or coat being relegated to "Seconds" or an inferior grade of garment.

This invention has as an object the provision of an underpressing apparatus which will enable the upper portion of the arm hole seam where the sleeve is attached to be underpressed.

This invention has as yet another object the provision of underpressing apparatus which will enable the upper portion of the arm hole seam to be pressed in one operation.

This invention has as yet a further object the provision of underpressing apparatus which will enable a relatively unskilled operator to achieve a high level of quality underpressing.

This invention has as a still further object the provision of underpressing apparatus which will produce underpressing garments of consistent underpressed uniformity.

This invention has as still a further object the provision of an underpressing machine in which the possibility of scorching, charring or injuring even the more delicate fabrics during the underpressing of the upper portion of the arm hole is minimized.

This invention has as a still further object the provision of a novel underpressing method in which underpressing is achieved in a single operation.

Other objects will appear hereinafter.

For the purpose of illustrating the invention there is shown in the drawings a form which is presently preferred; it being understood, however, that this invention is not limited to the precise arrangements and instrumentalities shown.

Referring to the drawings wherein like reference characters refer to like parts:

FIGURE 1 is a perspective view of the underpressing apparatus of the present invention.

FIGURE 2 is a fragmentary perspective view of the buck portion of the underpressing apparatus of the present invention with a fragmentary portion of a coat or jacket, namely the arm-hole portion thereof, operatively secured in position upon the buck.

FIGURE 3 is a plan view of the buck of the apparatus of the present invention with its covering removed.

FIGURE 4 is a front elevational view of the buck of the apparatus of the present invention taken on line 4—4 of FIGURE 3.

FIGURE 5 is a vertical sectional and perspective view of the buck of the apparatus of the present invention.

The underpressing apparatus of the present invention is designated generally as 10. Such underpressing apparatus 10 includes the buck 12 over which the garment 14 is draped, and the pressing head 16. The pressing head 16 is pivotally mounted on the pivot 18, and is movable into and out of engagement with the buck 12. Such movement of the pressing head 16 may be accomplished by the hand lever 20, or by the foot pedal 22. The foot pedal 22 may be linked to the pressing head 16 by conventional linkage (not shown) so that upon the lowering of the foot pedal 22 the pressing head 16 is drawn downwardly about the buck 12.

The buck 12 is provided with a buck covering 24 of linen or the like which is tautly stretched over the buck 12, so that such buck covering 24 assumes the contour and shape of the buck 12. In FIGURES 1 and 2, the buck 12 is shown in the form in which it is used, namely provided with the buck covering 24, while in FIGURES 3, 4 and 5 the buck covering 24 is removed in order that the shape of the buck 12 may be clearly ascertained.

The present invention resides in a particular construction of the buck 12 and its cooperation with the pressing head 16, which together permit underpressing of the upper portion of the sleeve seam to be achieved. Since a wide variety of heating means, steam control means, etc. may be utilized in the apparatus of the present invention, all of which are well known to those skilled in this art, no description will be made thereof.

The buck 12 is preferably formed as a metal casting having a vacuum chamber 26 and a steam chamber 28. Thus, steam may be inserted into the steam chamber 28 for heating the buck 12. A vacuum may be pulled through the vacuum chamber 26 whereby liquid contained on garments above the buck 12 may be withdrawn.

The buck 12 is provided with a substantially flat upper surface 30. A plurality of openings 32 are provided in the flat upper surface 30 so that the same is in communication with the vacuum chamber 26.

As seen particularly from FIGURES 3 and 5 the substantially flat upper surface 30 extends from the front face 34 to the rear portion 36. The maximum width of the flat upper surface 30 is disposed intermediate such front face 34 and rear portion 36, along the dotted line 38 shown in FIGURE 3. The shape of the buck 12 intermediate the maximum width portion 38 and the rear portion 36 is relatively immaterial, since this portion of the buck 12 is used solely for supporting the coat which is being underpressed.

The shape of the front portion of the buck 12 intermediate the maximum width portion 38 and the front face 34 is of critical significance, since the same determines the efficacy of the underpressing apparatus 10 of the present invention.

Referring now particularly to FIGURES 3, 4 and 5, it will be seen that the front face 34 is defined by arcuate side edges 40 and 42 and top edge 44. The arcuate side edges 40 and 42 are formed from a relatively small radius, while the arcuate top edge 44 is formed from a relatively large radius, and in fact one which is so much larger than the radius used to form the arcuate side edges 40 and 42 that the top edge 44 is relatively flat. Thus, the radius used to define the top edge 44 is preferably at

least twice the length of the radius used to define the arcuate side edges 40 and 42.

From the top edge 44 to the substantially flat upper surface 30 there is a slight degree of curvature, namely there is a curved surface running along the top front edge intermediate the front face 34 and the substantially flat upper surface 30.

The arcuate side edges 40 and 42 are mirror images of each other, and are symmetrically spaced in respect to the vertical center line of the buck 12. Such arcuate side edges 40 and 42 flare outwardly from the front face 34 towards the maximum width portion 38, as seen particularly in FIGURE 4. Thus, the curved side surface 46 is presented intermediate the arcuate side edge 40 and the maximum width portion 38, and the curved side surface 48 is presented intermediate the arcuate side edge 42 and the maximum width portion 38.

It will be seen from FIGURE 5 that the curved portion adjacent the top portion 44 is of relatively small length whereas the curved side surfaces 46 and 48 extend for the full front portion of the buck 12.

The underside 50 of the pressing head 16 has a length measured from front to rear which is approximately equal to the length of the front portion of the buck 12 intermediate the front face 34 and the maximum width portion 38. The underside 50 of the pressing head 16 is contoured so as to meet with the top surface of the front portion of the buck 12, and with the surfaces 46 and 48 for a distance equal to an arcuate portion somewhat less than 90° on each of the arcuate side edges 40 and 42. Thus, were the underside 50 of the pressing head 16 to mate to the extent of more than 90° on the arcuate side edges 40 and 42, the garment 14 would be pinched during the underpressing operation.

The operation of the underpressing apparatus of the present invention is as follows:

The garment 14 is draped over the buck 12 in the manner shown in FIGURE 2, with the shoulder seam 52 lying along the center line on the flat upper surface 30 of the buck 12 and with the top portion of the arm-hole seam 54 where the sleeve is attached lying on the flat upper surface 30 in back of the small curved portion adjacent the top edge 44 and on the curved side surfaces 46 and 48. Thus, the underside of the jacket is presented for contact with the head 16 with the arm-hole substantially disposed over the front face 34 of the buck 12, and with the sleeve 56 lying downwardly.

The pressing operation to achieve underpressing of the top portion of the arm-hole seam 54 is effected by bringing the pressing head 16 downwardly onto the garment 14. Underpressing of the entire top portion of the arm-hole seam 54 may be achieved in one operation.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and, accordingly, reference should be made to the appended claims, rather than to the foregoing specification as indicating the scope of the invention.

I claim:

1. In a pressing machine comprising a buck, a pressing head, the outside shape of a front portion of said buck being substantially symmetrical about a vertical center line, a front face of said buck at said front portion having mirror image arcuate side edges, said buck having a point of maximum width adjacent said front face, the sides of said buck being defined by curved surfaces extending from said front face and tapering continuously to said point of maximum width, said head having a width corresponding to the width of the portion of said buck between said front face and said point of maximum width, holes in said last mentioned portion of said buck for permitting steam to pass therethrough, and means mounting said head for movement toward and away from said last mentioned portion of said buck.

2. In a pressing machine comprising a buck mounted for cooperation with a portion of said buck, the outside shape of the front portion of said buck being substantially symmetrical about a vertical center line, a front face of said buck being spaced from and adjacent to an intermediate portion of said buck, said intermediate portion of said buck being a point of maximum width, said front face of said buck having mirror image arcuate side edges, each of said side edges being defined by an arc having a first radius, said front face having a top arcuate edge whose arc is defined by a second radius which is substantially greater than said first radius, the sides of said buck extending from said front face being curved surfaces which taper continuously outwardly from said front face to said point of maximum width on said buck, and the width of said pressing head corresponding with the distance from said front face to said point of maximum width.

3. In a pressing machine in accordance with claim 2 wherein said pressing head is provided with a concave surface adapted to engage said top arcuate edge, said surface on said head being also adapted to engage said arcuate side edges for a distance less than ninety arcuate degrees.

4. In a pressing machine in accordance with claim 3 in which the relatively large radius which defines the top arcuate edge of the front face of the buck is substantially more than two times the length of the radius which defines the arcs of the side edges of the buck.

5. A buck for a pressing machine comprising a hollow body substantially symmetrical about a center line, said body having mirror image arcuate side edges at one end thereof, said body having a front face at said one end, said front face being defined by arcuate side edges having a first radius, said front face also being defined by a top arcuate edge having a second radius, said second radius being at least twice as large as said first radius, said buck having a point of maximum width adjacent to said front face, said body having curved surfaces extending from said front face to said point of maximum width, said curved surfaces tapering continuously outwardly from said front face, and the upper portion of said buck between said front face and said point of maximum width having holes therein for permitting steam to pass therethrough.

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