April 14, 1942. R. A. DILLON 2,279,663

CUFF GUARD AND FORM PROTECTOR

Filed Nov. 13, 1940

Fig. 1

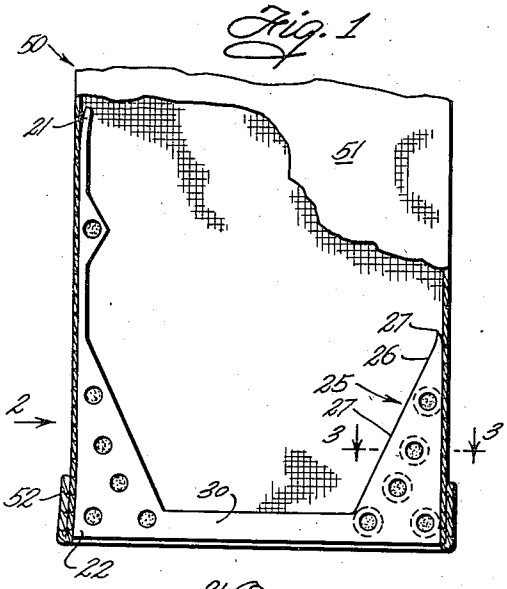


Fig. 4

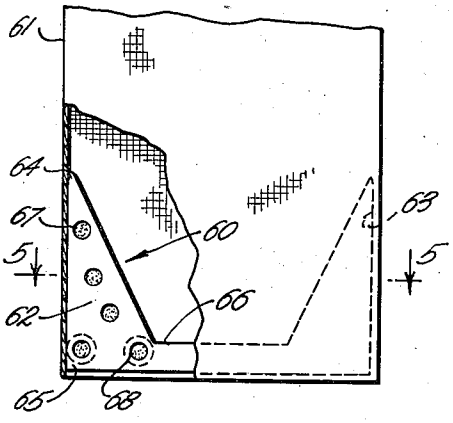


Fig. 5

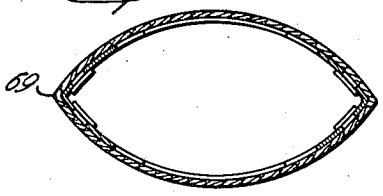


Fig. 2

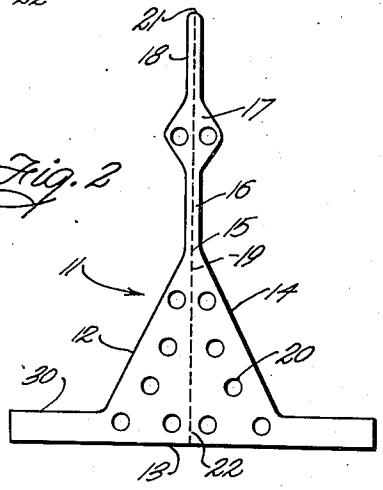


Fig. 6

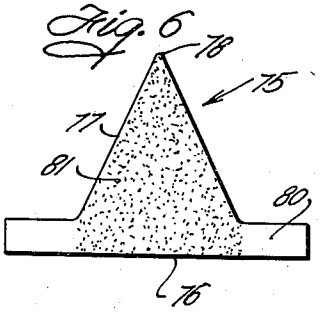


Fig. 3

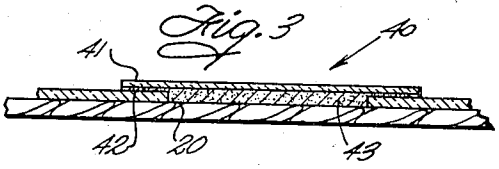
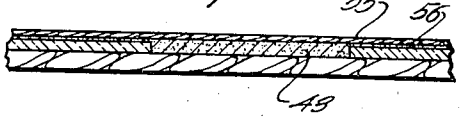


Fig. 7



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Patented Apr. 14, 1942

2,279,663

UNITED STATES PATENT OFFICE

2,279,663

CUFF GUARD AND FORM PROTECTOR

Robert A. Dillon, Los Angeles, Calif.

Application November 13, 1940, Serial No. 365,479

5 Claims. (Cl. 2—123)

I designate my invention as a guard and form protector for cuffs as it is designed to be inserted within the cuffs of sleeves or the cuffs or lower end of the trousers to maintain these in desirable shape for being worn, the form protector has an angular edge which conforms to the usual crease made by pressing the trousers or the sleeve and thus maintains this crease. An object and feature of my invention is a guard or form protector having front and rear angular elements or parts each formed of thin sheet material and adapted to be inserted inside of the lower end of the trousers or a sleeve adjacent the cuff, the sheet material having sufficient stiffness to somewhat round out the lower portion of the trousers or cuff of the sleeve and thus present a neat appearance. The device by having an angle or fold which aligns with the front and back creases of the trousers or sleeve thus maintains these creases reducing the necessity of frequent pressing. Further, the interior protector operates as a guard and resists the wear usually coming on the fabric, such wear being caused by the shoes as to the trousers or the wrist in regard to a sleeve.

A further feature of my invention relates to making the guard or form protector removable and readily replaceable by providing a series of perforations each of which has an adhesive therein, the adhesive being adapted on pressure against the fabric of the trousers or sleeve to retain the protector in place. Such protector however may be readily removed by disengaging the adhesive from the fabric, this adhesive being of the type which does not mar the fabric and still remains in the perforation.

A further characteristic and use of the device of my invention is in retaining not only garments of a tubular type such as sleeves and trousers to the desired shape but by using part of the device it may be applied as a stiffening for other parts of the garments and be readily attached and detached. This latter characteristic is readily developed by providing the sheet material stiffener with the series of perforations having the adhesive fastener or button.

The device for use as a guard or form protector may be made of sheet material stiffer and more resilient than the fabric of the garment using such material as non-inflammable Celluloid, Pyralin, Pliofilm or various other sheet plastics which may be either colorless or tinted. My invention may also employ a stiffened type of fabric which will have the desired resiliency. If the device is to be left permanently in the garment when this is being cleaned and pressed of course the material should be such that the usual cleaning solvents will not destroy the sheet material or the adhesive. As it is much less expensive to make the device with the structure readily removable, the wearer of the garment does not have to consider what solvents are used in any cleaning.

For a sleeve and trouser leg guard and protector I find it of advantage to have the front and back portions of a tubular guard made somewhat triangular shaped when flattened so that these may be folded on a line between the apex and the mid section of the base. A triangular device of this nature may be used as a single guard attached by adhesive however the tubular design not only maintains the pressed crease in the garment but rounds out the sleeve or trouser leg thus in warm weather allows more freer circulation of the air around the arm or leg. In addition the guard having wear resisting characteristics saves the fabric of the garment from the usual wear and from becoming soiled which is especially the case of trouser legs from the shoe polish.

My invention is illustrated in connection with the accompanying drawing, in which:

Fig. 1 is a side elevation of one type of my invention illustrated as fitted in a trouser leg, the latter being shown in a vertical longitudinal section.

Fig. 2 is a front elevation of the device of Fig. 1 taken in the direction of the arrow 1 of Fig. 2 omitting the fabric of the trousers and illustrating the device in a widely spread position.

Fig. 3 is a detail section of Fig. 1 on the line 3—3 showing an adhesive button or attaching device to engage the fabric of the garment.

Fig. 4 is an elevation of a coat sleeve broken away showing my invention fitted therein, this being modified from the construction of Fig. 1.

Fig. 5 is a section on the line 5—5 of Fig. 4 in the direction of the arrows illustrating the device as retaining the crease of the sleeve.

Fig. 6 is an elevation of one end of the device either of Figs. 1 or 4 showing the pressure sensitive and attaching device on the triangular body of the shaping guard.

Fig. 7 is a modification of the construction of Fig. 3 illustrating an inside fabric covering.

Referring first to the construction of Figs. 1 and 2, the guard and form protector designated by the assembly numeral 11 has a front somewhat triangular shaped shaping guard 12 which may be considered as having a base 13, two con-

verging sides 14 leading to the narrow or apex portion 15. From this portion there is a narrow tongue 16, then a rectangular shaped enlargement 17 arranged diagonally and a terminating finger 18. The construction is adapted to have a fold or angular corner on the dotted line 19. There are a series of perforations 20 in the guard structure 12 and also in the rectangular enlargement 17 for the adhesive buttons hereunder described. The tip of the finger 18 is bent inward slightly as indicated at 21, Fig. 1, and the center portion at the bottom indicated at 22 is slightly flared outwardly.

The rear guard 25 is of similar somewhat triangular shape as the guard 12 but has no tongue or finger extending upwardly but terminates at the apex 26 of the tapering side edges 27. This apex is flared inwardly as indicated at 28. There are also a series of perforations in the rear guard. These two guards are connected by similar side straps 30 which may be formed integral with the front and rear guards and as the device is made of thin sheet material, it may be cut or stamped out of relatively large sheets forming the two straps 30 on each side, one of which would then be connected either to the front or rear guard however if desired the straps 30 may be made separate from the guards and attached thereto to produce the different sizes required.

The adhesive button attachment device is illustrated in Fig. 3 designated by the assembly numeral 40 in which a thin strip of sheet material 41 is attached to the inside of either the front or rear guards at one of the openings 20 by marginal adhesive 42, the opening 20 is filled with an adhesive 43 which may be of a non-drying pressure sensitive adhesive. The trouser leg is indicated by the numeral 50 having the usual fabric structure 51 and with a cuff 52 adjacent the lower portion. The guard is fitted in the trouser so that the angles or edges indicated by the dotted line 19 which is in both the front and the rear guards will align with the pressed crease of the trousers. The device is preferably inserted to have the bottom edge slightly above the lower edge of the trousers or the cuffs thereof, the relative height being as desired by the wearer of the garment. The pressure sensitive adhesive 43 filling the openings 20 is then pressed against the fabric of the garment which may be done by pressing the trousers using heat if desired or by the mere pressure of the fingers. This adhesive has sufficient adherence to the fabric of the trousers to attach the guard and to hold this in place but yet allows the guard to be readily removed and this type of adhesive does not injure, mar or in fact leave any mark on the fabric of the garment. The guard has sufficient inherent stiffness in the sheet material to retain the crease front and back in the trousers and to spread sufficiently so that the trousers have a comfortable fit around the ankle and the legs of the wearer of the garment.

Fig. 7 shows a modification of the adhesive button of Fig. 3 in that a fabric lining 55 is attached to the sheet material form by adhesive 56. The button adhesive 43 is thus coated on the inside of the fabric but such fabric which may be of uniform color and match the garment causes the device to be less conspicuous when being worn however the structure may readily be inserted and removed as the pressure sensitive adhesive button 43 may be pulled from the fabric of the garment and still leave the fabric lining and the sheet material guard attached together.

The construction of Fig. 4 illustrates the guard 60 suitable for a sleeve indicated at 61 to fit in the cuff. In this case both of the guard elements 62 are approximately triangular in shape and of the same size and provided with an angular edge or fold 63 in the line between the mid position of the base and the apex. This apex is slightly curled inwardly as indicated at 64 and the base at the fold line may be bent outwardly as indicated at 65. These two portions are connected by side straps 66. There are a series of perforations 67 having the adhesive button structures 68. These are fitted so that the fold of the reinforcement sheet structures lines up with the crease 69 of the sleeve.

The construction of Fig. 6 shows another form of guard 75, the main body being triangular in shape having a base 76, two similar sides 77 and an apex 78. This may be folded on a line between the apex and the mid section of the base. Extending from the base there may be two straps or wings 80. This arrangement may be used to form a single guard or two of these with the straps 80 secured together make the double guards. In the illustration the main triangular portion is coated with an adhesive 81 which may be of the pressure sensitive nondrying type allowing it to be attached to the inside of the garment and to be readily removed without marring the fabric of the garment. A construction of this nature may be used in circumstances where the person does not desire to use the front and rear guards by using only one of the guards, for instance either at the front portion of the cuff or the front or rear portion of the trouser leg. This construction might also have the perforations and the plastic buttons. Where these buttons are used however after repeated removals and again attachments to the garment, the adhesive loses a certain amount of its attaching power and therefore it is desirable to replace with new adhesive buttons which may readily be done in the construction for instance of Fig. 3 by loosening the adhesive 42 and removing the sheet strip 41, then replacing by a new strip. This may also be done with the fabric lining 50.

Various changes may be made in the details of the construction without departing from the spirit or scope of the invention as defined by the appended claims.

I claim:

1. In a device as described, a sheet material reinforcement element for a fabric tubular structure having a series of perforations with adhesive buttons fitted in the perforations, such buttons being adapted to engage the inside of the fabric structure and attach the reinforcement element thereto.

2. In a device as described for attachment to fabric, a sheet material reinforcement element substantially triangular in shape having a fold line between the mid section of the base and the apex, there being a series of perforations with adhesive buttons fitted therein to engage the fabric.

3. In a device as described for attachment to fabric, a sheet material reinforcement element substantially triangular in shape having a fold line between the mid section of the base and the apex, there being a series of perforations with adhesive buttons fitted therein to engage the fabric, a tongue extending upwardly from the apex and terminating in a finger with means to attach the tongue and finger to the fabric.

4. A guard and form for cuffs of fabric trousers or sleeves having two sheet reinforcement structures each with an angle insertible in trousers or sleeves with the angle in alignment with the crease, each of the structures being wide on the base and tapering to an apex adjacent the crease, each sheet having a series of perforations with adhesive therein to engage the fabric of the trouser or sleeve.

5. A guard and form for cuffs of fabric trousers or sleeves comprising an angularly bent section of sheet material adapted to be positioned within the cuff, said section having perforations therein, a normally tacky adhesive filling the perforations so as to be exposed on one side of said section, and a covering over the adhesive on the opposite side of said section.

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