United States Patent

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[54] **CUFF STRETCHER**
5 Claims, 6 Drawing Figs.

[52] **U.S. Cl.** **223/2; 38/21**
[51] **Int. Cl.** **A41h 33/00**
[50] **Field of Search** 223/2, 39, 70, 61; 38/21

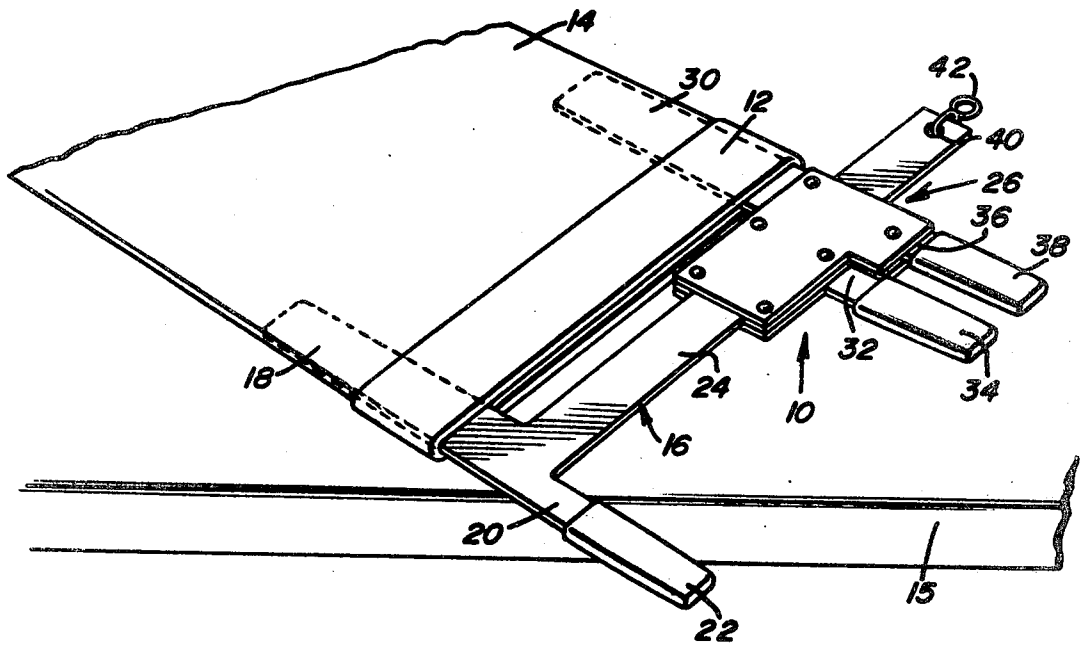
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ABSTRACT: Two parallel-spaced fingers are mounted in slidably adjustable relation with respect to one another and are adapted to engage the cuff of a garment. During cuff stretching, a sliding bar separating the fingers is caused to frictionally lock against a guide when actuating handles are manually gripped. Release of the handles frees the frictional locking allowing displacement of the fingers inwardly and removal of the device from the cuff.



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SHEET 1 OF 2

Fig. 1

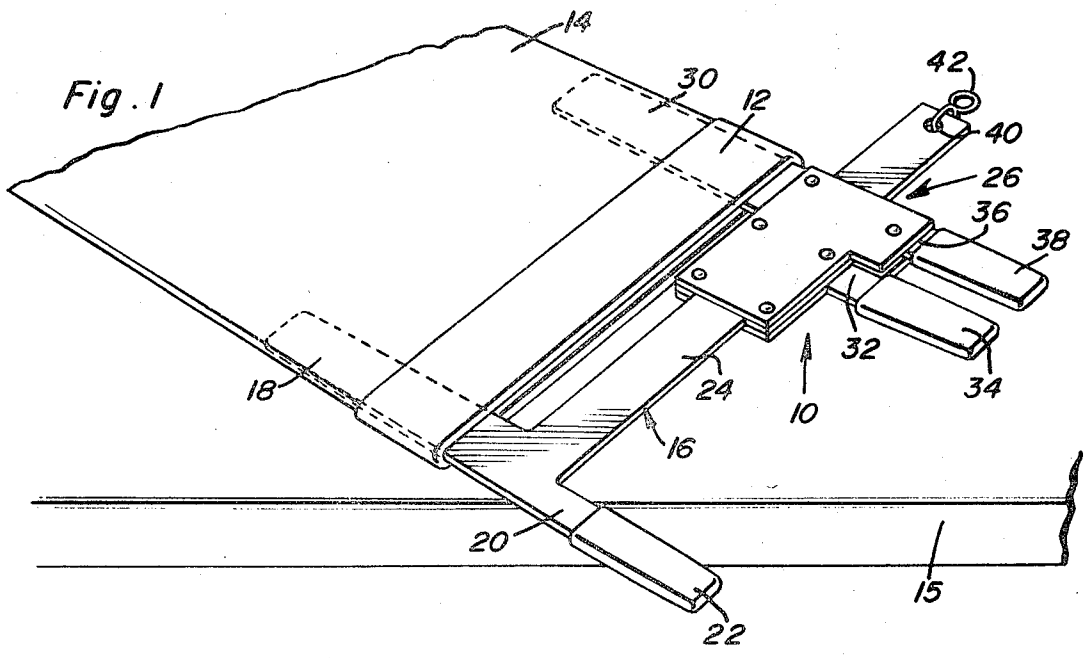
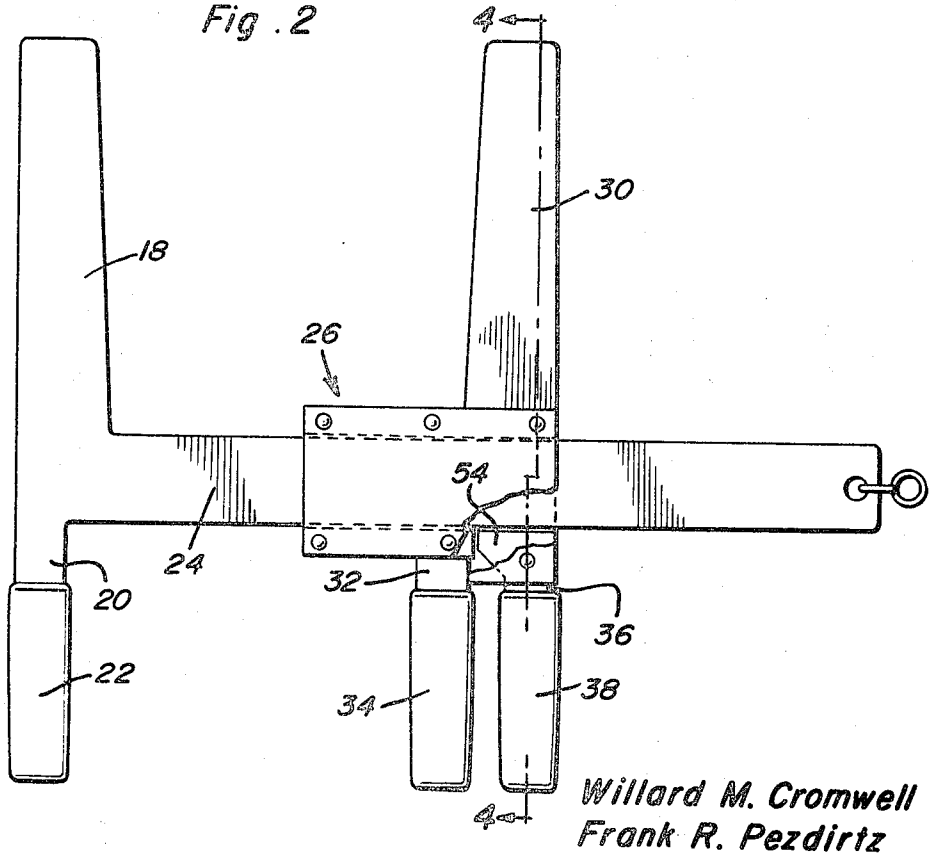


Fig. 2



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Fig. 3

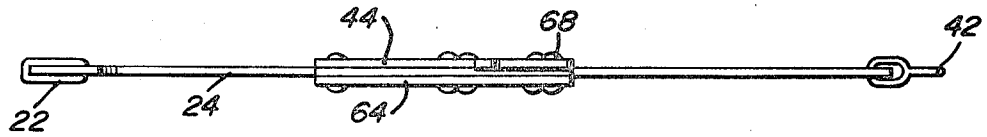


Fig. 4

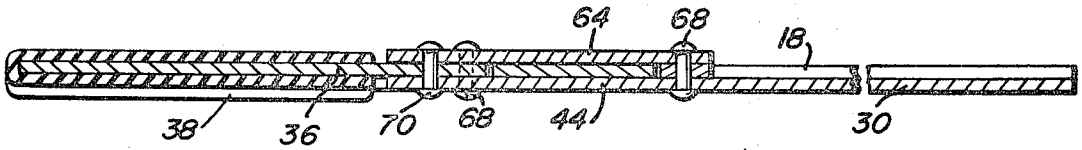


Fig. 6

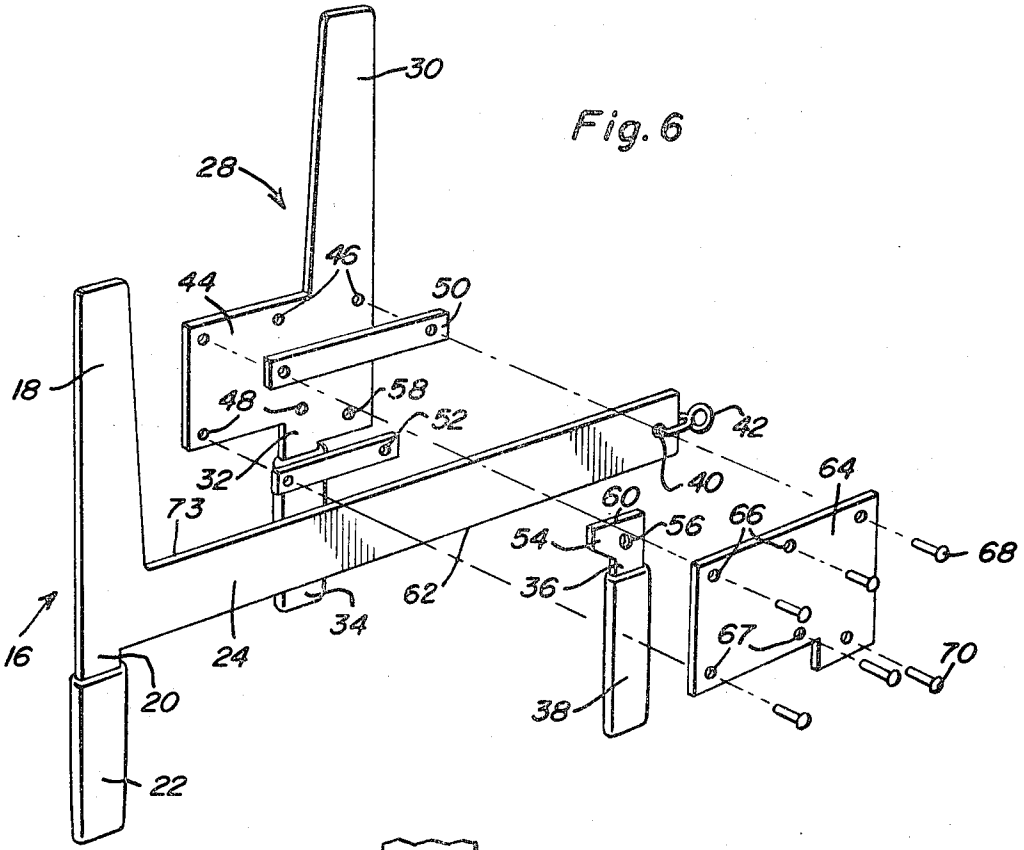
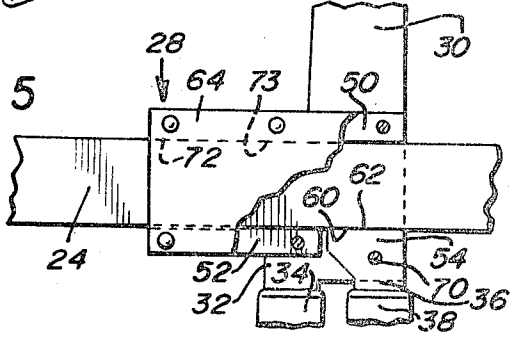


Fig. 5



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CUFF STRETCHER

The present invention relates to a garment cuff stretching device.

During the finishing of cuffed garments, it is generally desirable to insert a stretcher device into the cuff during a garment pressing operation. In the past, such devices have provided satisfactory results but with several attendant disadvantages. A first such disadvantage resides in the bulkiness of the device which detracts from the pressing forces exerted on the garment during the time that the garment undergoes a pressing operation. Further, prior art devices required time-consuming adjustments between cuff engaging members so that maximum efficiency cannot be realized. Generally, previous constructions have been fabricated from metal and during prolonged and sequential use of the device, the portions thereof which must be manually manipulated become heated and cause a pressing machine operator discomfort.

With the aid of the present invention, an operator may lock the device in place by gripping actuating handles with one hand, which then leaves the other hand free for manipulation of the material or the press. The device can be removed by releasing the grip. The structure of the present invention is simple and therefore highly reliable. Also, the simplicity lends a compact or thin design which does not impede the garment pressing processes previously described in relation to the prior art. Further, the actuating handles that are provided for manipulating the cuff engaging members have insulating sleeves fitted over them so that a machine operator can comfortably handle them during prolonged use of the device in a hot press or hand iron.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a perspective view illustrating the disposition of the present invention in a cuffed garment.

FIG. 2 is a top plan view of the present invention.

FIG. 3 is an edge view of the present invention.

FIG. 4 is a sectional view taken along a plane passing through section line 4–4 of FIG. 2.

FIG. 5 is a partial cutaway view illustrating the frictional locking of the device components to maintain the cuff engaging members of the invention in a stretching position.

FIG. 6 is an exploded view of the invention.

Referring to the FIGS. and more particularly FIG. 1, the present invention is generally indicated by reference numeral 10 and is seen to include members which engage the inside surface of a cuff 12 which forms an outward portion of a garment 14. The inserted device is positioned on the base member 15 of a press and after the lowering of the top press member (not shown), creases are formed in the garment in the usual manner.

The present device includes a slidably mounting member generally indicated by reference numeral 16 which is seen to be in the form of a T having oppositely disposed arms 18 and 20. The arm 18 serves as a cuff engaging finger while the arm 20 serves as a handle to be covered by a heat insulating sleeve 22 which is contacted by a machine operator in a comfortable manner. The central leg 24 of the slidable member is received within a guide generally indicated by reference numeral 26. As will be seen in FIG. 6, the guide is formed in part from a second member generally indicated by reference numeral 28 which is seen to include a finger portion 30 disposed in parallel-spaced relation with the aforementioned finger 18 and serves to engage a cuff in the same manner as finger 18. The base of the finger portion integrally mounts a handle 32 which is covered with an insulating sleeve 34 and serves the identical function of the aforementioned sleeve 22. A third handlelike device 36 is pivotally mounted to the base portion of member 28. The handle 36 is also covered with a heat insulating sleeve 38. This handle serves to lock the two cuff engaging fingers in spaced relation during pressing, as hereinafter explained. For

purposes of convenience, an aperture 40 is formed on the plain end of the central leg 24 to permit the insertion of an eye 42 allowing the device to be placed on a hook or other fastener secured to a press or nearby surface.

Referring to FIG. 6, the member 28 is seen to include a central platelike projection 44 having first row of horizontally disposed apertures 46 and a second row of apertures 48 beneath the first row to permit the securement of a guide or track member 50 to the top aperture row. The lower aperture row 48 serves to mount a second guide bar 52 in lowered-spaced parallel relation to the first bar 50. The central leg 24 of the T-shaped member 16 is adapted to be slidably retained between the guide bars 50 and 52.

As will be noted, the handle 36 includes a cam projection 54 integrally attached to the upper portion of the handle. An aperture 56 is formed in the central body of the cam portion and is adapted to be placed in coaxial relation with an aperture 58 formed in the lower portion of member 28. The connection of the handle 28 is in the form of pivotal securement so that the upper edge 60 of the cam portion 54 can be rotated to engage the confronting edge 62 of the T-shaped member 16 for locking the device in a stretching position as explained hereinafter.

In order to retain the central leg 24 between the bars 50 and 52, a plate 64 is disposed in overlying relation with respect to the bars 50 and 52. Apertures 66 are formed in the plate 64 and receive rivets 68 therein which pass through the plate 64, the bar 50, and apertures 46 in member 28. Likewise, apertures 67 are formed beneath the apertures 66 and permit the insertion of rivets therein which are secured in the apertures 48 in member 28. A rivet 70 passes through plate 64, aperture 56 in the cam portion 54 of handle 36 for final passage through aperture 58 in member 28. The passage of the rivet 70 through the cam portion 54 is of a loose enough nature to permit pivotal movement of the handle 36.

Referring to FIG. 5, in operation of the device, handles 20 and 32 are moved outwardly so that the fingers 18 and 30 stretch the cuff of a garment as seen in FIG. 1. Handles 34 and 38 are gripped together which causes camming portion 54 to force central leg 24 into engagement with guide bar 50. More particularly, this will cause frictional engagement between the guide bar 50 and the edge 73 of the central leg 24. The area of frictional locking or engagement is indicated by 72. Thus, the cuff engaging fingers will be retained in a cuff stretching position until handles 34 and 38 are released whereupon the central leg 24 and the guide bar 50 will be separated due to the cessation of frictional locking. This frictional release is performed after the garment has undergone pressing. The handles may then be displaced inwardly toward one another so that the device may be removed from a cuff for subsequent use.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

We claim:

1. A garment stretching device comprising a central leg having elongated edges, a first garment engaging finger integrally attached to the central leg, a handle integrally attached to the central leg for manipulating the finger, a second garment engaging finger slidably mounted on the central leg, a handle integrally attached to the second finger for manipulating the finger, guide means connected to the second finger for journaling the central leg during sliding adjustment of the second finger relative to the first finger, the guide means having bearing surfaces for frictionally locking an edge of the central leg after being inserted in a garment stretching position, and separate handle means located adjacent the central leg for selectively contacting the central leg and forcing it into frictional locking with the guide means thereby maintaining the garment stretching position.

2. The device set forth in claim 1 wherein the handles include heat insulating sleeves thereon for allowing comfortable manual contact of the handles when exposed to heat.

3. A garment stretching device comprising a T-shaped bar having first and second oppositely extending arms and a central leg, one of the arms serving as a garment engaging finger, the other arm serving as a means for adjusting the position of the finger in a garment, a member having a central plate portion, an arm integrally attached to the plate portion for serving as a second garment engaging finger, a handle integrally attached to the plate portion and extending in an offset oppositely disposed relation to the second finger, track means connected to the plate portion for slidably guiding the central leg of the T-shaped bar thereby causing adjustment in the space between the first and second garment engaging fingers, the track means frictionally engaging the central leg when the device is inserted in a garment stretching position, and

separate cam means for selectively forcing the central leg into frictional engagement with the track means thereby retaining the device in a garment stretching position.

4. The device set forth in claim 3 wherein the track means comprises two parallel-spaced bars mounted on the member, and a plate abutting the bars so that the bars are sandwiched between the member and the plate, the central leg of the T-shaped bar being slidably disposed between the guide bars.

5. The device set forth in claim 4 wherein the cam means includes a handle portion and a cam portion integrally attached to the handle portion, the cam portion being pivotally mounted to the member so as to permit engagement between the cam portion and a confronting edge of the central leg wherein pivotal displacement of the cam portion causes frictional locking engagement between the central leg and the guide bars until the cam portion returns to its original position.