

[54] GARMET HANGERS

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[51] Int. Cl. A47J 51/10

[58] Field of Search 223/85, 86, 88, 89, 91, 92

[56]

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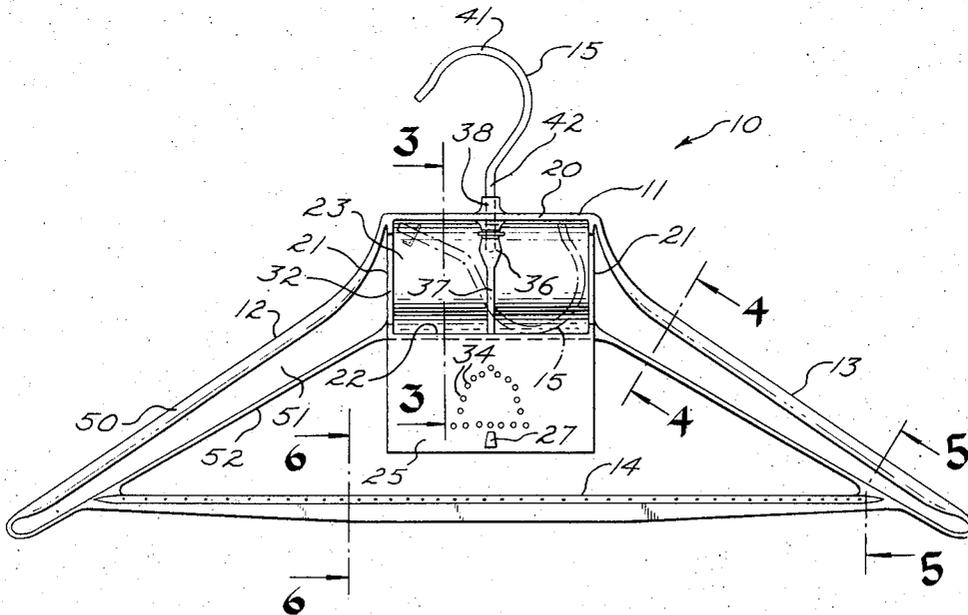
Primary Examiner—George H. Krizmanich

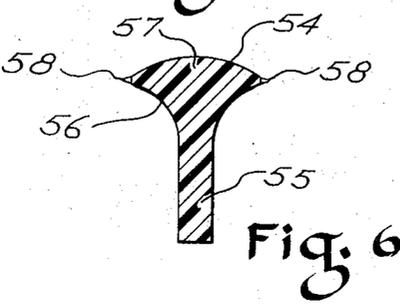
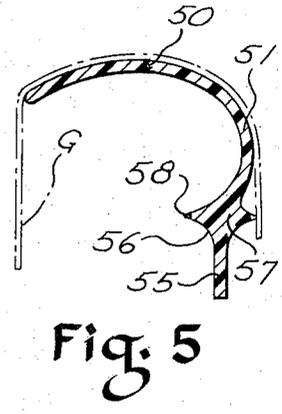
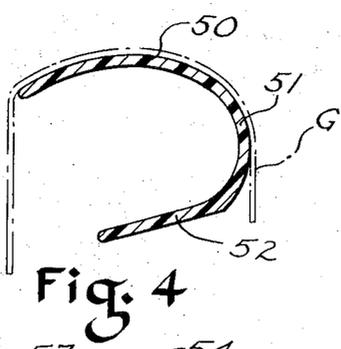
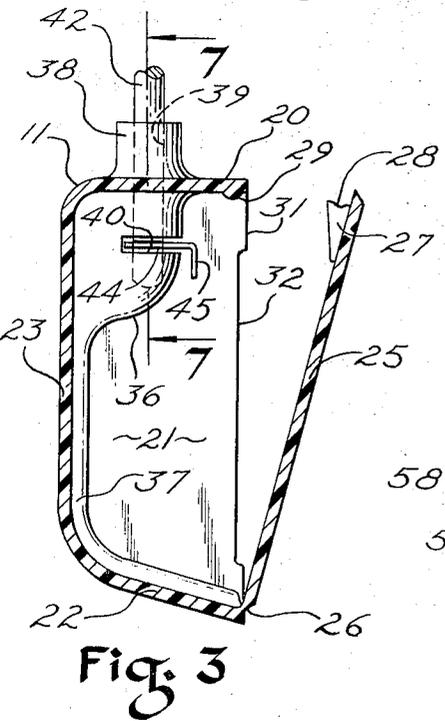
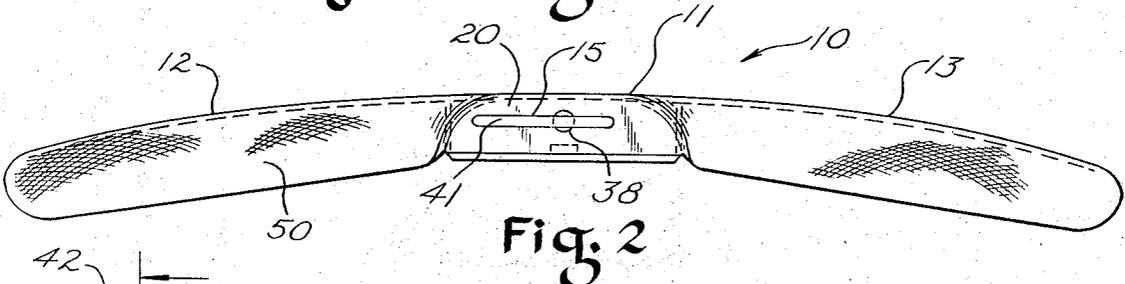
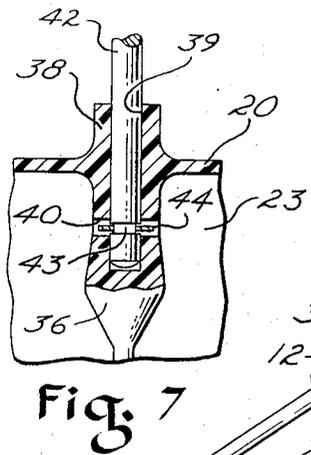
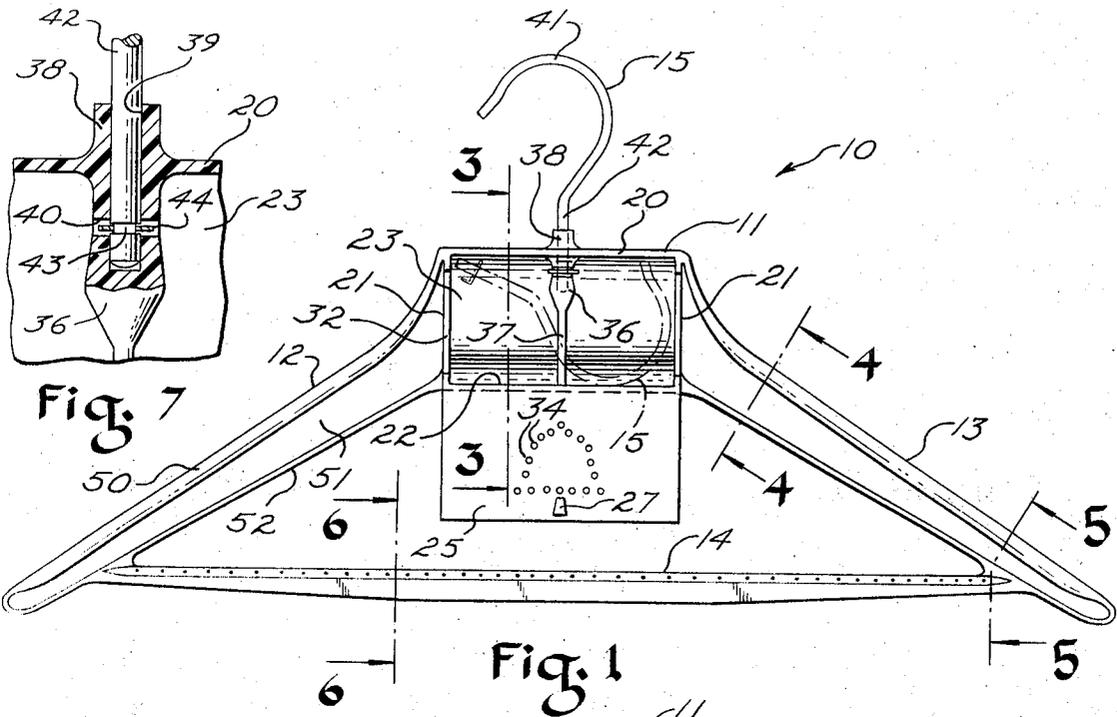
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ABSTRACT

Thereis disclosed herein a garment hanger having a compartment for moth crystals, deodorant tablets, and the like and hollow arms especially formed for efficiently dispersing the fumes into the garment. A cross-bar of the hanger is provided with transversely projecting pegs for retaining a garment placed thereover.

3 Claims, 7 Drawing Figures





GARMENT HANGERS

This invention relates to garment hangers and more particularly to a garment hanger having a compartment for moth crystals, deodorant tablets, or the like whereby insect repellent or deodorizing fumes are dispersed throughout the garment.

It is well known to combine a coat hanger with a compartment having perforated wall portions for allowing the fumes from an odorous substance to disperse into the garment and, preferably, into a protective bag disposed thereover. The compartment is commonly provided in the center of the hanger between the garment-bearing arms thereof and adjacent to the hanger hook.

The present invention is directed to a garment hanger of the above type and to certain improvements therein. A unique feature is provided in that the compartment is also adapted for storage of a detachable hanger hook when the garment hanger is packaged, stored, or the like. Other features are directed to the shape of the arms whereby they form passageways for improved dispersal of the fumes and to a nonslip means for the crossbar to prevent trousers, or other garments from slipping off.

In view of the foregoing, it is the general object of this invention to provide an improved garment hanger of the type having a compartment for containing moth crystals, deoderant tablets, or other odorous substance and dispersing the fumes thereof into the garment.

Another object of the invention is to provide a garment hanger of the above type wherein the hook portion is detachable and adapted to be stored inside the compartment for more compact packaging and storing of the hanger.

Still another object of the invention is to provide a garment hanger having a compartment for containing moth crystals, deodorant tablets, or the like wherein the hanger arms are so shaped as to form passageways whereby the fumes are more efficiently dispersed into the garment.

Yet another object of the invention is to provide a garment hanger of the referred to type wherein the crossbar thereof is provided with unique retaining means for preventing a garment from slipping off of the crossbar.

Other objects and advantages of the invention and the invention itself will become apparent from the following description of one preferred embodiment thereof as shown in the accompanying drawings, in which said drawings:

FIG. 1 is a front elevation of the garment hanger of this invention showing a central compartment thereof with the door in fully opened position;

FIG. 2 is a top plan view of the garment hanger;

FIG. 3 is an enlarged section taken generally along the line 3—3 of FIG. 1 showing the central compartment with the door only partly open;

FIG. 4 is an enlarged section taken along the line 4—4 of FIG. 1;

FIG. 5 is an enlarged section taken along the line 5—5 of FIG. 1;

FIG. 6 is a still further enlarged section taken along the line 6—6 of FIG. 1; and

FIG. 7 is a section taken along the line 7—7 of FIG. 3.

Referring now to the drawings in all of which like parts are designated by like reference numerals, FIG. 1 is a front elevation of a hanger 10 comprising a preferred embodiment of this invention. Said hanger has a central compartment 11 having laterally directed, downwardly sloping hollow arms 12 and 13 connected adjacent to the lower ends thereof by a transverse, horizontal crossbar 14. The compartment, arms, and crossbar are preferably of integrally molded, one-piece construction and made of a suitable moldable material such as any of the well known modern plastics. A detachable hook 15 made of metal or of any other suitable material of sufficient rigidity and strength projects upwardly from the compartment 11.

The compartment 11 as herein disclosed is generally rectangular as seen in front elevation having a top wall 20, vertical side walls 21, a generally forwardly and downwardly angled bottom wall 22, and a vertical rear wall or back wall 23 which is rounded at the upper and lower edges thereof to blend into the top and bottom walls 20 and 22, respectively.

The front of the compartment 11 is provided with a closure member in the form of a hinged door 25 having the hinge thereof disposed at the lower edge of said door at the forward edge of the bottom wall 22. As shown in FIG. 3, hinge means 26 for the door 25 may comprise an extremely thin, molded web of plastic connecting the door 25 to the bottom wall 22 and allowing the same to be pivoted forwardly and downwardly to the open position as illustrated in FIG. 1. The enlarged detail of FIG. 3 shows the door 25 in a partially open position, the same being provided with an integrally molded latch portion 27 projecting inwardly adjacent to the center of the door and having an upwardly concave notch 28 adapted to frictionally engage an integral catch button 29 projecting downwardly from the top wall 20 adjacent to the forward edge thereof. When the door 25 is fully closed, the latch portion 27 snaps over the catch button 29, whereby the door is frictionally and releasably held in the closed position.

As shown in FIG. 1, it will be noted that the door 25 is of sufficient width to overlap the entire thickness of the vertical side walls 21 whereby the front edges of said side walls are completely covered when the door is closed. As best seen in FIG. 3, each side wall 21 has a forwardly directed edge 31 which is recessed over a substantial portion of the length thereof as indicated at 32. Thus, when the door 25 is in the fully closed position, a slot or opening is provided in each vertical side wall 21 between the associated front edge 31 and said door. Thus the recesses 32 provide means for allowing the fumes from moth crystals, deodorant crystals, or other odorous substance to be dispersed laterally with respect to the compartment 11. Additional escape means for the fumes are also preferably provided in the door 25 by means of small apertures 34 which may be arranged to form a suitable attractive pattern such as a shield, star, concentric circles, and the like. This allows the fumes to be dispersed freely within, for example, a plastic cover surrounding a garment held by the hanger 10.

Referring again particularly to FIG. 3, it will be noted that the compartment 11 has a centrally disposed, integrally molded inner enlargement 36 and a central reinforcing rib 37 which extends down the inner surface of the vertical back wall 23 and forwardly across the bottom wall 22. The enlargement 36 is in line with an up-

wardly projecting boss 38 integrally formed on the upper surface of the top wall 20. A socket cavity 39 is provided through the boss 38 and downwardly through the top wall 20 into the inner enlargement or protuberance 36. A horizontal, forwardly opening slot 40 is provided in the protuberance 36, said slot intersecting and extending slightly rearwardly of the socket cavity 39.

The hook 15 as herein disclosed is formed from heavy wire stock to provide an upper, semicircular engaging portion and a vertically downwardly directed, straight stem 42. The stem 42 is adapted to slidably project into the socket cavity 39 and is provided with a circumferential groove 43 at the portion thereof which is normally aligned with the transverse slot 40. A detachable, C-shaped snap-on retainer 44 projects through the slot 40 and engages the stem 42 at the groove 43 whereby the hook 15 is detachably retained in engagement with the socket 39. As shown in FIG. 3, an edge portion of the C-shaped snap-on retainer is preferably provided with a downturned lip 45 whereby the same can be easily engaged by a finger or a simple tool.

It will be understood that the hollow arms 12 and 13 have the same form except that they are mirror images of each other, the cross sectional shapes thereof being best seen by reference to FIGS. 4 and 5. Each arm has an upper, slightly upwardly curved wall portion 50 which curves rearwardly and blends smoothly into a rounded back wall portion 51. The lower edge of said back wall portions intersects and is integrally formed with a forwardly and downwardly slanting, substantially flat bottom wall portion 52 which is generally parallel with the upper wall portion 50. The upper wall portion 50, the back wall portion 51 and the bottom wall portion 52 forms a forwardly opening and slightly downwardly directed C-shaped concavity at the front of each of the arms 12 and 13, the forward edges of said upper and bottom walls defining openings allowing fumes from the odorous substance to disperse freely into a garment.

As shown in FIG. 5, the upper wall portion 50 and the back wall portion 51 continue at generally the same angle and shape all the way down into the arms 12 and 13 whereas the bottom wall 52 recedes progressively rearwardly and eventually intersects the ends of the integral crossbar 14. Said crossbar is generally T-shaped having an upwardly convex upper surface 54 and a downwardly directed bladeliike portion 55 the front and rear surfaces of which curve upwardly in the forward direction to form fillets 56. Thus the crossbar 14 has a substantially thick, upper body portion 57 reinforced by a downwardly directed, bladeliike flange 55 which, as shown in FIG. 1, may have a slightly greater vertical dimension adjacent to the central portion of said crossbar than adjacent to the ends thereof.

As best seen in FIG. 6, the thickened body portion 57 of the crossbar 14 is preferably provided with a plurality of small pegs or buttons 58 which project forwardly and rearwardly from the edges thereof and which are preferably substantially pointed at their outwardly directed ends. While the upwardly convex upper surface 54 of the crossbar 14 provides a smooth, rounded surface for retaining a garment such as a pair of trousers without creasing the same, the pegs 58 projecting from the side edges of the bar provide sufficient friction to prevent the garment from slipping off of the crossbar in use of the hanger. The arms 12 and 13 may also be

provided with friction means to prevent slippage of the garment which said friction means may take a well-known form such as knurling, flaking, or the like.

From the foregoing description, the advantages of the garment hanger of this invention will become readily apparent. As shown in FIG. 1, the compartment 11 is of such size as to receive the hook 15 stored therein when said hook is detached from the hanger. Thus for purposes of storing, packaging, shipping, and the like the hook 15 may be conveniently removed and placed inside the hanger and have a snap-on retainer 44 carried thereby for quickly and readily securing the hook to the hanger.

It will be further noted that the hanger arms 12 and 13 are so formed as to provide passageways which effectively interconnect with the sides of the compartment 11 at the vertical side walls 21. Thus, the fumes from the odorous substance placed in the compartment 11 can escape not only forwardly through the apertures 34 in the door 25 but also laterally through the recesses 32 in the forward edges of said side walls. The upper wall portions 50 project forwardly of the forward edges of the bottom walls 52 whereby with a garment G hanging over the arms, the passageways are closed at the front to a substantial degree but still allow a substantial opening for fumes to disperse and permeate the entire inside of the garment. Thus, the hanger of this invention and particularly the arms thereof coact with a garment disposed thereon to provide means for freely dispersing the fumes to every part of the garment and to the portion of the garment hung over the crossbar 14. Said crossbar, in turn, effectively holds its portion of the garment against displacement by means of the small, pointed pegs 58.

It will be understood that the term "odorous substance" as used in the accompanying claims includes any substance adapted to either fumigate or deodorize the garment.

It will be further understood that many changes in the details of the invention as herein described and illustrated may be made without, however, departing from the spirit thereof or the scope of the appended claims.

I claim:

1. A garment hanger comprising wall means defining a central compartment having an upwardly projecting hook attached thereto and laterally projecting, hollow garment supporting arms; said central compartment being adapted to contain and disperse the fumes of an odorous substance and having an access opening and a closure member for said opening; said garment supporting arms being attached to side walls of said compartment and having means defining openings therein communicating with the interior of a garment hung thereon; means defining openings in said side walls of said compartment whereby fumes from said odorous substance disperse laterally into said hollow arms, said arms affording passage means for the fumes to disperse into the garment; said arms comprising wall portions which are C-shape in cross section opening generally toward the front of said hanger; said supporting arms comprising upper and lower wall portions having forward edges and a back wall portion connecting said upper and lower wall portions; the forward edges of said upper wall portions projecting forwardly of the forward edges of said lower wall portions a substantial distance whereby when a garment is draped over said supporting arms, the portion of the garment hanging from

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the forward edges of said upper wall portions is disposed a substantial distance in front of the forward edges of said lower wall portions whereby fumes from said odorous substance can disperse freely into said garment from said arms; the forward edges of said lower wall portions tapering backwardly in the direction of the outer ends of said arms toward convergence with said back wall portions whereby the openings in said arms into the garment progressively increase in size out-wardly of said compartment; a transverse crossbar connected at the ends thereof adjacent to the ends of said arms and adjacent to the bottom edges of said back wall portions; said crossbar having a plurality of small pegs projecting from the forwardly and rearwardly facing side edges of said crossbar whereby to frictionally retain a garment draped thereover.

2. A garment hanger as set forth in claim 1: said hook being detachable from said central compartment and adapted to be contained within said central compartment whereby to make the hanger more compact for storage and packaging.

3. A garment hanger comprising wall means defining a central compartment having an upwardly projecting hook attached thereto and laterally projecting, hollow garment supporting arms; said central compartment being adapted to contain and disperse the fumes of an

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odorous substance and having an access opening and a closure member for said opening; said garment supporting arms being attached to side walls of said compartment; means defining openings in said side walls of said compartment whereby fumes from said odorous substance disperse laterally into said hollow arms; said supporting arms being C-shape in cross section and comprising upper and lower wall portions having forward edges and a back wall portion connecting said upper and lower wall portions; the forward edges of said upper wall portions projecting forwardly of the forward edges of said lower wall portions a substantial distance whereby when a garment is draped over said supporting arms, the portion of the garment hanging from the forward edges of said upper wall portions is disposed a substantial distance in front of the forward edges of said lower wall portions whereby fumes from said odorous substance can disperse freely into said garment from said arms; the forward edges of said lower wall portions tapering backwardly in the direction of the outer ends of said arms toward convergence with said back wall portions whereby the openings in said arms into the garment progressively increase in size outwardly of said compartment.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,790,044 Dated February 5, 1974

Inventor(s) Rocco Verdilf

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

Column 1, line 60, change "party" to -- partly --;

Column 4, line 30, change "dispursing" to -- dispersing --;

Column 5, line 10, change "out-wardly" to

-- outwardly --.

This certificate supersedes Certificate of Correction Issued
October 8, 1974.

Signed and Sealed this

second Day of December 1975

[SEAL]

Attest:

RUTH C. MASON

Attesting Officer

C. MARSHALL DANN

Commissioner of Patents and Trademarks

UNITED STATES PATENT OFFICE
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Signed and sealed this 8th day of October 1974.

(SEAL)

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