Sept. 13, 1932. H. DISKIN 1,877,283

CHAMBERED CLOTHES HANGER FOR CONTAINING AN INSECT REPELLING MATERIAL

Filed May 21, 1931

Fig. 1

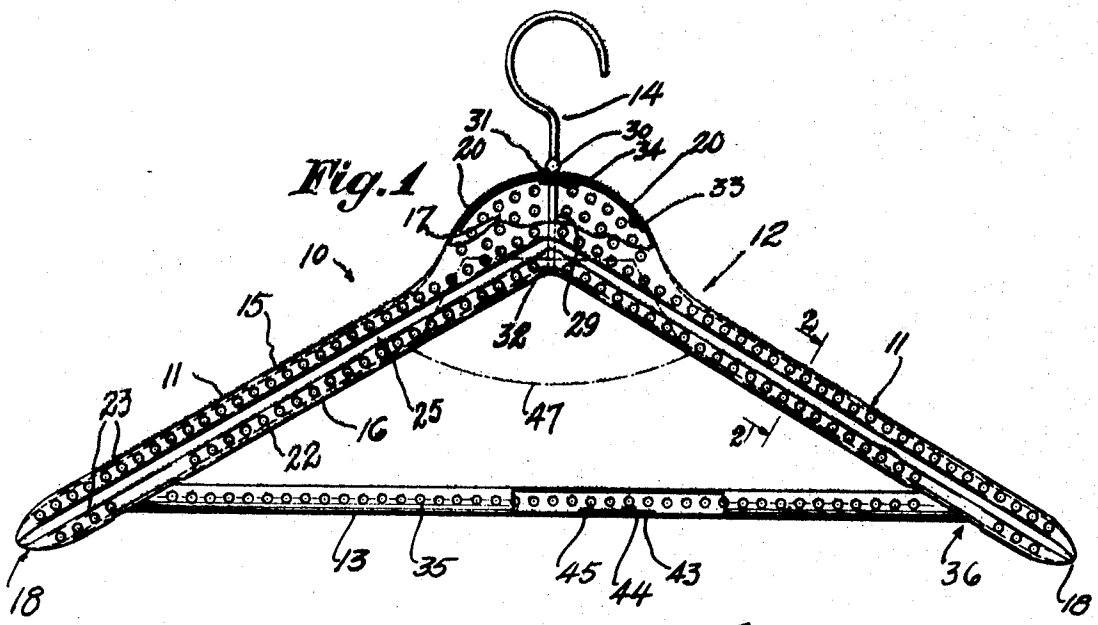


Fig. 2

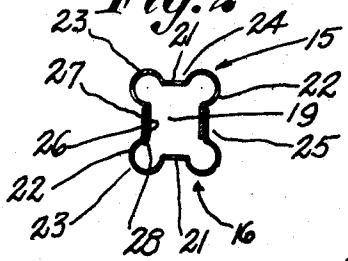


Fig. 3

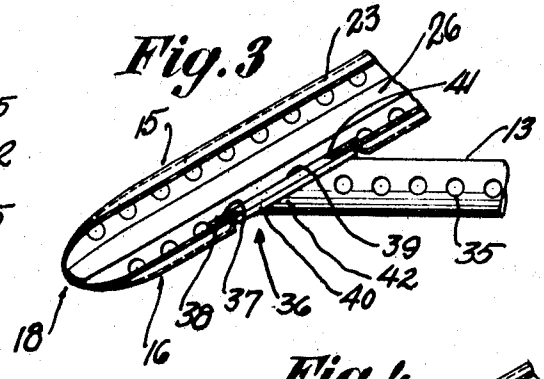


Fig. 5

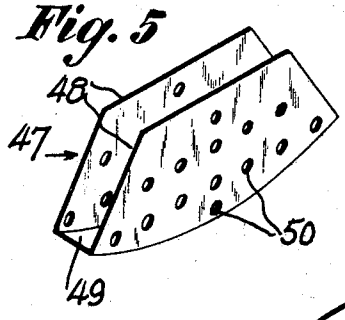


Fig. 4

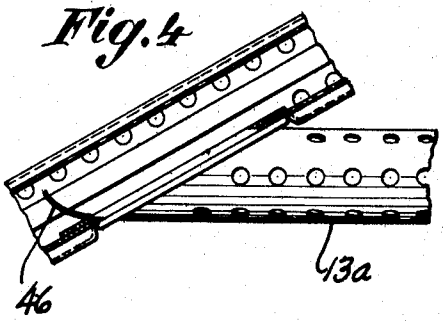
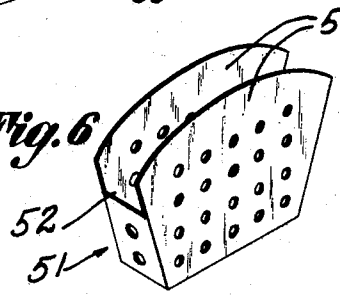


Fig. 6



INVENTOR
Harry Diskin
BY
Louis Schumacher
ATTORNEY

Patented Sept. 13, 1932 1,877,283

UNITED STATES PATENT OFFICE

HARRY DISKIN, OF NEW YORK, N. Y.

CHAMBERED CLOTHES HANGER FOR CONTAINING AN INSECT REPELLING MATERIAL

Application filed May 21, 1931. Serial No. 538,902.

This invention relates to chambered devices such as clothes hangers for containing an insect repelling material, or the like, to be applied to the clothing by normal vaporization.

One object of the invention is to provide a chambered clothes hanger of improved construction whereby the same may be made of a plurality of longitudinally coextending channel sections coacting to afford a tubular space in the hanger, and requiring a maximum of material for construction.

Another object is the provision of a hollow sheet metal clothes hanger made up of sections, and having improved means for interengaging the sections or interlocking the same, or both.

Another object of the invention is to furnish a hollow garment supporter which is so formed or beaded in an improved manner as to facilitate the neat and rapid assembling of parts, and/or with the beading disposed in projecting relation to perforations in the device so as to substantially space the garment from the perforation.

Another object of the invention is to furnish a clothes hanger having a horizontal trouser supporting bar, all of perforated tubular construction, and the bar having such relation to the arms of the hanger as to readily receive camphor balls or other solid material therefrom, preferably in spaced relation to the lower ends of said arms, whereby any fine material may drop into said lower ends, and with other related advantages as hereinafter set forth.

Another object of the invention is to provide an improved closure for an inlet for camphor balls, or the like; also improved means for mounting the same.

Another object of the invention is to provide an improved simple attachable device for a clothes hanger, adapted to be disposed in compact relation thereto, and to carry an insect repelling material.

A further object of the invention is the provision of a device of the character described having relatively few and simple parts, and which is inexpensive to manufacture and assemble, rugged, reliable, safe and efficient to a high degree in use.

Other objects and advantages of the invention will become apparent as the specification proceeds.

With the aforesaid objects in view, the invention consists in the novel combinations and arrangements of parts hereinafter described in their preferred embodiments, pointed out in the subjoined claims, and illustrated on the annexed drawing, wherein like parts are designated by the same reference characters throughout the several views.

In the drawing:

Figure 1 is a view in side elevation of a device embodying the invention with parts removed to show the internal construction.

Fig. 2 is an enlarged cross sectional view thereof taken on line 2—2 of Fig. 1.

Fig. 3 is an enlarged fragmentary sectional view showing the connection between the hanger arms and the trouser bar.

Fig. 4 is a similar view of a modification of the device.

Fig. 5 is a perspective view of a detachable container for an insect repelling material.

Fig. 6 is a similar view of a modification thereof.

The advantages of the invention as here outlined are best realized when all of its features and instrumentalities are combined in one and the same structure, but, useful devices may be produced embodying less than the whole.

It will be obvious to those skilled in the art to which this invention appertains, that the same may be incorporated in several different constructions. The accompanying drawing, therefore, is submitted merely as showing the preferred exemplification of the invention.

Referring in detail to the drawing, 10 denotes a device embodying the invention. The same includes a device for supporting garments or other fabric articles, and may include a clothes hanger although this term is used in an illustrative rather than in a limiting sense. The device which includes a chamber for an insect repelling, odorous or other material, may be constructed in widely

different shapes and forms within the principles of the invention.

The coat hanger may include a pair of arms 11, between which, if desired, may be disposed an additional supporting means, such as a trouser bar 13. Any suitable device such as a hook 14 may be utilized for suspending the coat hanger.

The arms 11 constitute the main body 12 of the hanger and may be constructed by a plurality of channel members such as 15, 16 which may extend along each other from end to end of the hanger. For example, the members may be arranged as upper and lower members respectively, this arrangement affording a greater economy of material than if the channel members were otherwise arranged. Said channel members 15, 16 coact to provide a tubular chamber therein which may extend along any suitable part or wholly along the hanger from end to end of said arms. The upper member 15 may be provided with an upward projecting portion 17 at the apex of the angle formed by the arms 11, whereby a proper support is afforded for the collar of a coat. The ends 18 of the members 15 may be interconnected in any feasible manner, preferably in somewhat rounded form.

Into the tubular chamber 19 in the hanger may be placed, through openings such as 20, an insect repelling or other material which acts in a desired manner upon an article supported by the hanger. The members 15, 16 may have perforations, as, for instance, the vertically and laterally opening perforations 21, 22 spaced therealong to permit the fumes or vapor of the insect repelling material to freely pass out of the chamber 19 and distribute itself in an adequate manner along the garment.

For the double purpose of eliminating or reducing contact of the garment with the perforations, and also to facilitate the interengagement of members 15 and 16, the latter may be of longitudinally beaded conformation. Thus each of said members has a pair of beads or ridges 23 which are disposed along the corners of the members, preferably continuously. These beads may be regarded as projecting in an upward or lateral direction, but due to their arrangement at the corners, they project in both directions. Accordingly it is seen that perforations 21 lie in a recess 24 between the beads 23. The garment will readily rest on the latter entirely out of contact with the edges of the perforations. The perforations 22 may be disposed at angular portions of the beads so as to substantially lie in the side recesses 25. Thus contact between a garment and the edges of the recesses 22, which at best can be only slight because the weight of the garment is carried by the upper surface of the arms 11, is practically avoided. Obviously, the perforations 22 may be differently positioned according to the size and shape of the arms 11 in cross section.

It will be appreciated that the perforations 21, 22 may be regarded as openings in a general sense, within the scope of the invention, which is not to be limited as to size, shape, or number of the openings used.

For engaging the members 15 and 16, the same may be provided with longitudinally interfitting flanges 26, 27 respectively. Owing to the resilience of the metal, together with the spring action of the beads 23, the said flanges may be readily sprung so that one pair of them receives and engages the other pair frictionally or otherwise. With this arrangement, the flanges, such as 27, may lie within the grooves 25 and with their edges in abutment against the adjacent beads. Thus these flanges are out of contact with the garment. If additional interengagement is desired, one of the flanges 26 may have an outwardly curved marginal lip 28 to partially spring into and engage within an adjacent bead 23. As thus constructed, the members 15 and 16 can be interconnected solely by spring action and can also be taken apart, if desired.

If a strong permanent connection be required between the members 15 and 16, a member such as the shank 29 of the hook 14 may be utilized. One form of construction is to flatten the shank at 30 to abut a hole 31 in the part 17 through which hole the shank passes. The shank may also be passed through an alined hole in the member 16 at the apex thereof and secured thereat as by heading over or spot welding at 32.

To close the opening 20, movable means including preferably a leaf spring 33 may be used to underlie both openings. This leaf spring may have a central hole therein through which the shank 29 may be passed in assembling the hanger, and the leaf spring may be mounted upon said shank preferably in fixed connection therewith, as by a washer 34 bearing against the spring and spot welded to said shank. In this manner, the leaf spring, which may be normally plane, may be held snugly against the inside arcuate face of the part 17 so as to properly close both openings 20. To insert a camphor ball, the latter presses upon and deflects the spring downward to open the hole 20 and enter the hanger. The spring then snaps shut.

Thus the hook 14, spring 33, and members 14, 15 may be permanently interconnected in practically a single operation by the shank 29.

The trouser bar 13 may be made of tubing perforated at 35 and connected to the arms 11 at 36, as in openings 37. The arms may be inwardly flanged over at 38 around said openings to smoothly re-enforcingly receive said bar. The latter may terminate at its ends 39 in the plane of the flange, and adjacent to said ends the bar may be beaded at 40 to abut

around the outside of said openings. Thus the ends of the bar may be inserted in the openings 37 by slightly springing apart the arms 11, and the beads 40 holding the bar in securely abutting relation. The bar may also be spot welded to member 16 at 41 prior to assembling the members 15 and 16.

It will be noted that when a piece of material, such as a camphor ball, moves down an empty arm 11 after being inserted through opening 20, it impinges the lower wall portion 42 of the bar 13 so as to enter the same. This entering action may be effected particularly after the balls fill up the lower ends of the arms 11 up to the level of the bar 13. However, said material may also be supplied to bar 13 through an opening 43 therein, which may be closed by a leaf spring 44 secured in place by a rivet 45 or the like.

It will be noted that by arranging the bar 13 in spaced relation to the ends of the arms 11, the bar may be easily connected thereto without interfering with or complicating the longitudinal sectional construction of the arms. The flanging connections 26, 27 are thus available for strongly interconnecting and re-enforcing the arms at the free ends as well as at all other portions of the arms.

In Fig. 4 is shown a modification which may be similar in all respects to that shown in Fig. 3, except that the trouser bar 13*a* may be of relatively larger diameter, and the inner ends of said bar may have means for directing camphor balls or the like from said arms into the bar so that all parts of the device may be filled from the openings 20. Thus the bar 13*a* may have tongues such as 46 extending inward into the bar, especially if said tongues be upwardly curved. The tongues 46 may be resilient if desired, so that after the bar 13*a* is filled, camphor balls may be pressed inward into the arms through openings 20 to deflect tongues 46 and enter the lower ends of the arms 11. However, it may suffice that any small particles or remains of the camphor will readily pass the tongues 46 and accumulate in the free ends of the arms.

In Fig. 5 is shown a device arranged in the manner of a U clamp for engaging a part of a hanger whether it be the ordinary solid hanger or the tubular hanger 10. In the latter case the device 47 may form a unitary structure with the hollow hanger and may carry additional or a different kind of odorous or insect repelling material from that in the hanger. A simple construction is to form the device 47 of a single piece of any somewhat resilient sheet material with sides 48 interconnected by a bottom portion 49 which may be concaved or curved to hold the material. By applying the device to the underside of the hanger at the apex thereof as shown in dotted lines in Fig. 1, the arms 48 clamp the hanger therebetween and the arms 11 act as closures for the top and ends of the device 47 causing a reliable retention of the material therein. The device 47 may be suitably perforated at 50 as shown.

In Fig. 6 is shown a modification including a perforated box like element 51 having an open top 52, and upward extending flanges 53 which may be parts of the side walls of the box and are adapted to engage therebetween the hanger 10, closing the top of the element.

The hanger 10 may be made of any suitable material such as thin sheet metal which may be stamped and formed into proper shape. The bars 13 may be similarly constructed, out of tubing or sheet metal formed into tubular shape. The devices 47, 51 may be made of metal or composition material.

It will be appreciated that various changes and modifications may be made in the device as shown in the drawing, and that the same is submitted in an illustrative and not in a limiting sense, the scope of the invention being defined in the following claims.

I claim:

1. A coat hanger having angular related arms consisting of a plurality of longitudinally coextensive longitudinally beaded channel members coacting to form a tubular chamber therein.

2. A coat hanger having angularly connected arms including a plurality of members at least one of which is of channel form, said members having resilient means extending along the sides from end to end thereof for interconnecting the members to form a tubular hanger.

3. A coat hanger of tubular form, said coat hanger having arms provided with outward projecting elongated beads therein, and a row of perforations between the beads so arranged the the perforations are all shielded between the beads.

4. A garment supporter having arms consisting of a plurality of longitudinally coextending channel members having the flanges of one disposed between the flanges of the other, the former member being provided with opposite longitudinal outward projecting beads against which the edges of both flanges of the latter member abut so that the beads overhang said edges.

5. A tubular coat hanger made of sheet metal, said coat hanger having a plurality of angularly connected arms, each of said arms consisting of a plurality of longitudinal channels adapted for interrelative longitudinal movement on springing the arms apart, said arms having alined openings therein, and a trouser bar having its end portions extended into said openings, said bar having stop elements adjacent the ends of the bar for bearing on the outside of the arms adjacent to the openings, whereby the bar may be interconnected by springing the arms.

6. A garment hanger having angular arms consisting of a plurality of coextensive chan-

nel members of thin sheet material forming angular arms, said members having the flanges of one embraced between the flanges of the other, one of the inner channels having an outward extending lip, and one of the outer flanges having a recess to receive said lip, whereby the members may be interconnected by springing the inner flanges between the outer flanges.

7. A coat hanger having angularly connected tubular arms consisting of upper and lower channels coacting to form said tubular arms, said channels having outward projecting longitudinal beads along the corners thereof, the flanges of the channels being interengaged between said beads so that the latter project outward beyond said flanges.

8. A coat hanger having angularly connected tubular arms consisting of upper and lower channels coacting to form said tubular arms, said channels having outward projecting longitudinal beads along the corners thereof, the flanges of the channels being interengaged between said beads and inward thereof, and a transversely extending trouser bar connected to said arms in openings therein spaced from the ends of the arms, the end portions of said arms forming guideways between said beads for movement of the bar into said openings.

9. A garment supporter having angular arms including a plurality of longitudinal elements at least one of which is concave in cross section, said elements coacting to form a tubular device, and a support for said device interconnecting said elements.

10. A coat hanger having tubular arms interconnected at an angle, one of said arms having an opening, a resilient member for closing said opening, an element for supporting said arms and connected thereto, said member being mounted on and connected to said element.

11. A coat hanger including angularly interconnected arms consisting of longitudinally coextensive one piece upper and lower channel members extending continuously from end to end of said arms, said members coacting so that the arms are of tubular form, a hook for supporting the arms, said hook having a shank passing through the members at the apex of the angle and coacting to keep the members in engagement, the upper member having openings in the top thereof on opposite sides of said shank, a single leaf spring mounted at the shank and disposed to resiliently close both openings.

12. A garment supporter having a pair of tubular, perforated arms interconnected at an angle, said arms being of continuous tubular form of polygonal shape in cross section, said arms having re-enforcing longitudinally extending beads in the corners thereof.

13. A garment supporter having a plurality of arms interconnected at an angle, each of said arms consisting of one piece sheet metal channel elements, coacting to form tubes, said elements having longitudinally extending re-enforcing beads.

14. A garment supporter having a plurality of arms interconnected at an angle, said arms being of sheet metal resilient construction, and a trouser bar extending from arm to arm, said arms having means in spaced relation to the ends thereof for engaging the bar to support the same, said bar being engaged with said means by sliding the bar along the ends of the arms to spring the arms apart and cause the bar to move into engagement with said means.

In testimony whereof I affix my signature.

HARRY DISKIN.