Aug. 31, 1943. H. J. HANAUER 2,328,142

COAT HANGER

Filed Sept. 14, 1942

Fig. 1.

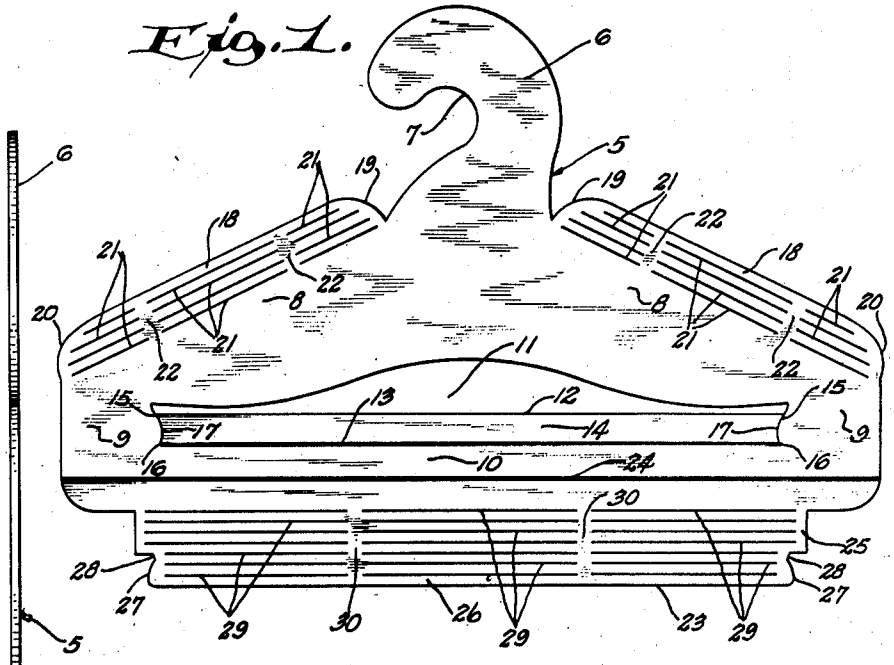


Fig. 2.

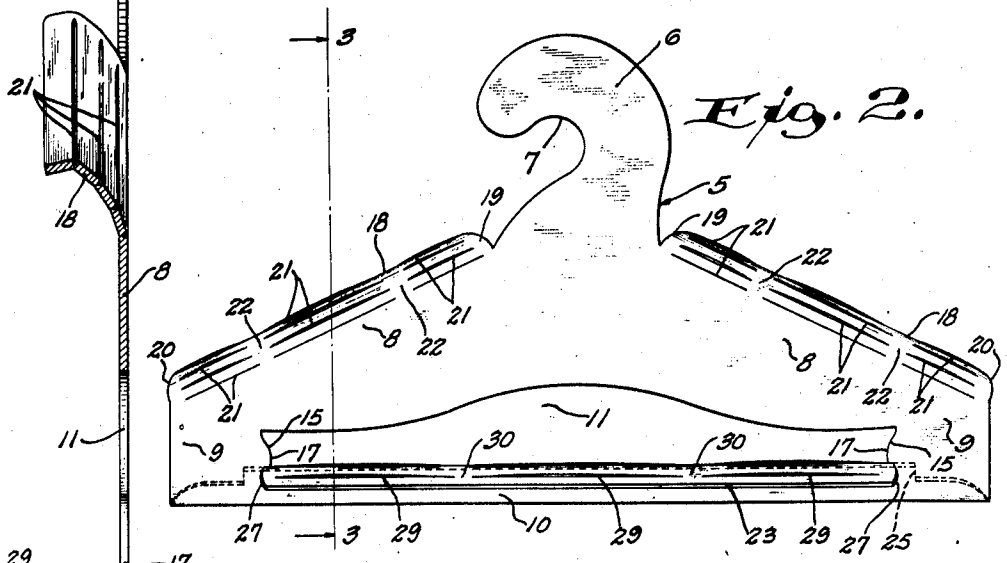
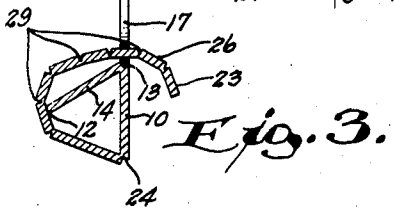


Fig. 3.



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2,328,142

COAT HANGER

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3 Claims. (Cl. 223—87)

This invention relates to improvements in coat hangers, and more particularly to a coat hanger formed completely of fiberboard or the like.

Due to the present unavailability of metal and wood for certain commodities, conventional coat hangers of metal or wood, such as are used by clothing stores, tailors and dry cleaners, are becoming unobtainable.

It is, therefore, a primary object of the present invention to provide an inexpensive form of coat hanger made entirely of fiberboard or the like.

A further object of the invention is to provide a fiberboard coat hanger which may be die-cut in large quantities and in a single operation from inexpensive and available flat stock of fiberboard, cardboard, pasteboard, corrugated board, or the like.

A further object of the invention is to provide a fiberboard coat hanger which may be stored, packed and shipped in plural numbers in perfectly flat condition, and which may be folded or arranged for use by a simple and quick hand manipulation.

A further object of the invention is to provide a one-piece fiberboard coat hanger having a relatively broad, rounded or arched trousers bar, and rounded or arched coat shoulder supports, said portions being quickly bendable from the plane of the hanger proper and serving to properly support and engage portions of a suit without creasing or marking the same.

A further object of the invention is to provide a fiberboard coat hanger having an integral trousers bar of substantial thickness and having an evenly rounded or arched trousers engaging surface supported on a portion of double thickness including relatively folded walls for additional strength and rigidity.

A further object of the invention is to provide a one-piece fiberboard coat hanger having a foldable, arched trousers supporting flap which may be locked in effective position by cooperating shoulder and groove means.

A further object of the invention is to provide a one-piece fiberboard coat hanger having coat shoulder engaging wings which are scored to facilitate their assuming an effective curved or arched position in a direction away from the plane of the hanger proper, said wing portions having strengthening and form-giving webs therein, interrupting the lines of scoring.

A further object of the invention is to provide a one-piece fiberboard coat hanger which is of very simple construction, is strong and durable, is inexpensive to manufacture, is easily formed into condition for use from a flat packed position, and is well adapted for the purposes described.

With the above and other objects in view the invention consists of the improved coat hanger, and its parts and combinations as set forth in the claims, and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a plan view of the improved coat hanger in its flat condition for packing, storing and transportation and prior to folding the integral wings and flaps into position for use;

Fig. 2 is a plan or front view of the coat hanger after integral portions thereof have been bent or folded into effective position for use; and

Fig. 3 is a transverse sectional view taken on line 3—3 of Fig. 2, and on a larger scale.

Referring now more particularly to the drawing it will appear that the improved coat hanger, indicated generally by the numeral 5 is depicted in Fig. 1 in its flat form for packing, storing and shipping, this being the form of the coat hanger immediately after it has been stamped or die-cut from a sheet of flat stock. The improved coat hanger is formed throughout of fiberboard, pasteboard, cardboard, corrugated board, or the like, and for the sake of brevity the term "fiberboard" as used herein and in the claims is intended to mean and include any of said materials, or those of the same general class.

The body of the coat hanger is shaped as shown and includes on the upper side or edge a medially positioned, integral hook 6. The shank portion of the hook is of substantial breadth for strength and rigidity while the hook recess 7 is of a proper curvature to fit and engage standard sized wardrobe or closet garment bars.

Sloping downwardly and outwardly in opposite directions from the base of the hook 6 are a pair of shoulder bars 8 terminating in end areas 9 whose lower portions are connected by a longitudinal transverse bar strip 10. Immediately above the strip 10 is a transverse slot 11 of eccentric shape. A portion of the stock which is die-cut relative to the hanger proper in the formation of the slot 11 has a longitudinally extending rectilineal free edge 12 and a scored folding edge 13 by means of which a strip 14 is permanently but foldably connected to the transverse bar strip 10. At its ends the strip 14 is severed from the stock of the hanger proper by curved lines of cut 15 which form the major portions of the ends of the slot 11 and provide locking grooves and shoulders 16 and 17 for the pur-

pose hereinafter to appear. When the portions of the coat hanger are ultimately folded into their proper positions for use, the strip 14 becomes the upper inner layer of a reinforced trousers bar, as will clearly appear.

Along the outer sloping edges of the shoulder bars 8 are shoulder wings 18 whose inner ends are separated from the base of the hook 6 by curved edges 19 and whose outer ends are also curved, as at 20. Each wing is provided with groups of break or fold lines 21, with the groups of fold lines being interrupted by transverse webs 22 integral with the shoulder bars 8.

The lower longitudinal edge of the trousers bar strip 10 has foldably connected thereto a trousers bar flap 23, the connection being along a fold or scored line 24. The inner portion of the flap 23 is of a length corresponding to that of the strip 10 with the opposite ends of said portion being curved. The flap is then stepped or reduced to provide an intermediate portion 25 and an outer edge portion 26, the latter, at its ends being stepped or reduced relative to the intermediate portion 25 and having locking shoulders and grooves 27 and 28. Both the intermediate and outer edge portions 25 and 26 of the flap 23 are provided with groups of longitudinal break or fold lines 29 with the groups of fold lines being interrupted by transverse webs 30. It should be observed that both with respect to the shoulder wings 18 and the trousers bar flap 23 that the fold lines 21 and 29 respectively terminate short of the side edges of said members leaving substantial areas of stock aiding the strength of said members and facilitating ultimate curvatures of the same in arcs rather than in sharp, angular bends.

The improved coat hanger may be readily stamped or die-cut so as to simultaneously produce large quantities of the same with one operation, by means of die-cutting a stack of superimposed sheets of fiberboard material. Each coat hanger as thus produced is in the flat form depicted in Fig. 1, making it very convenient to store, pack or ship a large quantity of the coat hangers with a minimum of bulk.

The clothing store or tailoring establishment will have on hand a pile of the coat hangers in flat form. When it is desired to use a coat hanger the operation or manipulation of bending the several wings and flap into proper position is easily and quickly accomplished. For instance, the strip 14 which becomes the inner top layer of the reinforced trousers bar is first folded through the slot 11 so as to assume a position substantially at right angles to the trousers bar strip 10. Thereafter, the entire trousers bar flap 23 is folded inwardly and toward the rear face of the coat hanger along the long fold line 24. The flap 23 is additionally caused to break or fold along some of the fold lines 29 so that the outer edge portion 26 of the flap 23 may then be pushed substantially horizontally through the slot 11, overlapping the previously inwardly folded flap 14. The flap 23 is locked in its effective position by flexing the shoulders 27 past the shoulders 17 at the ends of the slot 11 and then engaging the flap grooves 28 with the grooves 16 at the corner base portions of the slot 11, whereupon the entire flap 23 will be locked in the position of Fig. 2. Proper arched form and curvature of the portions 25 and 26 of the flap 23 is effected by bending or flexing the same on the groups of break lines 29. The webs 30 and the stock at the end portions of the flap 23 permit the bent portions of the flap to assume a gradually curved edge formation instead of having abrupt or angular bends therein. The arched portion of the flap 23 is the portion of the coat hanger which receives trousers passed through the slot 11, with the trousers rested on the broad arched flat surface of the flap 23 which will support the same effectively and prevent the formation of creases or lines therein. It will further be observed from Fig. 3 that the entire trousers bar is, in cross section, of box-like formation and is very rigid and strong due to the plies of material and due to the angular relationship of the folded flap portions.

Following the quick arrangement of the flap 23 in its effective position, the shoulder wings 18 are broken slightly along their fold lines 21 and are arranged in a rearwardly curved or arched shape, as best shown in Figs. 2 and 3. Here again the webs 22 and stock at the ends of the wings aid in preventing angularity of the rolled wings and give a proper rounding to the same. These wings, as thus arranged, present broad curved surfaces for engaging the inner shoulder portions of a coat supported by the hanger.

While the improved hanger is adapted for coats and trousers, it is equally well suited for any other class of garments for which coat hangers of this type are generally used. The bar portion described as being adapted for trousers may, of course, be used for ladies' skirts or other types of garments.

From the foregoing description it will be seen that the improved coat hanger may be manufactured at a minimum of expense and effort and is composed throughout of readily available fiberboard material or the like. The coat hanger, while in perfectly flat form for packing, storage, and shipping, can be quickly arranged for use, and when in use it provides broad curved surfaces for supporting and engaging portions of garments in a manner to prevent marking and creasing the garments. The coat hanger is furthermore rigid, strong, and durable and is well adapted for the purposes set forth.

What is claimed as the invention is:

1. A garment hanger, comprising a flat body portion having a hook projecting from one edge thereof intermediate its ends, the body portion adjacent the opposite edge having a longitudinal slot therein, a strip foldably associated with the body portion at the lower edge of the slot of less breadth than the slot and foldable out of the slot to an outwardly projecting angular position to provide a ledge at the lower edge of the slot, a deformable flap foldably associated with said opposite edge of the body portion and projectable in folded and deformed condition through said slot and over the folded strip to provide a garment bar, the inner portion of the flap being foldable angularly relative to the plane of the body portion and the outer portion of the flap being stepped at its ends and being provided with a series of interrupted score lines to facilitate deformation of the same into arched formation, the latter portion constituting a substantial overhang relative to the folded strip, and cooperating means at the ends of the slot and at the stepped ends of the flap to releasably lock the flap in its projected, folded, overhanging and arched position.

2. A garment hanger of fiberboard throughout, comprising a flat body portion having an integral hook projecting from one edge thereof intermediate its ends, said hook lying in the plane of the body portion and being of sufficient

size and rigidity to support garments mounted on the hanger, the first mentioned edge of the body portion on opposite sides of the hook being inclined in opposite directions, deformable shoulder wings projecting from said edge portions, said wings being provided with series of interrupted score lines whereby the wings may be bent into curved formation extending away from the plane of the body portion, the body portion adjacent the opposite edge having a longitudinal slot therein, a strip foldably associated with the body portion at the lower edge of the slot of less breadth than the slot and foldable out of the slot to an outwardly projecting angular position to provide a ledge at the lower edge of the slot, a deformable flap foldably associated with said opposite edge of the body portion and projectable in folded and deformed condition through said slot and over the folded strip to provide a garment bar, the inner portion of the flap being foldable angularly relative to the plane of the body portion and the outer portion of the flap being stepped at its ends and being provided with a series of interrupted score lines to facilitate deformation of the same into arched formation, the latter portion constituting a substantial overhang relative to the folded strip, and cooperating means at the ends of the slot and at the stepped ends of the flap to releasably lock the flap in its projected, folded, overhanging and arched position.

3. A garment hanger, comprising a flat body portion having a hook projecting from one edge thereof intermediate its ends, the body portion adjacent the opposite edge having a longitudinal slot therein, a strip foldably associated with the body portion at the lower edge of the slot and foldable out of the slot to an outwardly projecting angular position to provide a ledge at the lower edge of the slot, a deformable flap foldably associated with said opposite edge of the body portion and projectable in folded and deformed condition through said slot and over the folded strip to provide a garment bar, the inner portion of the flap being foldable angularly relative to the plane of the body portion and the outer portion of the flap being stepped at its ends, the latter portion constituting a substantial overhang relative to the folded strip, and cooperating means at the ends of the slot and at the stepped ends of the flap to releasably lock the flap in its projected, folded, overhanging position.

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