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ADHESIVE COLLAR STAY PACKAGE

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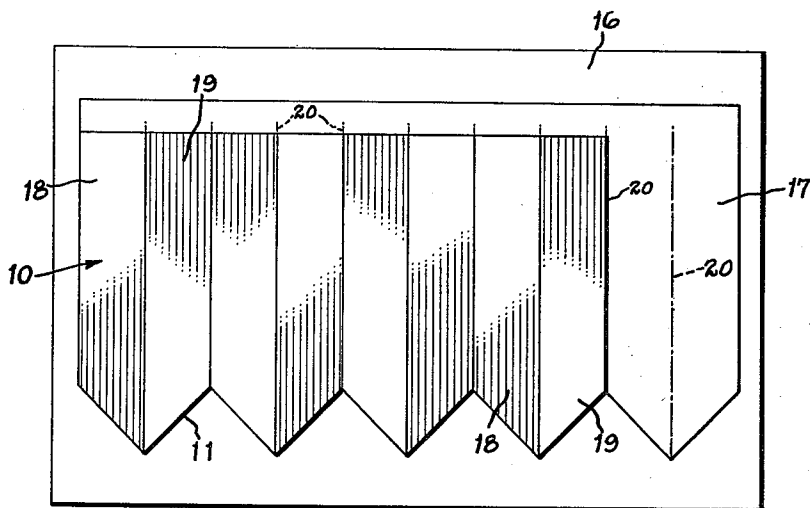


Fig. 1

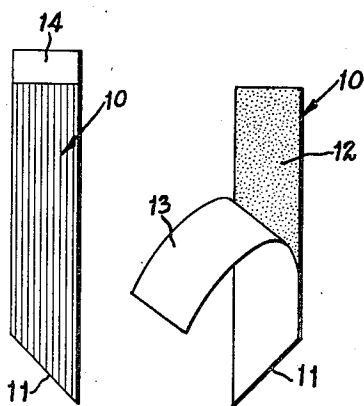


Fig. 2 Fig. 3

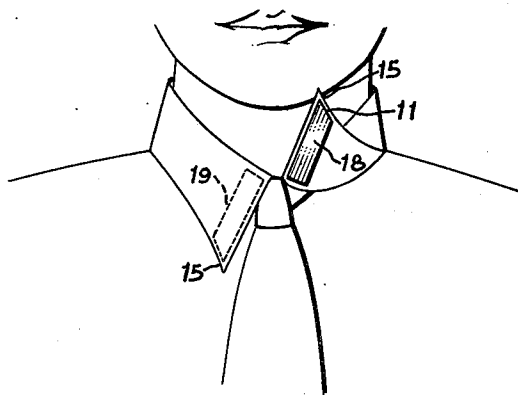


Fig. 4

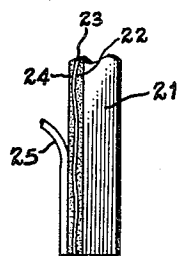


Fig. 5

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ADHESIVE COLLAR STAY PACKAGE

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2 Claims. (Cl. 206—56)

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This invention relates to shirt collar stays and is particularly directed to a self-supporting adhesive stay adapted for use with practically any make or style of collar and which may be repeatedly used and re-used on the same shirt or on different shirts for a great number of wearings.

In order to prevent starched and soft collars from curling and wrinkling, it has been conventional to stiffen and support the collar wings by means of elongated stays or ribs which are removably held in cloth pockets formed on the underside of the wings. Before the shirt is laundered, the stays are removed from the pockets so that they are not bent or broken during laundering or ironing.

Although pocket-supported stays have been generally adopted in many medium and high priced shirts, they have not been completely satisfactory for a number of reasons. In the first place, the formation of the pockets materially increases the manufacturing cost, so much as to make their use impracticable in shirts of the less expensive grades. Consequently, the collars of inexpensive shirts have no provisions for supporting the stays and, in their absence, wrinkle or curl without restraint.

Moreover, the sizes of the pockets and stays are not standard between shirts but vary considerably with the make and cut of the collar with the result that it is usually not possible to interchange stays between different collars. Hence, if a stay for any particular shirt becomes lost or broken, it is virtually impossible to find a ready made replacement and the user must improvise a stay from a stiff material, such as cardboard, alter a stay designed for another shirt, or do without.

Because the stay pocket openings are usually located near the collar neckband and are self-closing to prevent the stay from working out of the pocket, it is difficult or annoying for the user to insert and remove the stays from the pockets without wrinkling or soiling the collar, particularly if the wearer has forgotten to place the stays in the pockets before putting on the shirt. Wire stays, on the other hand, are objectionable because they are held in place by collar penetrating cleats, which tear or fray the collar fabric.

This invention is directed to the provision of a self-supporting, self-adhering collar stay capable of being utilized on a shirt collar without the aid of external supporting means such as stay pockets or collar penetrating cleats. Con-

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sequently, it will be apparent that the use of stays of this type will not only permit a material reduction in the manufacturing cost of shirts, but the wearing life of the shirts will be substantially prolonged. The stays of this invention are adapted for repeated use with the same shirt or different shirts having a variety of collar styles for a great number of wearings. Thus, in the event that a stay becomes mislaid or lost, it can be easily replaced with a similar stay without necessitating the construction of a substitute fitted to a particular collar pocket. Moreover, the stays of this invention can be quickly and conveniently placed in concealed supporting position at any desired angulation with respect to the collar wing without mussing or soiling the collar, even though the shirt is being worn at the time of attachment.

Described in more detail, the collar stay of this invention comprises a collar tab stiffener having a face surfaced wholly or in part, with a pressure-responsive adhesive which is effective to hold the stay in association with the fabric of the collar wing. In use, the stay is placed in concealed position against the undersurface of the collar wing where it remains until it is forcibly removed. Although the bond established, under finger pressure, between the collar fabric and the adhesive material is quite strong and will not permit accidental forceless detachment of the stay, the adhesive selected has a greater affinity for the material of the stay than it does for the shirt fabric. Hence, when the stay is removed from the shirt, the adhesive adheres firmly to the stay surface and detaches from the collar cleanly without leaving residual spots of the adhesive clinging to the collar fabric.

In order to keep the adhesive in a tacky condition and to prevent it from air drying when not attached to a shirt collar, this invention also contemplates the provision of a protective facing strip which is adapted to be placed over the adhesive face of the stay, thereby shielding the adhesive from air and preventing the accumulation of dust, dirt and foreign particles which would otherwise tend prematurely to deprive the stay of its adhesive characteristics. When the stay is to be used, the facing strip is removed and the stay is pressed into place on the underside of the collar. During use, the collar fabric supplants the facing strip as the protective shield for the adhesive.

Other advantages of this invention will be apparent to those skilled in the art from the following description of the drawings in which:

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Figure 1 is a front view of a series of paired stays mounted on a card in a manner convenient for merchandizing, showing one pair removed.

Figure 2 is a front view of an individual stay showing the non-collar engaging side of the stay.

Figure 3 is a view showing the collar engaging side of the stay with the facing strip peeled back to expose the adhesive.

Figure 4 is a front view of a shirt showing the manner in which the stay is attached.

Figure 5 is an enlarged fragmentary side view of a preferred embodiment of this invention which is slightly different from the embodiments shown in Figures 2 and 3.

As best seen in Figures 2 and 3, a typical collar stay which is constructed in accordance with this invention comprises; a generally rectangular stiffener or rib 10 which forms the main body of the stay. The lower edge of the stiffener is angulated as at 11 to conform to the angular point of the collar wing. As best seen in Figure 3, one face of the stiffener is coated with a pressure-responsive adhesive 12. In the embodiment shown, the entire face is covered with adhesive but it will be apparent to those skilled in the art that the adhesive can be applied in strategically located areas or spots without departing from the spirit of this invention.

The stiffener rib can be formed from a variety of stiff material such as thin metal, or heavy paper or cardboard. However, I have successfully utilized and prefer a stiffener fabricated from the vinyl chloride-vinyl acetate copolymer resin, containing stabilizers necessary to produce the desired end product.

In order to keep the exposed surface of the adhesive tacky and to prevent it from air-drying, a facing strip 13 formed from paper is supplied to cover the exposed adhesive surface. The facing strip is configured to cover the adhesive contact areas and it may be provided with a tab 14 which extends beyond the edge of the stiffener and permits the strip to be grasped readily.

When the stay is to be used on a shirt, the facing strip is grasped by the tab and peeled from the surface of the adhesive, thereby exposing the adhesive. The stay is then placed in position on the surface of the collar wing and adjusted so that the angulated edge 11 conforms to the wing vertex 15 (Figure 4). By applying thumb and finger pressure to the stay, the adhesive can be made to adhere firmly to the cloth surface, to the underside of the collar. When it is desired to remove the stay when one edge of the stiffener is grasped and pulled from the collar, the facing strip is then replaced to keep the adhesive tacky until the next time the stay is to be used. I have discovered that if the facing strip is kept covering the adhesive between wearings, the same stay may be used for 24 or 25 different wearings over a period of a month's time before the adhesive becomes inert.

The adhesive is selected carefully so that the bond established between the adhesive and the stay or stiffener is stronger than the bond established between the adhesive and the shirt fabric or facing strip material. Any number of adhesives of this type are known to those skilled in the art of pressure-responsive adhesives. By virtue of this characteristic, the adhesive adheres more firmly to the stay and follows the stay as it is peeled from the collar. Consequently, it is cleanly detached from the collar and

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does not leave spots of adhesive clinging to the collar which would be difficult to remove. By the same token, the collar does not pull the adhesive from the stiffener and the stiffener retains its adhesive over long periods of use.

While a pressure-responsive adhesive is preferred and entirely suitable for use in conjunction with this stay, the invention also contemplates the use of a heat-responsive adhesive. If the latter type of adhesive is used in the stay, it may be utilized to advantage in laundries or in shirt manufacturing plants where the stay may be placed in position on the collar and the adhesive activated by a hot iron during the shirt pressing operation.

A convenient means for marketing and handling the adhesive collar stays of this invention is shown in Figure 1. A rectangular cardboard panel 16 serves as a support and mount for the stays. A heavy paper backing sheet 17 is detachably fastened to one face of the panel by any convenient means such as spots of adhesive or cement, and can readily be detached therefrom by a quick pull. Pressed on the face of the backing sheet are a series of complementary pairs of stiffeners. Each pair includes a stiffener 18 for the left collar wing and a stiffener 19 for the right collar wing. The respective pairs are held to the facing strip by means of the pressure-responsive adhesive on the underside of the stiffener. When it is desired to use a pair of stays, a right and left stiffener are peeled from the back of the sheet and applied to the shirt collar. During the removal of the stays the backing sheet is held to the panel by means of the paste or cement previously described. After use, the stays are then pressed back into the vacated position on the backing sheet.

One of the chief advantages of this construction resides in the fact that it is not necessary to utilize individual facing strips which easily become lost when not attached to the stiffener. The large backing sheet mounted on the cardboard panel is easier to keep and locate and it is extremely unlikely that the backing sheet will blow away or become lost which is often the case when individual strips are used. However, if it is desired, the backing sheet may be cut or torn into individual facing strips for the individual stiffeners. To facilitate removal of the individual strips from the sheet, score lines or slits 20 may be provided on the sheet. Moreover, the lower edge of the sheet may be configured to conform to the pointed ends of the stiffener and thereby provide a pre-formed angulated edge for each individual facing strip.

In Figure 5, I have shown a preferred embodiment of my invention. In this form, the stiffener comprises a rib 21, a coating of adhesive 22 and a rough corrugated paper tape 23. The collar-contacting, pressure-responsive adhesive is indicated at 24 and covers either wholly or in part the surface of the tape 23. A facing strip 25 of the type previously described covers and protects the adhesive 24. This construction is particularly advantageous in so far as manufacture and assembly of the stays is concerned, because the tape 23 may be of a commercial type which has opposite faces coated with films of pressure-responsive adhesive. The pre-fabricated commercial tape is simply pressed into position on the rib to form the completed unit and it is unnecessary for the stay manufacturer to deal with liquid adhesive.

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Having described my invention, I claim:

1. A package of collar stays comprising: a plurality of complementary pairs of collar stays, each pair consisting of a stay having the lower end thereof angulated to conform generally to the angular point of a left collar wing and a stay having the lower end thereof angulated to conform generally to the angular point of a right collar wing, each stay surfaced on one face with pressure responsive adhesive, said pairs of stays adhesively secured to an integral backing sheet in side by side relationship with the angulated ends of each pair providing a pair-identifying V, a stiff panel mounting and supporting said backing sheet, and said backing sheet configured to conform to the outline of the lower ends of the respective stays and having a portion extending beyond the upper ends of the stays, said backing sheet slit between the stays from the lower angulated ends thereof to points above the upper ends of the stays but short of the upper edge of the backing sheet, whereby connecting webs are provided between each pair of stays and between the stays of each pair.

2. A package comprising a plurality of collar stays each of which has its lower end configured to conform generally to the vertex of a collar

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wing, each stay surfaced on one face with pressure responsive adhesive, said stays adhesively secured to an integral backing sheet in side by side relationship, a stiff panel mounting and supporting said backing sheet, said backing sheet configured to conform to the outline of the lower ends of the respective stays and having a portion extending beyond the upper ends of the stays, and said backing sheet being slit between the stays from the lower ends thereof to points above their upper ends but short of the upper edge of the backing sheet, whereby connecting webs are provided between the stays.

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