Dec. 12, 1950 H. A. TOMARIN 2,534,081

SUPPORT SHIELD FOR HANGERS

Filed March 18, 1948

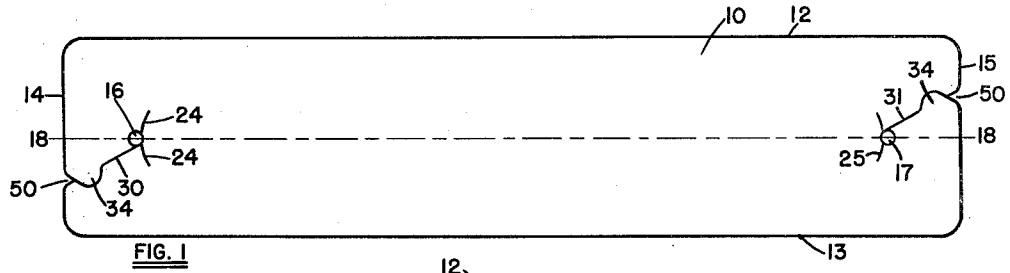


FIG. 1

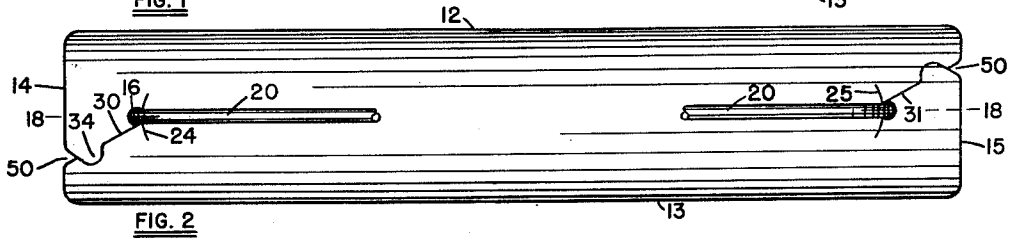


FIG. 2

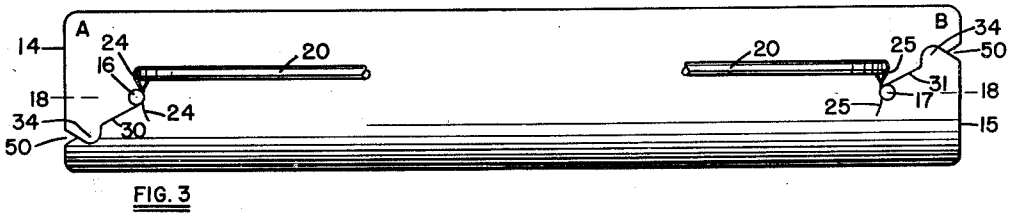


FIG. 3

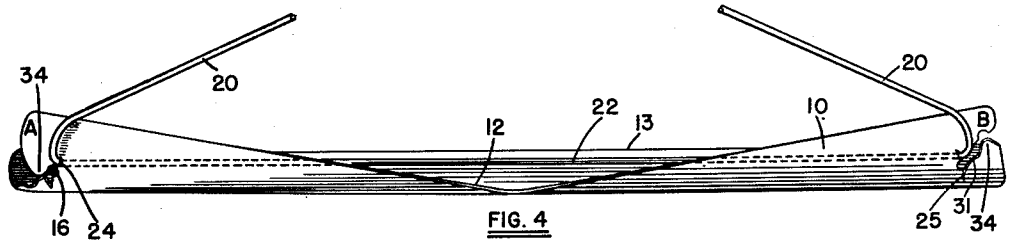


FIG. 4

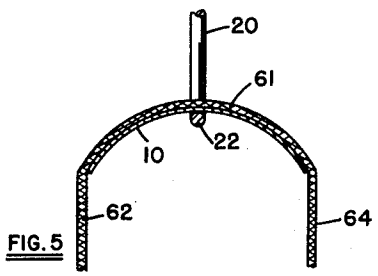


FIG. 5

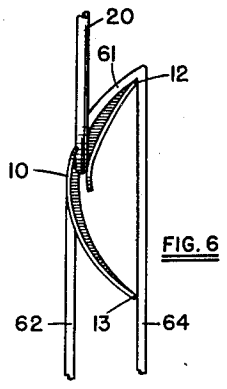


FIG. 6

INVENTOR.
HARRY A. TOMARIN

BY

J. Warren Kinney, Jr.

ATTORNEY

Patented Dec. 12, 1950

2,534,081

UNITED STATES PATENT OFFICE

2,534,081

SUPPORT SHIELD FOR HANGERS

Harry A. Tomarin, Cincinnati, Ohio, assignor to Loroco Industries Incorporated, Reading, Ohio, a corporation of Ohio

Application March 18, 1948, Serial No. 15,538

4 Claims. (Cl. 223—88)

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This invention relates to apparel protectors and more particularly to guards or supports of the type adapted to be associated with the lower or horizontal leg of a wire garment hanger.

An object of the invention is to provide an inexpensive support which is an improvement over other supports presently on the market; my support being constructed to permit limited transverse shifting relative to the legs of a supporting garment hanger incident to tilting or turning of the support relative to the hanger.

A further object of the invention is to provide a support which includes simple, yet highly effective means for locking it to a garment hanger against accidental or unintentional displacement therefrom.

Still a further object of the invention is to provide a trouser support having the hereinabove described characteristics and which will normally support an item of wearing apparel in a non-creasing manner, and which is adapted to effectively preclude accidental or unintentional relative movement between the support and an item of wearing apparel suspended therefrom.

Another object of the invention is to provide a support with hanger engaging means which are adapted to lock it to a hanger in such a manner as to effectively preclude disassociation of the support from a hanger even though the central or an intermediate portion of the support be twisted 180° or more from its normal position with reference to a hanger.

Still a further object of the invention is to provide a garment support having the hereinabove described characteristics which may be efficiently and inexpensively manufactured using modern mass production techniques.

These and other objects are attained by the means described herein and as disclosed in the accompanying drawings, in which:

Fig. 1 is a plan view of a blank from which a garment support embodying the teachings of the present invention may be fabricated.

Fig. 2 is a plan view showing a completed support associated in normal relationship with a garment hanger.

Fig. 3 is a view similar to Fig. 2 but illustrating the support in a tilted, transversely offset relationship relative to the hanger.

Fig. 4 is a side view of the hanger and support of Fig. 3 but wherein the support has been twisted thru approximately 200° relative to its normal position, for illustrating the locking relationship between the support and hanger.

Fig. 5 is a sectional view illustrating the normal relationship between the lower or horizontal leg of a hanger, the support and an item of wearing apparel suspended therefrom.

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Fig. 6 is an end view showing the relationship of the hanger, support and item of wearing apparel when an endwise pull has been exerted on side panel 62 thereof.

With referenec to Fig. 1, the numeral 10 indicates a strip of sheet material, such as by way of example, cardboard, including side edges 12 and 13 and end edges 14 and 15. Laterally spaced apertures 16 and 17 are provided in the strip on longitudinal axis 18—18 and spaced from ends 14 and 15 respectively, as disclosed. It should be understood that the lateral spacing between apertures 16 and 17 approximates the lateral spacing of the lower ends of the convergent legs 20 of a wire garment hanger where they merge into lower or horizontal leg 22 (Fig. 4). The size of each aperture 16 and 17 will preferably be of such a dimension as to loosely receive a leg 20 of a hanger.

Transverse slots 24 and 25 are provided, intersecting apertures 16 and 17 on opposite sides of the longitudinal axis of the strip, said slots preferably intersecting adjacent halves of said apertures. That is, slot 24 intersects the right half of aperture 16 and slot 25 intersects the left half of aperture 17. By use of the term left and right half of apertures 16 and 17, respectively, I intend to include all relationships varying from tangential intersection with the adjacent edges of the apertures 16 and 17 on axis 18—18, to a diametric intersection along a vertical diameter of said apertures. In the preferred embodiment, the intersection of the slots with their respective apertures closely approximates a tangential intersection as illustrated in Fig. 1, but as above indicated, other relationships up and including a diametric intersection may be resorted to, within the scope of the present invention.

A pair of slits 30 and 31 inclined relative to and disposed on opposite sides of longitudinal axis 18—18 are provided for interconnecting apertures 16 and 17, respectively, with the adjacent end edges 14 and 15 of the strip. In the preferred embodiment of the invention, a flap or tongue like member 34 is provided in each of slits 30 and 31 for providing an interfering member projecting across the axis of said slits, as illustrated. The outer end of each slit may terminate in a notch 50.

The blank of Fig. 1 is suitably bent or curved about its longitudinal axis by means of a heated forming die or the like, thereby imparting the

arcuate form, in a transverse section, disclosed in Fig. 5.

The support may be associated with a hanger by introducing the lower end of one of the upwardly convergent legs 20 of a hanger into notch 50, after which an endwise force will introduce said leg into, thence along a slit, thence into aperture 16. A similar operation will locate the other leg of the hanger in aperture 17, whereby the support will engage the hanger as disclosed in Fig. 2, with the longitudinal axis 18—18 of the support disposed in substantial vertical alignment with lower leg 22 of the hanger.

This so-called normal relationship is likewise illustrated in Fig. 5, which discloses a garment draped from a support to provide intermediate portion 61, front and rear panels 62 and 64.

Slots 24 and 25 are constructed and arranged to receive legs 20 incident to a transverse shifting or displacement of the support relative to the lower leg of a hanger. Such transverse displacement will occur when the support is tilted or turned about lower leg 22, as illustrated in Figs. 3 and 6, and when thus tilted, the support is positively locked relative to the hanger.

As illustrated in Fig. 6, a downward pull on panel 62 of a suspended garment will emphasize the locking relationship between the support and the legs of the hanger since the upper side edge 12 of the support will be fully elevated to provide a sharp, well defined interfering edge which will effectively resist and preclude relative motion between the item of wearing apparel and the support. This feature is quite important since it will prevent items of wearing apparel, such as by way of example, skirts, trousers and the like, from falling or being pulled off of their support member incident to a bagging operation, other handling operation, and transportation of newly cleaned garments from cleaning establishments to the owners thereof.

Hangers and the garments supported therefrom are normally suspended from automatic conveyor systems in the larger dry cleaning plants. Such conveyors are provided with abrupt changes in elevation at various stations, and heretofore great difficulty has been experienced when loaded supports are subject to said sudden and abrupt elevational changes. Heretofore garment supports frequently become dislodged from their respective hangers, and quite often the garments draped over the supports become dislodged therefrom when subjected to such sudden and abrupt elevational changes. The support of the present invention has completely eliminated both of these disadvantages inherent in other supports.

With reference now to Fig. 4, it will be observed that the support has been twisted by more than 180° from its normal relationship with a hanger, without becoming disassociated therefrom. This is of particular importance in cleaning establishments, or wherever such supports are used, since it positively and effectively precludes accidental or unintentional disassociation of a support from its hanger even when carelessly and roughly handled by indifferent employees.

When the central portion of the support is turned or twisted the legs originally seated in apertures 16 and 17 will be shifted transversely into slots 24 and 25 respectively and portion A of Fig. 3 will be elevated to abutting relationship with the rear face of legs 20 adjacent their lower ends, as disclosed in Fig. 4. The support will not become unfastened from the hanger, in the absence of an intentional or deliberate act of removal, until it has been further twisted by an amount sufficient to shorten its overall effective length whereby to cause portion A to become disengaged from its illustrated abutting relationship with legs 20.

With particular reference to Figs. 3 and 4, it will be observed that slots 24 and 25 provide efficient and highly effective locking means for securing the support to a hanger, particularly when the hanger has been transversely shifted relative to the longitudinal axis of the support, in which event slots 24 and 25 define a hook-like arrangement with the legs of a supporting hanger. In this connection and by way of contrast, it will be noted that in conventional trouser guards presently on the market relative transverse shifting between a guard and its associated hanger cannot be accomplished, short of destruction of the guard. Conventional trouser guards are likewise subject to the inherent disadvantage of becoming detached from a hanger incident to normal handling to which such devices are customarily subjected.

With reference again to Fig. 3, it will be observed that when the legs of a hanger have been received within the ends of slots 24 and 25, said legs are disposed in an interfering, or non-accessible relationship with the inner ends of slits 30 and 31, thereby effectively precluding disengagement of the support from the hanger. It should be understood that a support will be locked to a hanger.

As hereinabove explained, and as illustrated in the drawings, the outer end of inclined slits 30 and 31 terminate in outer end edges 14 and 15, respectively, and on opposite sides of longitudinal axis 18—18, each slit preferably terminating in a notch 50. This construction greatly facilitates the ease with which my support may be secured to a hanger since the support need be distorted but a minimum in order to effect a seating of the legs of a hanger in apertures 16 and 17.

It should be understood that various changes and modifications may be made in the structural details of the device, within the scope of the appended claims, without departing from the spirit of the invention.

What is claimed is:

1. A support for hangers of the type including a horizontal leg the opposite ends of which comprise a continuation of the lower ends of a pair of upwardly convergent legs, said support fabricated from a strip of sheet material having a pair of apertures provided therein on the longitudinal axis and spaced from the ends thereof, slits tangentially engaging and interconnecting each aperture with an adjacent end edge of the strip for controlling access to said apertures, the slit for each aperture inclined relative to the longitudinal axis of the strip and being located on opposite sides of said axis at each end thereof, each slit terminating at its outer end in a notch provided in the end edge of the strip, each slit including interfering means extending across a straight line drawn between the points of intersection with its respective aperture and the end edge of the strip, and slots transversely intersecting said apertures on opposite sides of said axis, each of said slots constructed and arranged to receive the legs of a hanger when transversely displaced from its respective aperture incident to turning of the support about its longitudinal axis.

2. A support for hangers of the type including a horizontal leg the opposite ends of which comprise a continuation of the lower ends of a

pair of upwardly convergent legs, said support fabricated from a strip of sheet material having a pair of apertures provided therein on the longitudinal axis and spaced from the ends thereof, slits tangentially engaging and interconnecting each aperture with an adjacent end edge of the strip for controlling access to said apertures, the slit for each aperture inclined relative to the longitudinal axis of the strip and being located on opposite sides of said axis at each end thereof, each slit terminating at its outer end in a notch provided in the end edge of the strip, and arcuate slots transversely intersecting each aperture at a point removed from the connection of the tangential slit and on opposite sides of said axis, each of said slots constructed and arranged to receive the legs of a hanger when transversely displaced from its respective aperture incident to turning of the support about its longitudinal axis.

3. A device of the class described comprising a sheet of strip material having a pair of apertures disposed therethrough one adjacent each end and located on the longitudinal axis of the strip, a pair of slits inclined relative to and disposed on opposite sides of said axis at each end thereof, each slit interconnecting an aperture with the adjacent end edge of the strip and a transverse slot intersecting each aperture at a point removed from the connection of the slit and on opposite sides of said axis.

4. A support for garment hangers of the type including a horizontal leg the ends of which are

formed to provide a pair of upwardly converging legs, said support fabricated from a strip of sheet material having a pair of apertures disposed therethrough on the longitudinal axis and spaced from the ends thereof, slits interconnecting each aperture with an adjacent end edge of the strip, each slit controlling access to its respective aperture, each aperture dimensioned to receive the lower portion of an upwardly convergent leg of a hanger for securing the support in overlapping relationship with the lower leg of the hanger and with its longitudinal axis in substantial vertical alignment with said horizontal leg, and transverse slots intersecting each aperture at a point removed from the connection of the slit on opposite sides of said longitudinal axis constructed and arranged to receive those portions of the legs of a hanger, initially disposed in said apertures, when said support has been tilted about the lower leg of a hanger for securing the support to the hanger with the longitudinal axis thereof transversely displaced from a position in vertical alignment with said horizontal leg.

HARRY A. TOMARIN.

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