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3,425,604

GARMENT HANGER

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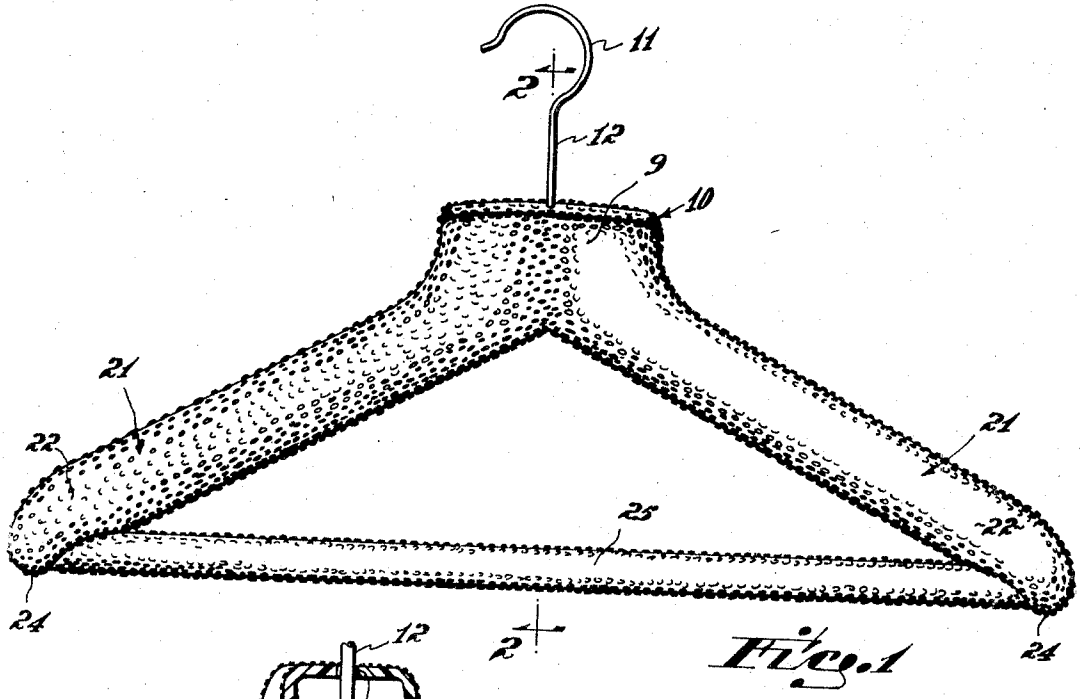


Fig. 1

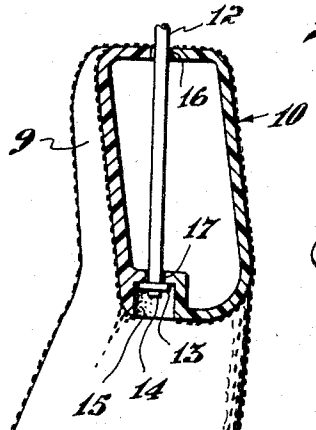


Fig. 2

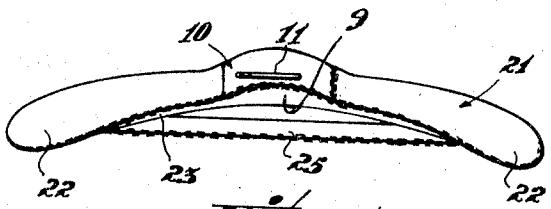


Fig. 3

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GARMENT HANGER

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Int. Cl. A47j 51/098

ABSTRACT OF THE DISCLOSURE

A garment hanger for hanging men's suits and the like, from a closet rod including, for example, a collar support, a hook extending upwardly from the collar support for engaging the rod, and shoulder beams depending downwardly and outwardly from the collar support, the collar support and shoulder beams having a dimpled surface at least in those areas where garments are hung. Preferably, the garment hanger is molded from a thermoplastic by blow molding techniques so that the hanger is both light in weight and economical to manufacture.

This invention relates to garment hangers and, more particularly, this invention relates to an improvement in garment hangers.

Historically speaking, garment hangers have been known and used for many years past. Basically, a garment hanger is a device that hangs or suspends garments in a freely hanging position. Generally speaking, it is a metal or wooden device that fits inside a garment or holds a garment thereon for hanging the garment from a hook or rod such as in a closet. There are many different types of garment hangers known and used today. Such different garment hanger types include those which have been designed and developed for limited or specialty uses. For example, there are hanger structures known for hanging only trousers or slacks, for hanging only skirts, and so forth.

The basic type of garment hanger used, however, is typified by the widely used wire garment hanger. The wire garment hanger is generally formed with downwardly and outwardly depending shoulder beams in an inverted V-shaped configuration. The opposed ends of the beams may be connected by a cross rod. Such a wire hanger may be referred to as having the geometry of a flattened isosceles triangle when the cross rod is used. The wire hanger is, of course, provided with a hook extending upwardly from the apex of the shoulder beams to permit hanging from a closet rod. The wire hanger has found widespread commercial application and use because it may be easily and economically manufactured from a single piece of wire.

Another old and well-known hanger structure is the wooden hanger having the same basic inverted V-shaped configuration as that described for the wire hanger. In the wooden hanger, however, the shoulder beams, as well as the cross rod when one is used, are formed of wood. While the manufacturing costs of the wooden hanger may not be as low as for the wire hanger, the wooden hanger generally gives better and more complete support to the garment hanging on it.

There are modifications known for the basic wire and wooden hanger configuration. For example, the basic, flattened, inverted V-shaped shoulder beam configuration, with or without the cross bar, may be adapted for evening dresses and other type dresses with shoulder straps. The evening dress hanger generally comprises only a pair of outwardly flaring and downwardly depending shoulder beams in the inverted V-shaped fashion. A hook is provided at the apex of the shoulder beams to facilitate hanging the hanger in the closet or the like.

Near the end of each beam there is a notch in the beam, the notch being provided to receive the shoulder straps of the dress so that the straps do not fall off the hanger arms.

However, all known types of garment hangers, to the best of my knowledge, that are of the inverted V-shaped shoulder beam configuration, carry shoulder beams that have a relatively low coefficient of surface friction, that is, such shoulder beams are relatively slippery. In addition, when such a garment hanger is provided with a cross rod, the cross rod itself is generally of the same surface finish as that of the hanger's shoulder beams. Such a surface finish has been found to be undesirable at times because of the relative ease with which garments tend to slip off the contact surfaces of the garment hanger. This is particularly true in the case of trousers or slacks hung on the cross rod, but is also true in the case of coats, jackets and the like hung on the shoulder beams.

The garment hanger of this invention substantially obviates the slipperiness problems inherent in the garment contact surfaces of the basic inverted V-shaped garment hanger well-known in the prior art. The garment hanger of this invention basically comprises hook means, and two shoulder beams connected to the hook means depending downwardly and outwardly in flattened, inverted V-shaped configuration, the shoulder beams having a dimpled surface at least in those areas where garments are to be hung. Such a dimpled surface for the shoulder beams of a garment hanger have been found to substantially increase the coefficient of surface friction and, thereby, reduce the tendency of the garment to slip off the hanger.

Thus, it has been an objective of this invention to provide a garment hanger of inverted V-shaped configuration with increased garment slip resistance.

It has been another objective of this invention to provide a garment hanger molded from a thermoplastic so that the hanger is both light in weight and economical to manufacture.

These and other objectives and advantages of the invention will be more apparent from the following detailed description taken in conjunction with the drawings in which:

FIGURE 1 is a front view of the garment hanger of this invention;

FIGURE 2 is a cross-sectional view taken along lines 2—2 of FIGURE 1; and

FIGURE 3 is a top view of the garment hanger illustrated in FIGURE 1.

FIGURE 1 illustrates a garment hanger, constructed in accordance with this invention, that is primarily adapted for use with men's suits. However, it will be understood that although the garment hanger of this invention will be described with reference to a man's suit, the principles of this invention may be applied to other hangers of the basic inverted V-shaped configuration type.

The garment hanger illustrated in FIGURE 1 includes a collar support section **10**. The collar support **10** is preferably configured with a concave arc **9** geometry, see FIGURE 3, to better support the collar area of a suit jacket. The collar support section **10** maintains a hook **11** carried by a shaft **12**, the hook permitting the hanger to be suspended from a hook or rod such as may be found in a clothes closet. The shaft **12** extends through the collar support **10** and is provided with a washer **13** at the end opposite the hook **12**. The washer **13** is held on the shaft **12** by crimping end **14** of the shaft. A recess **15** is provided at the bottom of the collar support **10** to receive the washer **13** and, thereby, support the hanger on the shaft. Although a hook **11** has been illustrated

other types of hook means may also be employed if desired. For example, a sphere could be attached to the top of shaft **12**, the sphere being dimensioned to cooperate with a sliding flange permanently mounted to a closet rod. Such sphere and flange hook means are often used for hangers in hotel rooms, motel rooms and the like.

The collar support **10** is provided with an opening **16** in its top surface and an opening **17** in the base of the recess **15**, the openings or apertures being dimensioned to permit the shaft **12** and, thereby, the hook **11**, to be freely slideable relative to the hanger structure. This permits that portion of the shaft normally extending above the top surface of the collar support **10** to be recessed within the collar support during shipment and/or storage of the hanger so that only a minimum box or storage area is required.

Shoulder beams **21** depend downwardly and outwardly from the collar support **10**. The shoulder beams **21** are preferably provided with a bulbous configuration, the bulbous end **22** of each shoulder beam constituting the shoulder pad area for that shoulder beam. As can be seen from FIGURE 3, the shoulder beams **21** also provide a concave arc **23** geometry, the arc **23** of the shoulder beam preferably being less pronounced than the arc **9** of the collar support **10**, to provide good support for the shoulder pad area of a jacket. It has been found that such a dual concavity relationship between the collar support area **10** of the hanger and the shoulder beam area **21** of the hanger provides a hanger that can support a suit jacket or the like substantially wrinkle free.

Thus, the shoulder beams **21**, in combination with the collar support **10**, comprise an inverted V-shaped, hanger configuration. Extending between the free end **24** of each shoulder beam **21** is a cross bar **25**. The cross bar **25** supports one or more pair of trousers in the known manner.

The essence of this invention lies in the surface configuration of those surface areas of the shoulder beams **21**, the collar support **10**, and the cross bar **25**, that contact or engage the garment as it hangs on the hanger. In those areas, at least, there is provided a dimpled surface such as is illustrated in FIGURE 1. It has been found that such a dimpled surface reduces the coefficient of surface friction for the hanger's working surface areas relative to similar hangers having smooth or substantially smooth surfaces. Such an increase in the coefficient of surface friction permits a suit jacket to be hung on the shoulder beams **21** of the hanger without fear of the jacket slipping off the hanger. Likewise, trousers are retained on the cross bar **25** of the hanger without slipping off the bar. While it is necessary that only those surface areas of the hanger which contact the garment have the dimpled surface, it is preferred that the entire surface area of the hanger be provided with such a dimpled surface.

The garment hanger of this invention is preferably formed hollow, see FIGURE 2. That is, the collar support **10**, shoulder beams **21**, and cross bar **25** are all substantially hollow. This permits the garment hanger to be fabricated with both lightness of weight and economy of cost. Preferably, such a hollow garment hanger is fabricated from a thermoplastic such as, for example, an acrylonitrile-butadiene-styrene (ABS) thermoplastic. Such a thermoplastic has been found most desirable not only from the fabrication standpoint, but from the end use standpoint of the garment hanger as well, because of the attributes it conveys to the hanger in terms of coefficient of surface friction characteristics.

The hanger of this invention may be fabricated by blow molding techniques. The basic steps involved in blow molding thermoplastics are well-known in the art and include (a) entrapping a parison, that is, a softened hollow body of a thermoplastic material, in a mold cavity, (b) introducing a fluid, such as air, under pressure to cause inflation of the parison until it conforms to the configuration of the mold cavity, and (c) allowing sufficient residence time of the article in the mold, while maintaining the air pressure, to permit cooling of the newly formed article. Thus, blow molding, by its very nature, forms a hollow, single walled article and is most adaptable to forming the garment hanger geometry and dimpled surface configuration of this invention.

Having described the most preferred embodiment of my invention in detail, what I desire to claim and protect by Letters Patent is:

1. A garment hanger adapted to depend from an overhead support comprising.

two shoulder beams having bulbous ends and depending downwardly, outwardly and forwardly in inverted V-shaped configuration, each of said shoulder beams having top and side surfaces over which a garment may be draped.

an upstanding collar support having side garment engaging surfaces and being integrally disposed between said shoulder beams,

hook means mounted to and extending upwardly from said collar support,

a cross bar having top and side surfaces over which a garment may be draped extending between the free end of each of said shoulder beams,

said collar support, shoulder beams and cross bar being molded of a thermoplastic material and being substantially hollow in cross-sectional configuration,

dimples integrally molded on said top and side surfaces of said shoulder beams and said cross bar and also a garment may be draped extending between the free

2. A garment hanger as set forth in claim **1** wherein said thermoplastic is an acrylonitrile-butadiene-styrene plastic.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,425,604 February 4, 1969

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It is certified that error appears in the above identified patent and that said Letters Patent are hereby corrected as shown below:

Column 4, line 43, "a garment may be draped extending between the free" should read -- molded on said side surface of said collar support. --.

Signed and sealed this 24th day of March 1970.

(SEAL)
Attest:

Edward M. Fletcher, Jr.
Attesting Officer

WILLIAM E. SCHUYLER, JR.
Commissioner of Patents