

[54] **FRONT SUPPORT FOR SHIRT COLLAR**

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[52] **U.S. Cl.** 223/83

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[58] **Field of Search** 223/71, 82-84;
2/132

[56] **References Cited**

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[57] **ABSTRACT**

The invention concerns a specially shaped support device for insertion beneath shirt collars while the shirt is packaged or stored for sale or display purposes. The conventional thin plastic support is modified with protruding "bubbles" which —when placed between the collar portion and the turned portion centered at the collar button of the shirt— acts as a front support on both sides of the middle point elevations for collar turns.

3 Claims, 9 Drawing Figures

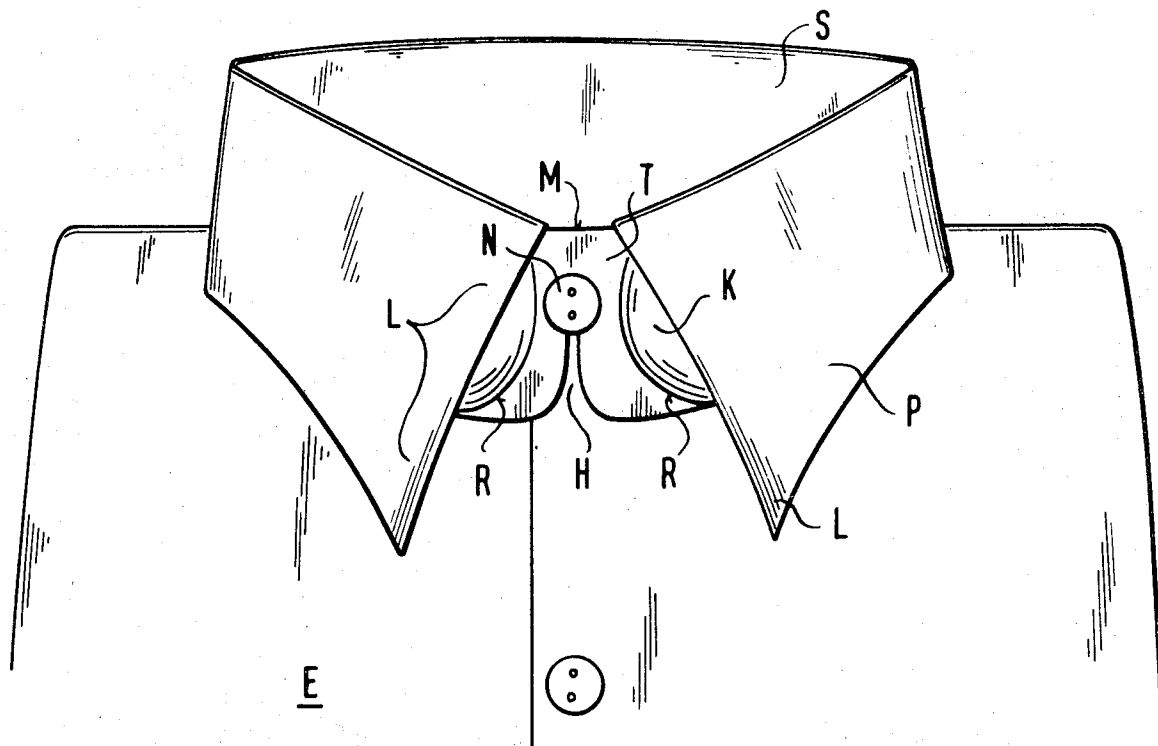


Fig.1

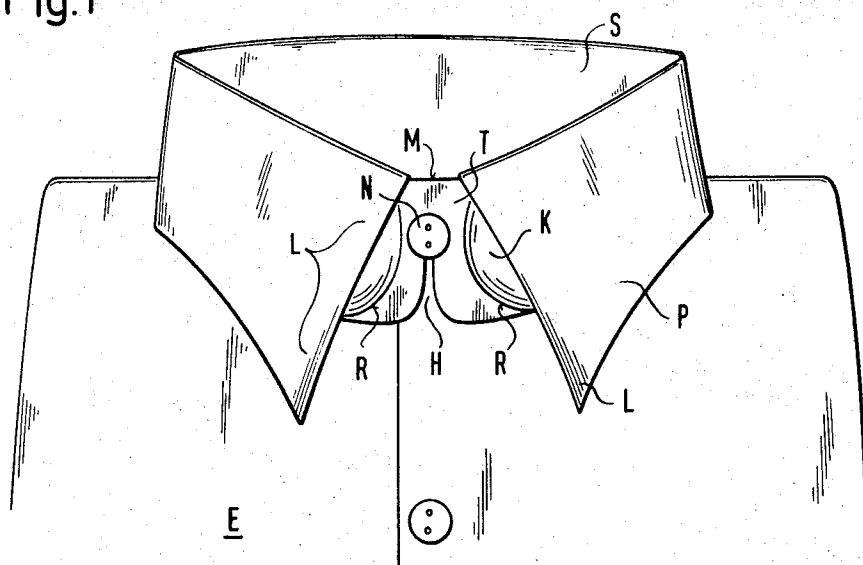


Fig.2

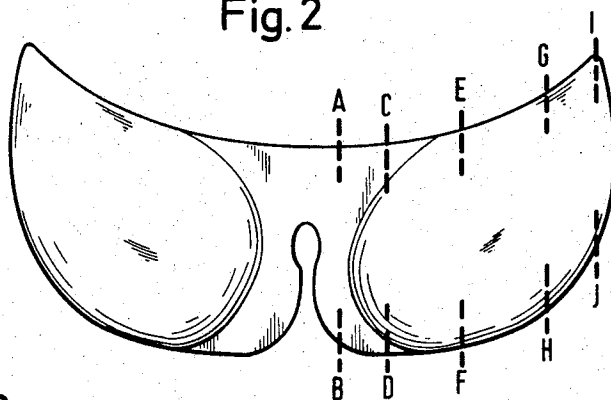
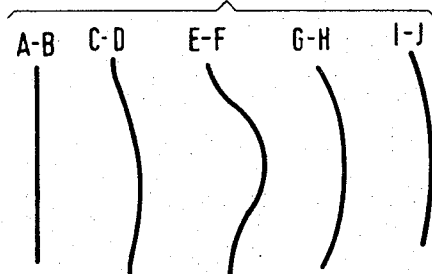


Fig.3



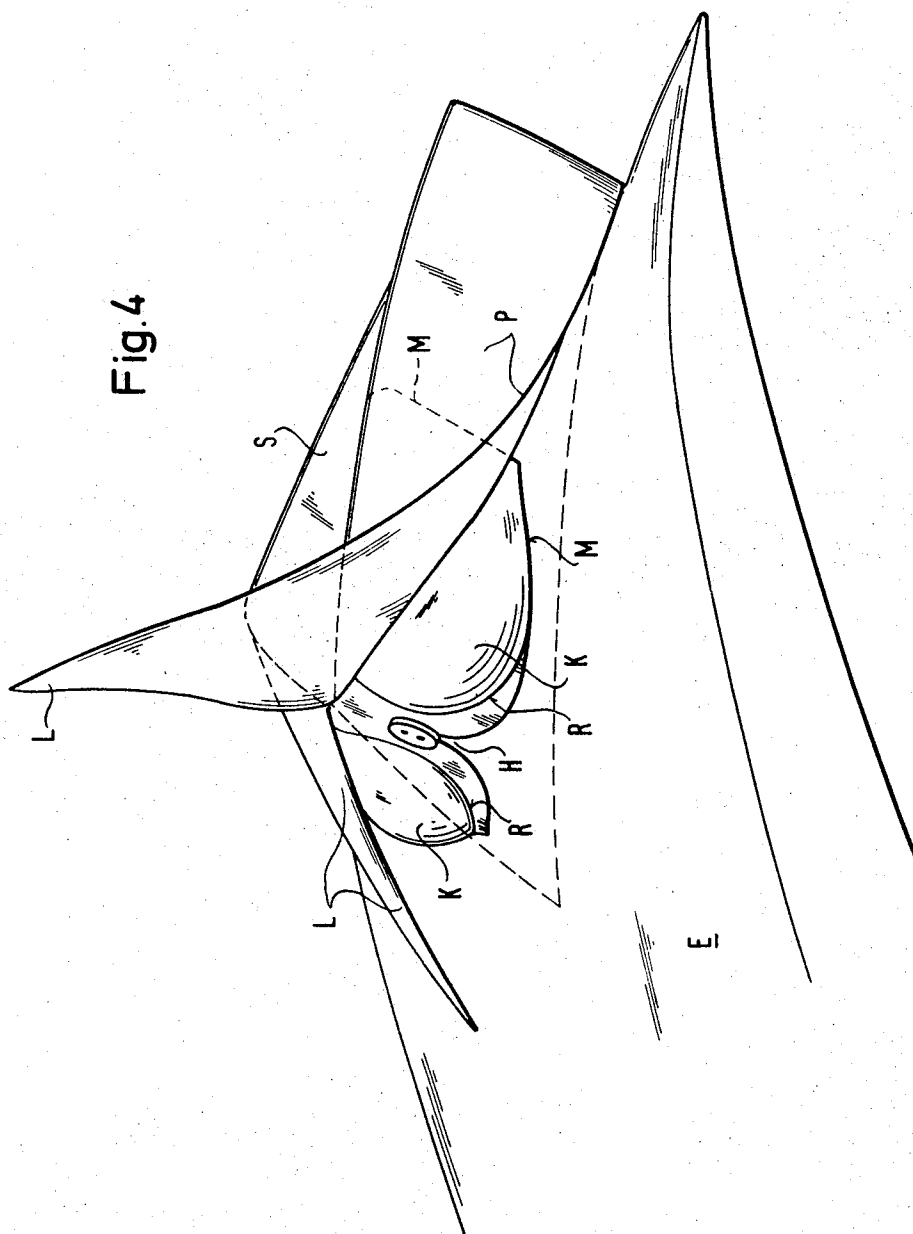
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Fig. 4



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Fig. 5

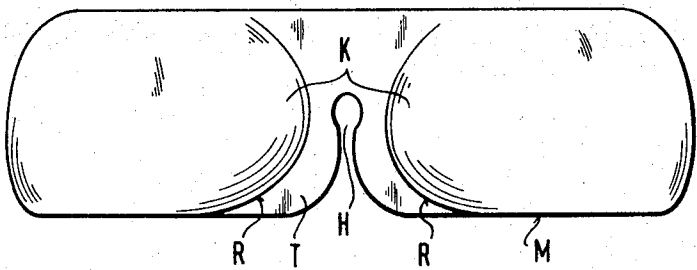


Fig. 6

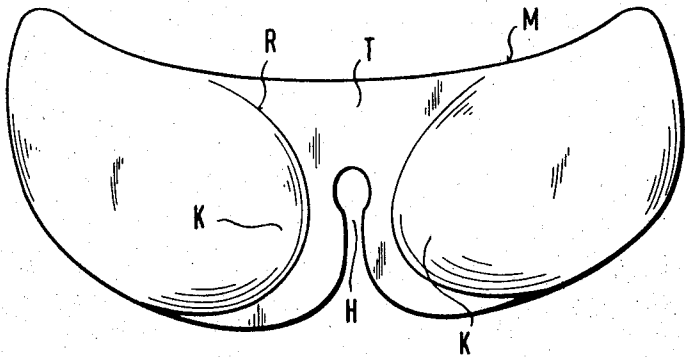


Fig. 7

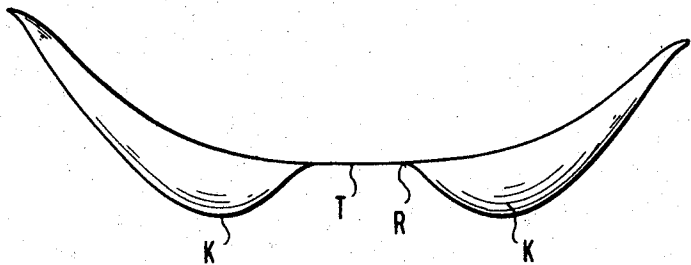


Fig. 8

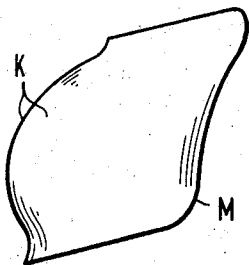
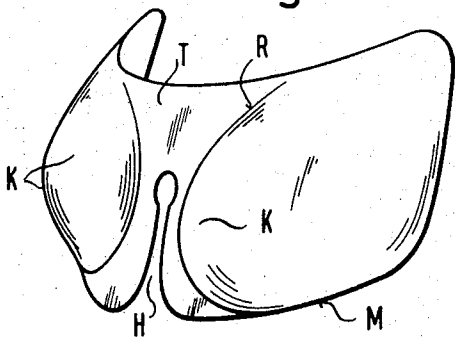


Fig. 9



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FRONT SUPPORT FOR SHIRT COLLAR

BACKGROUND AND SUMMARY OF THE INVENTION

A celluloid sheet generally is used as a support for shirt collars in sales cartons, this support being formed with a slit so that the support may be secured behind the topmost button of the shirt. When secured in position, the support is interposed between the neck band of the shirt and the turned-down collar, sometimes referred to as the cape portion of the collar. Conventional supports of this type provide support mainly only against the bending of the shirt collar in a vertical direction. Two of the above-mentioned celluloid sheets also have been used. By joining the two sheets together, it has been attempted to obtain the collar portion as well as a corresponding support construction, in order to support the tip of the shirt collar. This known expedient only partly supports the tips of the collar and is, in an esthetic sense, not a very acceptable solution for use in sales cartons. The tips of a shirt collar also have sometimes been protected against curving by placing pieces of plastic foam material beneath the tips, and spiral spring devices also have been used. While these devices stretch the points of the collar, the spring devices prevent curving of the shirt collars. However, the known devices have not solved satisfactorily the problems associated with the storages and transportation of shirts before use.

The objective of the present invention is to provide a front support for shirt collars which will meet the requirements better than heretofore, and which can be manufactured at low cost and which, as such, and in connection with the shirt, will fulfill the high esthetic requirements.

In accordance with the invention, a front support for shirt collars, arranged to be interposed between the neck band portion of the collar and the turned-over or turned-down portion, is provided, in the usual manner, with a central slit by means of which the support may be secured over the topmost button of the shirt front. In the support according to the invention, there are formed, on both sides of the middle slit and spaced somewhat therefrom, generally dome-shaped elevations or bosses projecting outwardly and engaging the turned-down portion of the collar. Preferably, the shirt collar front support in accordance with the invention is formed of plastic sheet material, and the elevations, bosses or domes are formed in a sheet of the plastic material by molding or pressing.

For an understanding of the principles of the invention, reference is made to the following description of a typical embodiment thereof as illustrated in the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

In the Drawings:

FIG. 1 is a perspective view illustrating the shirt support of the invention as positioned over the topmost button of a shirt front and as interposed between the neck band portion of the collar and the turned-down cape or wing portions thereof;

FIG. 2 is a perspective view of the support from the front, shown slightly obliquely upwardly, and without illustration of the shirt collar;

FIG. 3 illustrates the profiles of the support at the various lines indicated in FIG. 2;

FIG. 4 is a partial perspective view illustrating the invention collar support in position and with a flap or wing of the collar folded back to expose a portion of the support;

FIG. 5 is a front elevational view of the support;

FIG. 6 is a perspective view of the support, shown slightly obliquely upwardly;

FIG. 7 is a top plan view of the support;

FIG. 8 is a side elevation view of the support; and

FIG. 9 is a perspective view of the support as seen looking obliquely from the front and from one side thereof.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring in detail to the drawings, a collar support M embodying the invention is illustrated as having a central slit H arranged to mount support M on the topmost button N of a shirt E having a collar including a neck band portion S and a folded-down or cape portion P ending in tips L. On both sides of strip H, support M has an unelevated or essentially planar or non-deformed portion T, as best seen in FIGS. 6 and 7. The support M, after being mounted behind the button M, through the medium of the central slit H, is arranged to be interposed between the neck band portion S of the collar and the turn-down portion P of the collar.

On opposite sides of the essentially planar portion T, support M, which is preferably a plastic sheet, is formed with elevations K in the nature of at least partially hemi-spheroidal bosses, domes, or the like. For ready reference, these elevations will hereinafter be termed "bubbles." Bubbles K start rather abruptly from the peripheral portions of the planar portion T, at the boundary lines R. The angle of the elevations of the bubbles K decreases toward the edges of the bubble support. The highest elevation of the bubbles K is thus adapted to support the tip portions L of the shirt collar from beneath.

Referring more particularly to FIGS. 2 and 3, FIG. 2 illustrates section lines A-B, C-D, E-F, G-H, and I-J, and FIG. 3 illustrates the respective contours along the section lines. Thus, it will be noted that the area intersected by section A-B is essentially planar, the area intersected by section line C-D bulges somewhat outwardly, the area intersected by section line E-F bulges sharply outwardly, the area intersected by section line G-H has a reduced curvature, and the area intersected by section line I-J has a further reduced curvature.

The collar support, which may also be called the "bubble support" preferably is formed of colored or uncolored plastic film or plastic sheet material of a composition which softens by heating and hardens after colling while maintaining the shape imparted thereto during the heating phase. The collar support is produced by preparing a form that corresponds to the shape of the desired finished support. For example, a vacuum-forming machine sucks the heated plastic material over a form, and thus adapts the heated plastic material to the contours of the form.

The collar support embodying the invention is used for packaging and displaying shirts provided with turn-down collars, as shown in FIGS. 1 and 4, particularly while the shirts are being folded and packaged. The support is placed between the collar neck band portion S and the turn-down portion P of the collar, as best seen again in FIGS. 1 and 4, with the slit H mounting

support M in position with respect to the topmost button N of the shirt E. On both sides of slit H, the planar portion T lies against the shirt front and button N serves to retain the support in place. The elevations or bubbles K start symmetrically from planar portion T in spaced relation to central slit H, and are curved as indicated more particularly in FIGS. 2 and 3. The varying degrees of curvature are also clearly apparent from FIG. 7. The height and shape of the elevations or bubbles K can be selected for each type of turn-down collar, by changing the contours, height, or other features of the form used to manufacture the collar support. The highest portions of the elevations or bubbles K are situated under the tip portions L, as shown in FIGS. 1 and 4, when support M is positioned in the shirt collar.

The elevations or bubbles K prevent harmful curving and wrinkling of the most sensitive and important portions of the shirt collar, that is, the tips L of the turn-down portion T of the collar, particularly in the period between manufacture and actual use of the shirt. In addition, the shirt support M, having the bubbles or elevations K, provides support against sinking of the front portion P of the collar, and thus maintain the elevated position of the entire collar with relation to the front of the packaged shirt. The required tenacity of the collar support, having the elevations K is due to the arching of the elevation surfaces in different directions which, due to the above-mentioned double-support character, makes the invention collar support particularly suitable to fulfill the requirements mentioned above.

The collar support of the invention is used with articles of clothing provided with turn-down collars, mainly shirts, when the latter are placed in sales or display cartons. The support is placed between the neck band portion of the collar and the turn-down portion thereof. In addition, the support is secured in position by virtue of the slit H in cooperation with the topmost shirt button N. Needless to say, the collar support of

the invention also can be used after a shirt has been washed.

As mentioned above, the support embodying the invention may be manufactured of a plastic sheet of suitable thickness, for example by means of a vacuum-forming machine which heats, softens, and applies a vacuum to the plastic sheet to deform the same to the desired contours.

While a specific embodiment of the invention has been shown and described in detail to illustrate the application of the principles of the invention, it will be understood that the invention may be embodied otherwise without departing from such principles.

What is claimed is:

1. A front support for a shirt collar having a neck band portion and a turn-down front portion, having tips, joined at a folded edge, the collar being buttonable at the topmost button of the shirt front, said front support comprising a sheet of material insertable between the neck band and turn-down portions of the collar and having a central slit cooperable with said topmost button to position said support; said sheet having at least partially hemi-spheroidal preformed edges of said central slit and having a substantially planar portion between said at least partially hemi-spheroidal elevations and formed with said slit, and supporting said collar tips at points paced downwardly from the folded edge of the collar, against curving and wrinkling during at least packaging and display of the shirt.

2. A front support for a shirt collar, as claimed in claim 1, in which said material is a moldable plastic composition material.

3. A front support for a shirt collar, as claimed in claim 1, in which said elevations start abruptly from said planar portion with the angles of the elevations decreasing toward the outer edges of said front support.

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