March 30, 1954 N. H. RICHMAN 2,673,667

SHIRT PACKAGE AND BLANK FOR FORMING SAME

Filed Feb. 9, 1953

2 Sheets-Sheet 1

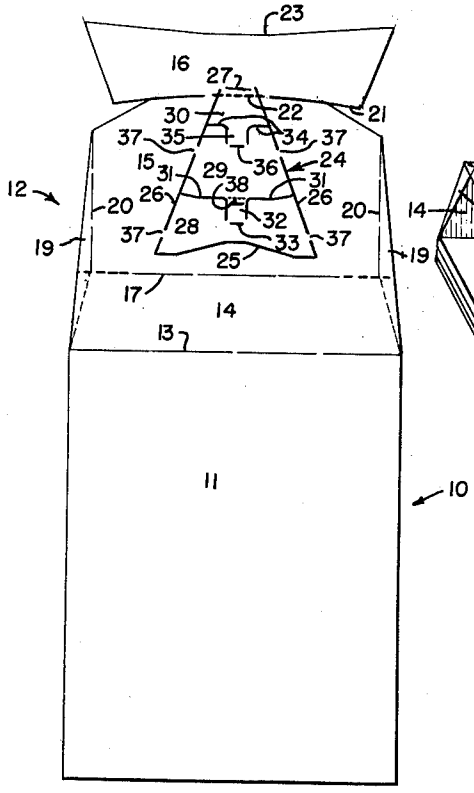


Fig. 1

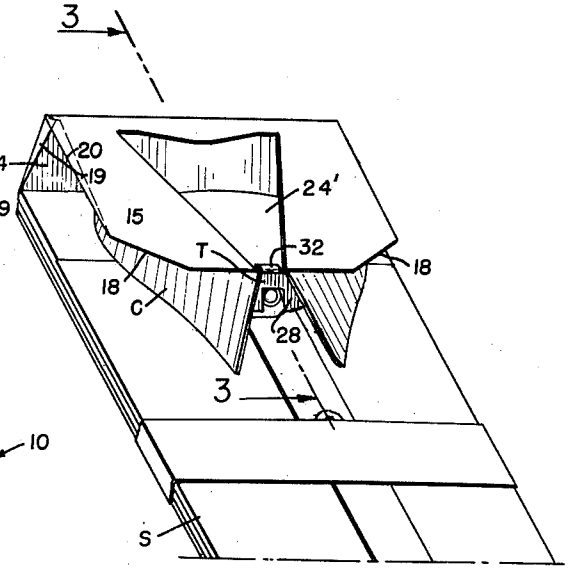


Fig. 2

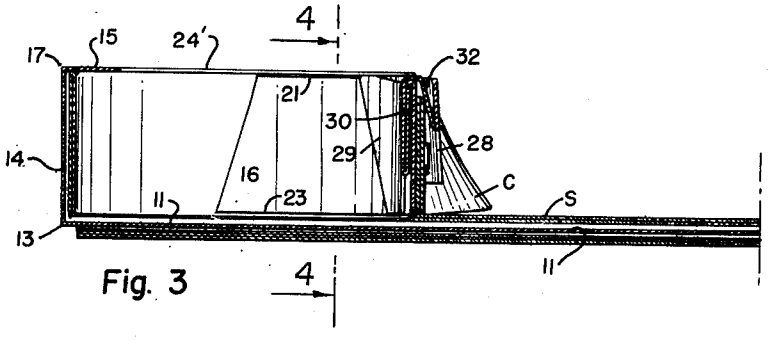


Fig. 3

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Fig. 5

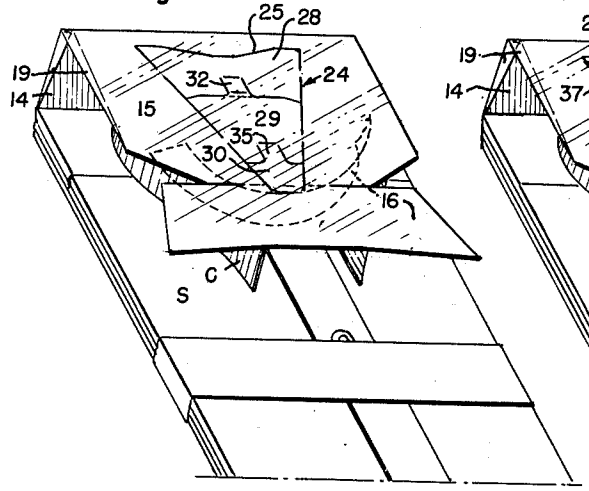


Fig. 6

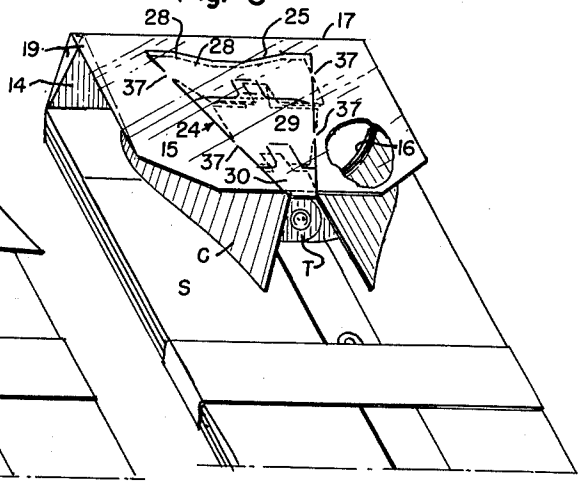


Fig. 7

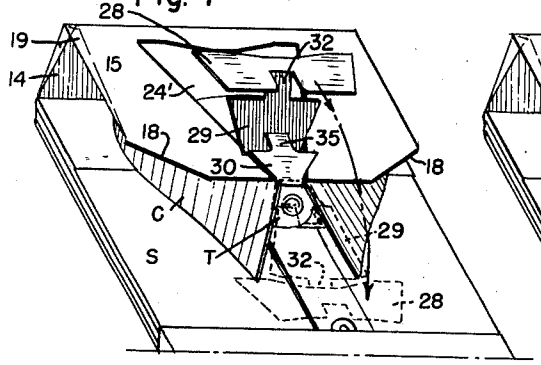
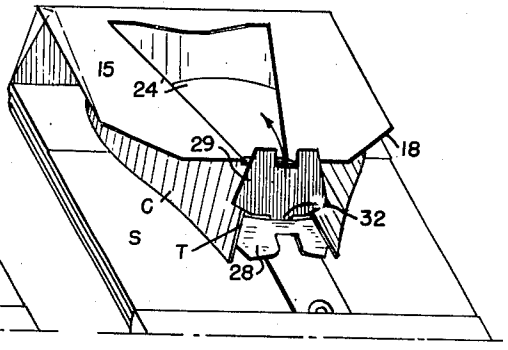


Fig. 8



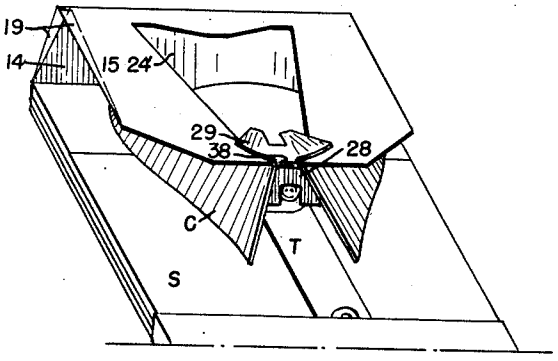


Fig. 9

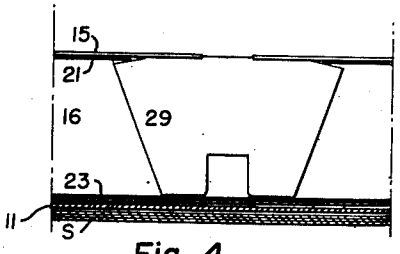


Fig. 4

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SHIRT PACKAGE AND BLANK FOR FORMING SAME

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Application February 9, 1953, Serial No. 335,922

9 Claims. (Cl. 223—71)

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This invention relates to shirt packaging devices for collar-attached shirts and more particularly to that class of shirt packaging devices which combine a shirt mounting board with a collar protector and support, an object of the invention being to provide a shirt package, including a shirt board and collar protector, with new and improved means for interlocking the collar protector with the collar of a shirt mounted upon the board.

Other objects of this invention include the provision of a new and improved blank for formation of a shirt package which: (*a*) combines, in a single piece of sheet material, a shirt board, a collar protector and means for interlocking the collar protector with the collar of a shirt mounted upon the board; (*b*) combines in the collar protector a panel adapted to cover the collar, a supporting rim adapted to space the panel above the collar and to hold the collar in erect circular shape, and a tab adapted to interlock the panel and collar at the throat of the collar; (*c*) combines the panel, support rim and tab of the collar protector into a compact arrangement by forming the rim as a continuation of the panel and the tab as a pull-out element in the face of the panel; (*d*) combines in the tab a series of foldable members with one member adapted to move into the throat of the collar for engagement therewith and the other members adapted to swing upon the panel to complete the interlocking operation; (*e*) provides an arrangement of elements which permits the interlocking of the collar protector with the collar by a few quick, simple movements; and (*f*) is inexpensive, adapted to be easily packaged for storage and shipment and compact and neat appearing with a shirt mounted and packaged thereon.

With the foregoing and other objects in view, all of which more fully hereinafter appear, my invention comprises certain novel constructions, arrangements and combinations of elements and parts as hereinafter described and as defined in the appended claims and illustrated, in preferred embodiment, in the accompanying drawing, in which:

Figure 1 illustrates a piece of sheet material cut and scored to form a blank for my improved shirt package.

Figure 2 is an isometric view of the shirt package formed from the blank illustrated at Fig. 1 and containing a folded shirt.

Figure 3 is a central longitudinal section as viewed from the indicated line 3—3 at Fig. 2, but on an enlarged scale.

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Figure 4 is a fragmentary section as viewed from the indicated line 4—4 at Fig. 3.

Figures 5 to 9 inclusive are isometric views of the shirt package with a folded shirt mounted upon the board portion thereof and illustrating serially the steps taken in completing the package after the collar protector has been positioned over the collar.

Referring to Fig. 1 of the drawing, the blank 10 of my improved shirt package is formed from a rectangular sheet of fibrous material such as cardboard. Such cardboard must be of such weight and rigidity as to support a folded shirt S thereon, yet be so cheap in cost that it may be thrown away when the shirt S is ready for use. It is to be noted that the generally rectangular form of the blank 10, with all elements of the package lying in a single plane therein, renders it especially suitable for packaging for shipment and storage prior to use in forming the shirt package.

One end of this blank 10 forms the shirt mounting board 11 while the other end includes the elements which form the collar protector 12. These end portions are separated by a transverse crease line 13, and it is contemplated that the collar protector 12 will be folded upwardly from the board 11 after the shirt S is folded upon or around the board with its collar C adjacent the protector 12.

The collar protector 12 is subdivided into a rear wall 14 adjacent the board 11, a cover panel 15 and a support strip 16. The rear wall 14 is bounded by the crease line 13 at one side and a parallel crease line 17 at the opposite side, the spacing between the transverse lines 13 and 17 being such that the panel 15 may be folded over the collar to lie over the top edge of the collar C in spaced parallelism with the board 11, as clearly shown at Fig. 5.

The cover panel 15 extends over the collar C from the crease line 17 at the back of the collar and forwardly to the collar throat T. The board 11 is rectangular in shape, while the sides of the collar protector 12 incline inwardly from crease line 13 and its corners are bevelled as at 18 to eliminate unnecessary material and to improve the appearance of the unit when folded over a collar.

A strip 19 is formed at each lateral edge of collar protector 12 between its edges and crease lines 20 which form triangles with the side edges of protector 12 as the bases and the apexes at crease line 17, and this strip is folded downwardly and inwardly to rigidify back wall 14 and the panel

15 against warping or buckling when the panel is folded over the collar. Each crease line 20 extends from the bevel 18 to the transverse crease line 17 and thence to crease line 13 at the lateral edge of the blank to permit a downward and inward fold, as illustrated at Fig. 2, without tearing the material forming the blank.

The support strip 16 is formed as a transversely disposed, approximately isosceles, trapezoid having inwardly curving top and bottom edges, the apex edge 21 being centrally connected to the center of the forward transverse edge of the panel 15. The adjacent edges of the panel and strip at each side of the point of connection are cut apart, and a crease line 22 spans the connective center portion. This construction permits the strip 16 to be folded downwardly from the panel 15 when the panel is positioned over a collar C and the extended edges of the strip 16 are turned inwardly from each side of the central creased line 22 portion so that the strip is positioned as an arch around and bearing against the inner face of the neckband of the collar C, as clearly indicated at Figs. 3 and 6 and by the broken line at Fig. 5.

The height of the strip 16, from the outer base edge 23 to the apex edge 21, is such that at the wider portions thereof, the base edge will bear against the surface of the board 11, through the folds of the shirt folded thereon, and the apex edge 21 will bear against the underside of the panel 15 with the panel folded over the shirt collar. The arch of this strip against the collar neckband prevents it from buckling, and therefore, it will hold the panel in position against forces which would otherwise crush the collar of the shirt.

A tab 24, composed of foldable segments, is formed in the center of the panel 15 by having its outline cut in the blank 10, and it is adapted to be lifted from the panel 15 when the panel is positioned over the shirt collar. The tab 24 segments are then folded into the collar and over the panel to lock the panel to the collar by the steps clearly illustrated in Figs. 6 to 9 inclusive and at Fig. 2, and now to be described.

This tab 24 is shaped as approximately an isosceles trapezoid having its vertical axis longitudinally centered upon the blank and its base 25 spaced from and substantially parallel with the transverse crease line 17. The side legs 26 of tab 24 converge toward the central connection between the panel 15 and strip 16 and each leg crosses the short crease line 22 and terminates at an apex defined by a crease line 27 within the strip 16, a short space from and parallel with the crease line 22. The cut outline of the tab, about the base 25 and legs 26, permits it to be lifted from the panel 15, yet remain connected to the blank at the apex crease line 27, at a level slightly below the surface of the panel 15, with the support strip 16 folded under the panel and inside the collar, the crease line 27 being at the top of the throat of the collar.

The tab 24 is divided into three interconnected segments, each in the form approximately of an isosceles trapezoid having a common vertical axis and having their side legs formed by the side legs 26 of the tab. These segments thereby form a base segment 28 adjacent to the base edge 25, an intermediate segment 29 and an apex segment 30 which has its apex defined by the apex crease line 27.

The base segment 28 is separated from the intermediate segment 29 by a pair of transverse cuts 31. Each cut extends from a side leg 26 to a point near the center of the segments and there turns downwardly into the body of the base segment 28 to define a short connecting strip 32. This strip is terminated by a crease line 33 in the body of the base segment. The intermediate segment 29 is separated from the apex segment 30 by a similar pair of transverse cuts 34, each of which extends from a side leg 26 to a point near the center of the segments and there turns downwardly into the body of the intermediate segment to form an interconnecting strip 35 with a terminating crease line 36 at the bottom of this strip within the body of the intermediate segment.

The outline of the tab about the base 25 and legs 26 is formed by a conventional stamping or cutting operation which will completely cut through blank 10 about the base and legs except at selected spots 37 which will hold the tab in position within the plane of the blank when the blank is not in use, but which are easily torn to permit the body of the tab to be separated from the panel. Two opposing pairs of spots 37 are positioned on the tabs on the legs 26, one pair being located near the base of the base segment and the other pair being located near but above the center of the intermediate segment and aligned with creaseline 36. The operation of removing the tab from the panel is simplified by such location of the spots, for with the panel 15 positioned over the collar and with the support strip 16 arched inside the collar neckband underneath the panel as illustrated at Fig. 5, it is necessary to merely press on segment 29 adjacent line 31 to separate the edges of segments 28 and 29 along line 31, grasp the edge of segment 28 and draw segment 23 toward the front thust breaking the spots 37 with the parts in position as illustrated at Fig. 7.

When so lifted above the panel, the base segment 28 is carried forwardly to the front of the collar at the base of the throat. This movement rotates the intermediate segment 29 with the interconnecting strip 32 underneath the base segment, all as clearly shown by broken lines at Fig. 7. The next movement is to bring each side portion of the base segment underneath a wing of the collar and at the same time move the intermediate segment 29 upwardly and over the panel with the interconnecting strip 32 remaining behind the base segment 28 as clearly shown at Fig. 8. The approximately arched shape of the base line of segment 28 materially aids in fitting that segment beneath the collar wings. As the intermediate segment 29 moves upwardly, it folds against the apex segment 30 in a manner which jams the underside of the panel 15 against the top of the collar, with the base segment locked between the collar wings and neckband. As a final step the intermediate segment and apex segment are swung over the top of the panel and bent about a crease line 38 at the top of the strip 32 and through the opening formed by the tab cut-out. This opening narrows near its apex so that the sides of the intermediate segment must be folded toward each other to be pushed through opening, as clearly illustrated at Fig. 9. The final step illustrated at Fig. 2 is accomplished by the sides of the intermediate segment spreading, when they are positioned underneath the panel, thus locking them into position against the panel and thereby completing the locking of the entire package. The arcuate for-

mation of base line 31 of segment 29, operatively combines with the narrowing edges of the opening in the panel to facilitate this final locking operation.

While I have illustrated and described many details of construction, alternatives and equivalents will occur to those skilled in the art which are within the scope and spirit of my invention; hence it is my desire that my protection be not limited to the details herein illustrated and described, but only by the proper scope of the appended claims.

I claim:

1. A blank for formation of a protective package for a collar-attached, laundered shirt, including a sheet of cardboard-like material divided by transverse, parallel fold lines into a substantially rectangular shirt-mounting board, a collar-backing segment and a collar-overlying panel, a tab cut from the central portion of said panel and narrowing to an apex at the outer end of the blank and adapted to normally lie in the plane of said panel but adapted to be lifted therefrom and thereby leave a tab-shaped orifice in said panel, said tab being cut into three transverse segments centrally inter-connected in tandem and connected to the panel at the tab apex, whereby when said panel is folded over the shirt collar the tab may be lifted from said panel and the three segments may be folded respectively, alternately, beneath the collar wings adjacent the outer face of the collar neckband and through said orifice and within the collar neckband to support the panel above and lock it to the collar.

2. The blank defined in claim 1 wherein the tab's longitudinal axis is coincident with the longitudinal axis of the blank.

3. The blank defined in claim 1 wherein the apex end of the tab and orifice is spaced from the collar backing segment a distance equal to that from the back of the collar to its throat and is thereby adapted to lie adjacent the throat of the collar when the panel is folded over the collar.

4. The blank defined in claim 1 wherein the base of the tab is centrally curved inwardly of the tab.

5. The blank defined in claim 1 wherein the lines cutting the tab from the panel are broken, leaving spots of the panel material normally connecting the tab to the panel.

6. The blank defined in claim 1 wherein there is a transverse support strip connected to the tab apex and the outer end of the panel.

7. The blank defined in claim 6 wherein the support strip is approximately isosceles trapezoidal with its end portions wider than its center portion, said end portions being at least as wide as the height of the collar neck band.

8. The blank defined in claim 1 wherein said tab is formed as a group of isosceles trapezoids having their outer edges in continuous lines.

9. In combination with a shirt package of cardboard like material having a flat shirt-mounting board and a collar protector extending from an end of the board and folded upwardly therefrom and over the collar of a shirt mounted upon the board; an orifice in the collar protector having a narrowed portion at the throat of the collar and a segmented tab hingedly extending from the collar protector at said throat portion including an apex segment attached to the collar protector, an intermediate segment attached to the apex segment and a base segment attached to the intermediate segment, said base segment including side portions at each side of said point of attachment which are adapted for insertion under the collar at each side of the throat while the intermediate and apex segments are folded together above the protector, said intermediate segment including side portions which are wider than said narrowed orifice portion the intermediate and apex segments being folded rearwardly over the collar protector and downwardly through the orifice and thereby locking the protector to the throat of the collar.

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