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DEVICE FOR FORMING CUFFS ON TROUSERS

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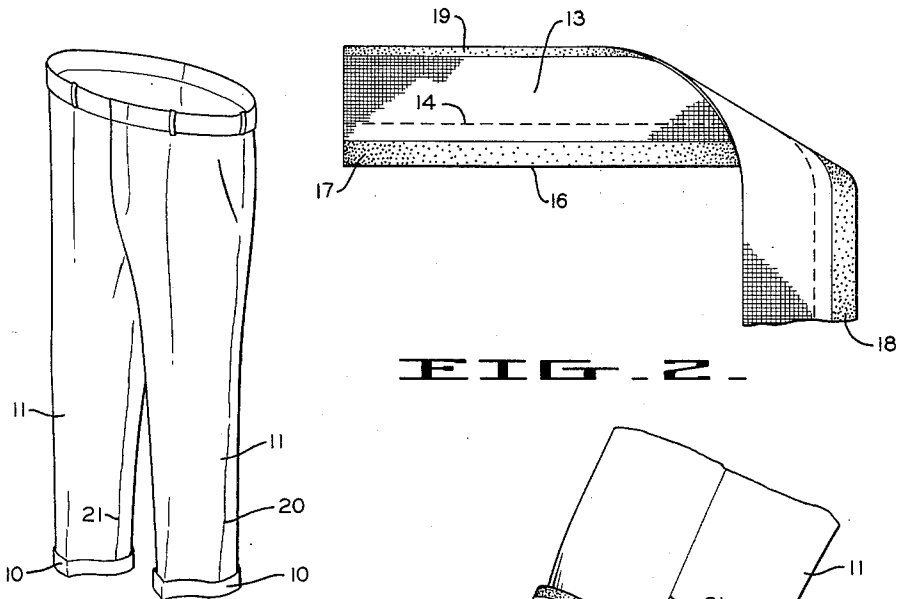


FIG. 2.

FIG. 1.

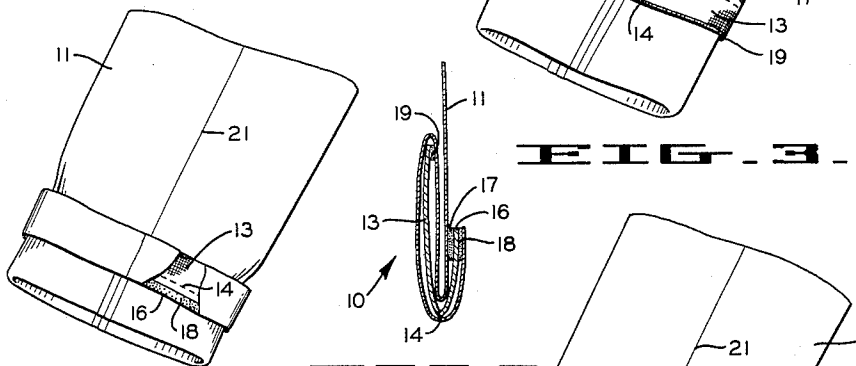


FIG. 3.

FIG. 4.

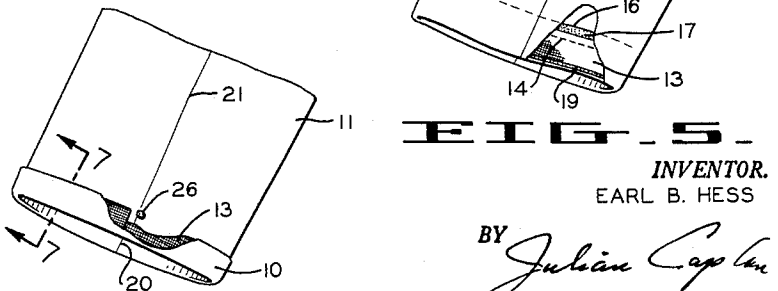


FIG. 5.

FIG. 6.

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DEVICE FOR FORMING CUFFS ON TROUSERS

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This invention relates to a new and improved device for applying cuffs to trousers. More particularly, the invention relates to a tape which may be affixed to the bottom of the trouser leg and caused to adhere thereto in such manner that a cuff may be formed.

At the present, trousers of the less expensive types such as wash pants and slacks are stocked by retailers in a variety of trouser lengths. This requires stocking an excessive inventory and, at the end of the season or when there is a change in style, results in an unbalanced inventory which must be disposed of at a reduced price. Maintaining a suitable inventory in various waist-band sizes and trouser lengths, as well as different colors and styles, presents a problem to the merchant. On the other hand, the labor ordinarily required to form a cuff on trousers at a retail establishment as compared with a factory is excessive and, further, requires the services of a tailor. The present invention is designed to eliminate these difficulties.

Accordingly, it is the principal object of the present invention to provide a device which may be used to form on trousers a cuff which is identical with conventional cuffs and yet may be formed without the services of a skilled tailor.

Alternatively, the present invention may be used by consumers or seamstresses to form cuffs on trousers or slacks, or to lengthen or shorten previously cuffed garments. The device may be applied to trousers purchased uncuffed.

All of the foregoing reduces the inventory required by the retailer by making it unnecessary to stock a plurality of lengths.

A still further feature of the invention is the fact that it is relatively inexpensive and the time required to form cuffs is materially reduced.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views.

In the drawings:

FIG. 1 is a perspective view showing a pair of trousers formed with cuffs in accordance with the present invention.

FIG. 2 is an enlarged fragmentary view showing tape used to form the cuffs.

FIG. 3 is a perspective view showing a portion of a trouser leg with the device applied in the first step of the method of its use.

FIG. 4 is a view similar to FIG. 3, partly broken away in section, showing the second step in the method of use.

FIG. 5 is a view similar to FIG. 3, partly broken away in section, showing the third step in the method of use.

FIG. 6 is a perspective view, partly broken away in section, showing the completed cuff.

FIG. 7 is a fragmentary sectional view taken substantially along line 7—7 of FIG. 6.

A conventional trouser cuff 10 is formed on the trouser leg 11 with the material cut approximately $4\frac{1}{2}$ inches longer than the final trouser length. The bottom edge of the leg is folded upwardly the width of the cuff (a distance of about $1\frac{3}{4}$ inches) then downwardly $1\frac{3}{4}$ inches to the bottom edge of the leg, and then inwardly and upwardly on the inside of the leg, a distance of one inch. The foregoing dimensions are subject to variation, but are assumed for the purpose of the following description.

The present invention provides a means for measuring

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the necessary widths of the folds of the cuff and for securing the cloth in place without the use of a sewing operation.

For such purpose there is provided a tape 13 having a width of $2\frac{3}{4}$ inches, preferably formed of a stiff material such as buckram. Buckram is desirable in that after the trousers have been washed the starch in the cloth is dissolved and the stiffness originally present in the cuff is eliminated. However, it will be understood that other materials may be employed for this purpose. The tape may be packaged in various ways. Thus for tailoring establishments or retail stores a large roll of the tape may be provided from which pieces of the required length may be cut with a shears. Alternatively, pieces of tape of a length sufficient to circumscribe the circumference of an average trouser leg may be provided. In any event, as a preliminary step in the use of the tape it must be cut to a length which is substantially equal to the circumference of the trouser leg at the location of the cuff and in no event greater than such circumference. The tape is preferably formed with a score-line 14 or perforation extending longitudinally thereof and spaced upwardly from the bottom edge 16, a distance of one inch. The back surface of the tape preferably has a tacky adhesive, such as a rubber-base adhesive, applied to at least a portion of the width thereof so that when the tape is placed on the trouser leg and manual pressure applied it will remain in position until it is heat-adhered in position at a later stage of the operation. Along the bottom edge of the tape, on front and back thereof, are bands of adhesive 17, 18, respectively, of the type which when a hot iron is applied to the cloth is adhered in permanent fashion. Such heat-adhering substances are well known for applying trouser knee patches, and the like. The width of the adhesive band is not critical but desirably is about one-half inch. Optionally, a narrow band 19 of similar adhesive is applied in a thin strip along the top front edge of the tape.

The first step in the formation of the cuff is to cut the trousers to proper length, namely, approximately $4\frac{1}{2}$ inches longer than the ultimate leg length. Apparatus is readily available for performing the cutting operation as well as the measuring operation which precedes it. The tape 13 is then cut to proper length. Thereupon the trouser leg 11 is folded inside out to the position shown in FIG. 3, the length of the material folded back being at least twice as great as the width of tape 13. The bottom edge 16 of the tape is then laid along the bottom edge of leg 11 completely around the leg, preferably beginning at the center seam 21. The tacky surface on the tape causes the tape to remain in the position shown in FIG. 3. The next step in the use of the device is to fold the bottom edge of the leg downwardly the full width of the tape. Because the buckram tape 13 is relatively stiff, the folding operation is readily and accurately performed. The completion of this operation is shown in FIG. 4, and thereupon a hot iron is applied which causes the heat sensitive adhesive 17, 18 on both sides to juxtaposed layers of cloth. In effect, this causes the layers of cloth to adhere to each other. Where the optional narrow strip 19 is used, this likewise adheres to the juxtaposed layer of cloth. Thereafter, the leg is unfolded so that it is right side out, as shown in FIG. 5. Next, the buckram is folded upwardly along the score line 14 so that the conventional cuff shown in FIG. 6 is formed. For such purpose, the score line 14 weakens the tape to facilitate the folding operation. The upper edge of the cuff 10 is held in place preferably by cutting off a small piece 26 of the heat sensitive material and using it to tack the upper edge of cuff 10 to leg 11, adjacent seams 21 and 20, to hold the top edge of the cuff in place in conventional position. If desired, thread

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may be used as a substitute for piece 26. When washed, the sizing in the buckram 13 is dissolved and the stiffness of the cuff eliminated. Optional band 19 causes the tape to remain flat rather than bunching along the bottom edge of the cuff after the stiffness disappears.

It will thus be seen that the present invention provides a means for forming a conventional trouser cuff, wherein no sewing operation is required and wherein measuring of the material to form cuffs in accurate manner and complicated pressing operations of conventional tailoring of cuffs is entirely eliminated. The time required to perform the operation is reduced and the degree of skill of labor is likewise materially reduced. Accordingly, trousers of the type heretofore described may be purchased uncuffed and the cuff formed by the user employing the device heretofore described. Alternatively, retailers may stock such trousers irrespective of leg length and when the customer purchases the item the cuff may be formed by the use of the device, thereby eliminating the inventory problem normally encountered.

What is claimed is:

1. A device for forming a trouser cuff comprising a tape or relatively stiff material of a length substantially equal to the circumference of the cuff to be formed, said tape being formed with a longitudinally extending weakened portion spaced from one longitudinal edge a distance equal to the width of the cuff to be formed, a first strip of adhesive on said tape along the front surface of a second longitudinal edge, and a second strip of adhesive on said tape along the back surface of said edge.

2. A device according to claim 1, in which said first and second strips of adhesive are of heat sensitive material.

3. A device according to claim 1, in which is further provided a third strip of adhesive along said first edge.

4. A device according to claim 1, in which said material is initially stiffened with soluble sizing.

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5. A cuff comprising a leg having the lower end thereof formed with a first fold extending upward and outside the lower end of said leg a second fold along the upper edge of said first fold extending downward to the elevation of the lower edge of said leg and outside said first fold and a third fold along the lower edge of said first fold extending upward and inside the lower end of said leg, a tape of a length substantially equal to the circumference of said cuff and a width equal to the combined widths of said second and third folds interposed under said third fold and between said second and first folds, a first strip of adhesive on said tape along the upper edge of one surface of said tape and adhering said tape to said third fold, and a second strip of adhesive along the upper edge of said tape on the surface opposite said first surface and adhering said tape to said lower end of said leg.

6. A cuff according to claim 5, in which said tape is initially formed with soluble sizing to stiffen said tape, said tape being weakened along a fold along the lower edge of said leg.

7. A cuff according to claim 5, which further comprises a third strip of adhesive along the edge of said tape opposite said first strip and adhering said tape to one of said first and second folds.

8. A cuff according to claim 5, which further comprises at least one short piece of material with adhesive on both surfaces adhering the upper edge of said first fold to the lower end of said leg.

References Cited in the file of this patent

UNITED STATES PATENTS

2,227,214	Bisberg	Dec. 31, 1940
2,360,953	Lippman	Oct. 24, 1944
2,860,081	Eiken	Nov. 11, 1958