Jan. 25, 1949. J. H. RICHA ET AL 2,459,962

GARMENT FINISHING APPARATUS

Filed June 10, 1946 2 Sheets-Sheet 1

Fig. 1.

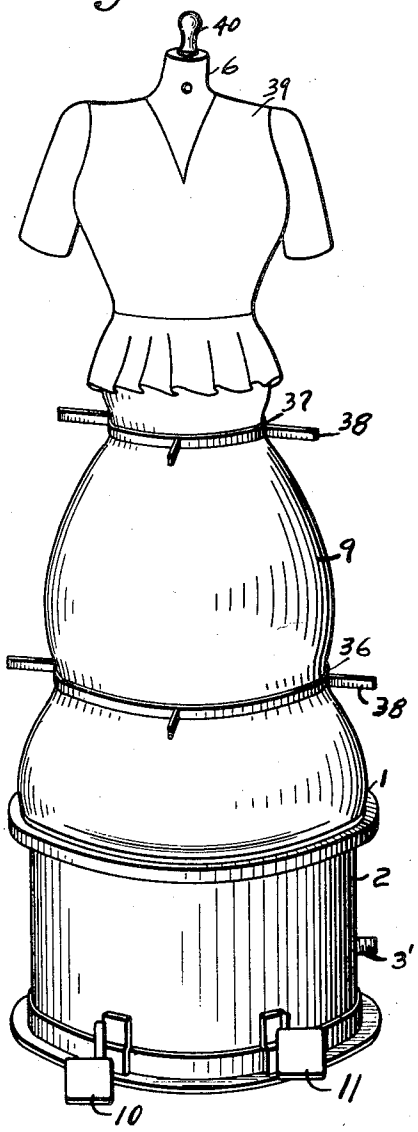
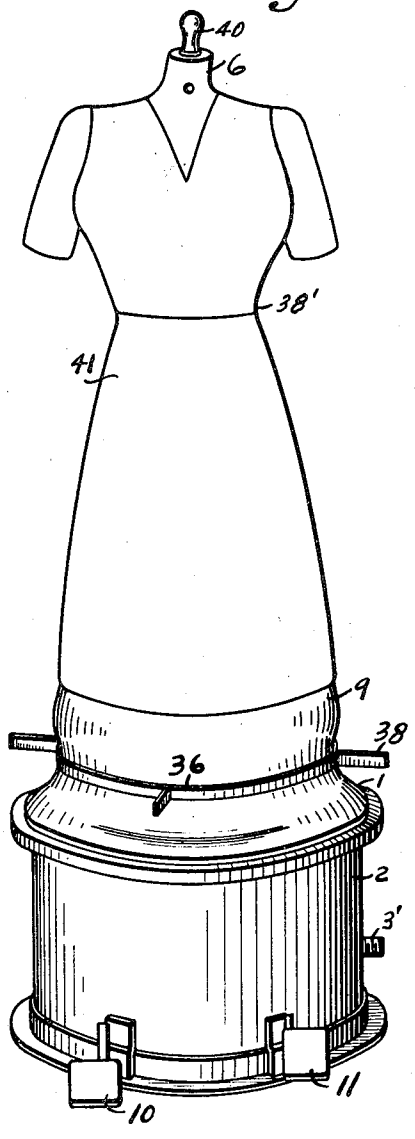


Fig. 2.



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Fig. 3.

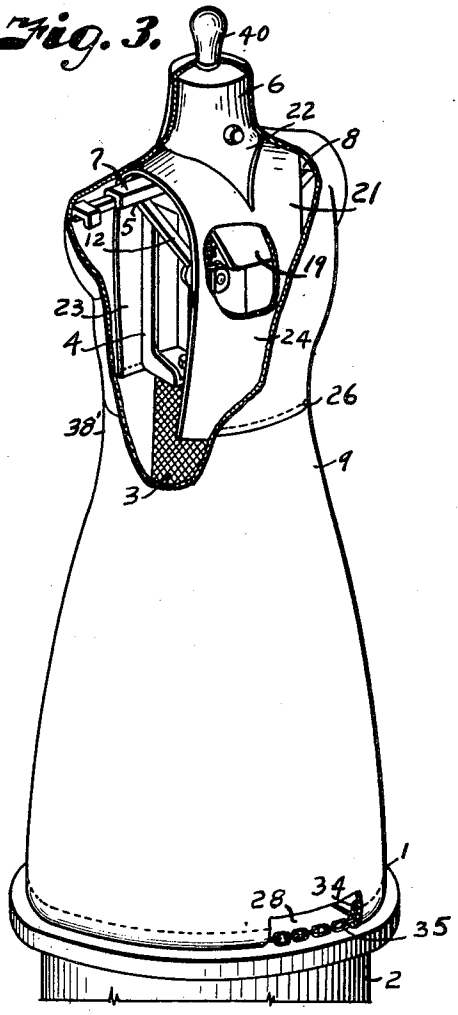


Fig. 4.

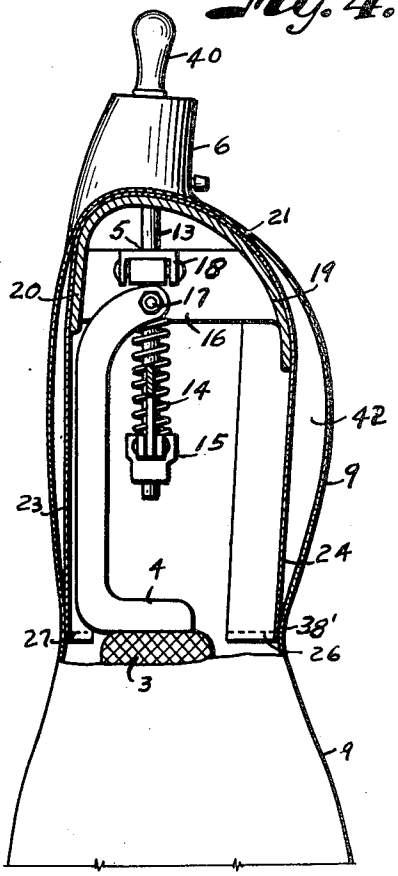
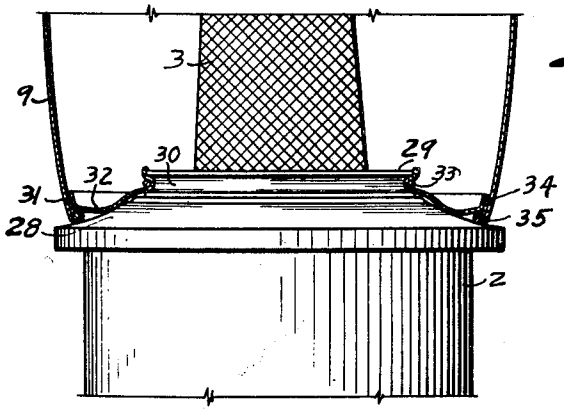


Fig. 5.



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UNITED STATES PATENT OFFICE

2,459,962

GARMENT FINISHING APPARATUS

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Application June 10, 1946, Serial No. 675,780

7 Claims. (Cl. 223—70)

1

This invention relates to a garment finishing machine of the type disclosed in the John H. Richa Patent No. 2,436,731 issued February 24, 1948, and more particularly to a device for controlling the distension of the bag used in connection with such machine for reshaping the garment.

Heretofore with devices of this character it has been the custom to use a permeable bag supported on a form over which a garment is applied so that the garment is steamed and brought to shape by steam and/or air discharged into the bag. With bags of this character it has been difficult to control the distension or balooning thereof to reshape the garment to its original form.

It is, therefore, a principal object of the present invention to provide a garment finishing machine having means for controlling the distension of the bag, including a suspender member over the shoulder portion thereof to support said bag.

It is a further object of the present invention to provide a weight on the bottom of the bag and connection of the bag to the housing of the base member so as to retain the bag in close proximity to the housing to prevent the bag from rising when steam or air is admitted thereto.

Other objects of the invention are to provide means for controlling the ballooning of the bag at any desired point throughout the length thereof; and to provide a device of this character that is simple and inexpensive to construct and which is readily operated and adjusted to support a garment over a permeable bag.

In accomplishing these and other objects of the invention we have provided improved structure, the preferred form of which is illustrated in the accompanying drawings wherein:

Fig. 1 is a perspective view of a garment finishing machine embodying the features of the present invention showing a waist, jacket or the like on the form ready for finishing.

Fig. 2 is a perspective view of the invention showing a dress on the form ready for finishing.

Fig. 3 is an elevational view partly in section illustrating the features of the invention and particularly illustrating the suspender over the waist portion of the device.

Fig. 4 is a side elevational view partly in section illustrating the suspender and the bag ballooned thereover.

Fig. 5 is a fragmentary view partly in section particularly illustrating the means for weighting the bag to the base of the device.

Referring more in detail to the drawings:

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1 designates a garment finishing machine constructed in accordance with the present invention and especially adapted for finishing dresses and similar small-waisted garments. The device includes a base 2 for containing a source of heated air under pressure, such as a motor-actuated blower (not shown), a steam supply line 3' and valves (also not shown) for controlling flow of steam and air into a fabric covered distributor 3 that projects upwardly from the base 2. Pivotally mounted upon the upper end of the distributor is a bracket 4 carrying a form assembly 5 including a neck element 6 and laterally extending shoulder elements 7 and 8 for suspendingly supporting a permeable bag 9 having the general shape of a dress or similar garment. The bracket 4 is adapted to rotate about a vertical axis so that the form may be rotated with respect to the distributor and base of the device. The base 2 is provided with the usual foot pedals 10 and 11 connected to the steam and air supply valves for admitting the steam and air to the device as is the usual practice.

The shoulders 7 and 8 are adjustable for accommodating garments of different shoulder widths. The shoulder portions 7 and 8 are supported by links 12 having their lower ends connected to and slidable upon a vertical rod 13 extending upwardly through the shoulder and neck portions and which is provided with a spring 14 having one end supported against a collar 15 to which the links 12 are connected and its opposite end engaging against a block 16 which supports the neck element 6. The apparatus just described provides for adjustment of the device to fit garments of different sizes, and particularly the widths of the shoulders thereof. It will be noted that the upper ends of the bracket 4 are attached to the collar 15 as indicated at 17. The links 12 are connected to the block by ears or the like 18 as best illustrated in Fig. 4. The neck element 6 includes a front or breast portion 19 and a back portion 20.

Adapted to engage over the neck portion of the device and particularly the back and breast portions thereof, is a suspender member 21 for allowing the breast portion of the permeable bag 9 and the garment to be finished to be distended from the structure to allow ballooning thereof in a horizontal direction, and to provide shaping of the breast portion of a garment independently of the lower portion. The suspender member may be made of suitable cloth material, such as canvas or other material, having sufficient body to hold the bag suspended therefrom, or it may be made

of leather, rope material, chain, wire or the like to support the breast portion of the bag. The suspender is provided with a cut-out portion to fit over the neck of the device as indicated at 22, Fig. 3. The suspender member has a back portion 23 and a front portion 24 which extends down to susbstantially the waist of the garment to be finished and is stitched or otherwise secured to the front portion of the permeable bag as indicated at 26 and to the back portion as indicated at 27.

The base 2 is provided with an inwardly tapered covering as indicated at 28 (Fig. 5) terminating in an opening through which the distributor extends and the cover terminating in an annular flanged portion 29 providing an annular groove 30 around the cover member 28. Secured near the lower edge of the bag 29 by stitching or other suitable means as indicated at 31 is a circular piece of material, such as canvas or the like, providing a bottom 32 for the bag to prevent belling of the bottom of the bag and steam and air from escaping therefrom and the inner edge of such material is secured to the annular groove 30 by a fastening device 33 which may be a cord, wire or the like. The lower end of the bag 9 is turned upwardly as indicated at 34 (Fig. 3) and stitched to the side of the bag to form an annular space around the bottom of the bag adapted to receive a weight or the like 35 to prevent the bag from rising and flying upwardly off the base when steam and air are admitted to the interior thereof. The weight 35 is here shown to be a chain or the like, but may be made of any suitable material, such as a rod, and additional weight provided if desired.

Adapted to engage over the bag 9 are ring members 36 and 37 having handles 38 thereon. The ring members and handles may be made of any suitable material, such as channel iron or the like, and may be of varying size to fit the lower portion of the bag or the upper portion as best illustrated in Fig. 1. While we have here illustrated two rings, any suitable number may be used.

In using a machine constructed and assembled as described, the supporting arms of the frame are released so that the shoulders may drop downwardly due to tension of the spring 14 on the collar 15 and in its collapsed form the device will be smaller than the waist of the garment to allow the garment to be placed thereover. The rings 36 and 37 are first placed over the bag 9. It will be noted that the bag has a smaller waist portion, as indicated at 38' (Figs. 3 and 4), to substantially conform to the contour of a dress or other garment to be finished.

Referring first to Fig. 1, 39 designates a waist, jacket or the like which is placed over the permeable bag after the rings 36 and 37 have been placed over the bag. The sleeve portions of the bag are inserted into the sleeves of the dress and the shoulder supports are grasped and raised to garment supporting position. The neck element may be tilted by moving the same to the handle 40 on the top thereof. The garment is then steamed by introducing steam into the bag by way of the distributor 3 by manipulation of the foot steam pedal to inflate the bag and cause the steam to permeate through the bag and contact the garment for softening and raising the fibers. The amount of balooning of the lower portion of the bag is regulated by the lower ring 36 and the amount of ballooning of the upper portion of the bag is regulated by the upper ring 37 by moving the same upwardly or downwardly with respect to the bag or by pulling sidewise on the ring. After sufficient steaming, the steam supply is shut off and heated air is discharged into the bag to inflate the bag by manipulation of the air pedal so as to extend the garment to its original shape, the air supply being maintained until the garment is dried to shape.

The extent of ballooning or extension of a waist garment is regulated by the upper ring 37, i. e., moving of the ring upwardly or downwardly with respect to the bag, or sidewise as above stated. The ring or weight member 35 will cause the lower portion of the bag to remain substantially in contact with the tapered portion 28 of the housing or base 2, and prevent belling thereof, the weight member sliding up and down on the tapered portion due to movement of the rings 36 and 37. The strip of material 32 engaging the groove 30 thereof will allow for movement of the bag inwardly or outwardly and thus prevent the steam from escaping from the bottom of the bag.

When the steam and air is admitted to the bag through the distributor, it will pass through the suspender member 21 or around the front and back portions through the sides thereof and cause the bag to be distended as best illustrated at 42 (Fig. 4) to reshape the breast and back portions of the garment, the suspender member preventing collapse of the form when the steam and air is shut off therefrom and thus facilitating reshaping of the garment being finished.

Operation of a device is the same for a dress or the like 41 as shown in Fig. 2 except that only one ring member 36 may be used near the base of the bag to regulate the extent of ballooning thereof as described in connection with ballooning of the bag shown in Fig. 1, i. e., movement of the ring upwardly or downwardly will regulate the extent of ballooning of the bag and thus the distension of the garment.

From the foregoing it will be obvious that we have provided an improved garment finishing machine particularly adapted for finishing narrow-waisted garments, such as dresses, and for regulating the ballooning or distension thereof, means for preventing collapse of the back and breast portions of a garment, and means for preventing excessive rising of the bag from the base.

It will further be obvious that any suitable suspension means may be used as it is not necessary that such suspension means be suspended from the shoulders of the framework structure. Any means of providing for distension of the waist portion of a garment in a horizontal direction to thus reshape the waist portion of a garment independently of the lower portion thereof is suitable for our purpose.

What we claim and desire to secure by Letters Patent is:

1. A garment finishing apparatus including neck and shoulder portions forming a framework structure, a permeable bag supported by said structure, a flexible porous suspender member engaging over said shoulders underneath said bag and having front and back portions for preventing collapse of said bag over the framework structure, means for inflating said bag, and means secured to the bottom of said bag to prevent the bag from belling when the bag is inflated.

2. A garment finishing apparatus including a neck and shoulder portions forming a framework structure, a permeable bag having a waist portion supported by said structure, means suspended

over said shoulder portions beneath said bag and having a front and rear portion engaging the waist of said bag and adapted to provide fullness in the waist portion of the bag, a base member having a distributor extending upwardly therefrom into said bag, a cover for said base extending around said distributor, said bag having a bottom extension engaging the cover member, and means for inflating said bag.

3. A garment finishing apparatus including a neck and shoulder portions forming a framework structure, a permeable bag having shoulder portions corresponding to the shoulders of a garment adapted to be supported over said framework, means suspended over said shoulder portions beneath said bag and having a front and rear portion engaging the waist of said bag and adapted to prevent collapse of said bag, a base member having a distributor extending upwardly therefrom into said bag, a cover for said base extending around said distributor member, said bag having a bottom extension engaging the cover member, and means on the bottom of said bag for slidably holding the bag in contact with said cover member.

4. A garment finishing apparatus including a neck and shoulder portions forming a framework structure, a permeable bag having shoulder portions corresponding to the shoulders of a garment adapted to be supported over said framework, means suspended over said shoulder portions beneath said bag and having a front and rear portion engaging the waist of said bag and adapted to prevent collapse of said bag against said framework structure, a base member having a distributor extending upwardly therefrom into said bag, a cover for said base extending around said distributor member, said bag having a bottom extension engaging the cover member, means on the bottom of said bag for holding the bag in contact with said cover member, means for inflating said bag, and means movable on said bag for regulating the inflation of said bag in different portions thereof.

5. In a garment finishing apparatus having a framework structure adapted to support a permeable bag thereon conforming to the contour of a garment and adapted to be inflated to distend the garment including, a base member and means for introducing steam and air to said bag, a suspension member adapted to engage over said framework structure beneath said bag and having its front and back portions attached to the waist portion of said bag to prevent collapse of said bag, an upwardly tapered cover member for said base, said bag having a bottom portion engaging said cover member closing the bottom of said bag, and a weight member attached to the bottom edge of said bag slidable on said tapered cover to

prevent belling of said bag when steam and air are applied thereto.

6. In a garment finishing apparatus having a framework structure adapted to support a permeable bag thereon conforming to the contour of a garment and adapted to be inflated to distend the garment including, a base member and means for introducing steam and air to said bag through the base member a suspension member adapted to engage over said framework structure beneath said bag and having its front and back portions attached to the waist portion of said bag to prevent collapse of said bag, a cover member for said base, said bag having a bottom portion engaging said cover member closing the bottom of said bag, a weight member attached to said bag near the bottom edge and adapted to rest on said cover member to prevent belling of said bag when steam and air are applied thereto, and means engaging said bag to regulate inflation of the bag in different portions thereof.

7. In a garment finishing apparatus having a framework structure adapted to support a permeable bag thereon conforming to the contour of a garment and adapted to be inflated to distend the garment including, a base member, means for introducing steam and air to said bag, a suspension member adapted to engage over said framework structure beneath said bag and having its front and back portions attached to the waist portion of said bag to provide fullness in the waist portion of said bag, a cover member for said base having a central opening, said bag having an open bottom portion, a weight member attached to the bottom edge of said bag and engaging said cover member to prevent excessive rise of said bag from the cover member when steam and are are applied thereto, a flexible extension on the bottom of said bag, means securing said extension to the cover member around the central opening to close the bottom of said bag, and ring members insertable over said bag and slidable thereon to regulate distension of the bag in different portions thereof.

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