EXTERNAL HANGER FOR GARMENT CARRYING BAG

Filed April 1, 1966

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BY

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This invention relates to an external hanger for a garment carrying bag. The term “garment carrying bag” or “garment bag” as used herein relates to a bag which is popularly known as a “sack bag” and specifically is a type of garment carrier that will accommodate garments and the like outstretched at full length when the bag is suspended by an end by means of the external hanger. The carrier, i.e., bag, is foldable about a transverse medial line to halve its major dimensions for hand carrying purposes.

When garment carrying bags were unfolded to their full length, they were adapted to be hung in such outstretched condition from a fixed support or rod, for example, by an external hanger adapted to be attached to the fixed support such as a door or wall or a rod secured in a closet. For this purpose, one outer end wall of such garment carrying bag conventionally was provided with an external hook. However, because the bag was folded for hand carrying purposes, the outer end surface (bearing the hook) which was uppermost at such time as the bag was suspended at full length constituted a part of the bottom of the bag when the bag was folded. Therefore, in garment carrying bags of the character under consideration the external hook had to be capable of being swung from an extended position in which it could be used to hang the bag from a fixed support to a folded position in which the external hook lay flat against or on the outer end surface of the bag on which it was mounted. In other words, the hook could not permanently protrude from its end of the bag.

In order to permit the aforementioned swinging movement of the hook between operative and idle positions, bags of the character described hereof have been provided with an articulated joint, usually a swivel joint, between said outer end surface and the external hook. Conventionally, the joint was limp and did not maintain the hook in any particular position relative to the bag. A disadvantage of this type of arrangement was that it was extremely inconvenient to attach the hook to a door or wall or rod since the user of the bag ordinarily needed both hands to grasp and hold the very heavy loaded bag and therefore did not have a hand free to erect the hook and hold it in proper position over the wall or door or rod. To overcome this problem, a construction was developed in accordance with which the hook would maintain itself in its erected position while the user manipulated the bag to couple the hook to the fixed support. Such a construction is shown in Patent No. 3,179,363 dated April 20, 1965.

A feature of the present invention is the provision of an improved, smoother working swivel joint construction which permits the hook to maintain itself in an operative (erect) position.

Conventionally, a flap retainer was also provided to maintain the hook of the external hanger in its idle (flat) position against an end of the bag when the bag is being carried. An important aspect of the present invention is to provide an improved means to retain the hook in such flat position, which means is peculiarly and particularly adaptable for use with the type of construction wherein the external hook is joined to the bag in such manner that it is capable of maintaining itself in erect position, thereby obviating the need for the user to handle the hook at the time that the bag is being physically manipulated for coupling to the external support by means of the hook.

More specifically, the purpose of this aspect of the instant invention is to provide a unitary construction wherein the retaining means for the idle position of the hook is part of and cooperates with the articulated joint construction of the external hanger. In this way, the conventional extra flap retaining arrangement is entirely obviated and a simpler, more economic and more useful overall construction is obtained.

It is a principal object of the present invention to provide an improved external hanger for a garment bag of the character described which hanger is capable of maintaining itself in erect position and which includes as part thereof simple and effective means for maintaining the hook thereof in its idle position.

It is another object of the present invention to provide a device of the character described which presents a compact and attractive appearance.

It is another object of the present invention to provide a device of the character described in which it is very simple to manipulate the hook of the external hanger between the idle and operative positions thereof.

It is another object of the present invention to provide a device of the character described which has few and simple parts, which is very easy to assemble and mount to a garment bag, which is rugged and foolproof in construction and operation, and which is well adapted to mass production methods.

Other objects of the invention in part will be obvious and in part will be pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangements of parts which will be exemplified in the external hanger hereinafter described and of which the scope of application will be indicated in the appended claims.

In the accompanying drawings, in which I have shown one of the various possible embodiments of the invention:

Garment bags 10 with which the present invention can be utilized essentially comprise a rectangular enclosure which in outstretched, full-length condition includes two broad oblong walls the long edges of which are joined by side walls and the short edges of which are joined by end walls. The bag is adapted to be folded about a central axis perpendicular to the longitudinal axis of the long walls, and the outermost wall when the bag is folded includes a transverse reinforcing strip which provides a stiffened zone at which is attached a carrying handle 12. When the bag is being carried, the two outer end walls 14a and 14b are adjacent one another and face downwardly. (The bag 10 in FIG. 4 is shown in folded condition but upside down to facilitate explanation of the present invention). Conventionally, suitable latching means is provided to maintain the two parallel depending sections of the bag in adjacent condition when being carried or transported.

When the bag is in its folded transportable condition with the end walls lowestmost, said end walls or feet 16 thereon will rest on the ground when the bag is not being carried, i.e. has been set down. It is desirable that the end walls not include any member which projects beyond the feet, since projecting elements would prevent the bag from being placed on the ground as aforesaid. This is the reason why an external hanger secured to one end of the bag must not be of a permanently projecting nature and must be manipulatable between an operative, i.e. erect or projecting position and an idle, i.e. flat, position. Moreover, a hanger that is not retained in flat position may catch on other luggage during transportation.

As already mentioned, it is desirable that the hook of the external hanger be capable of maintaining itself in erect position, and pursuant to the present invention,
an external hanger is provided wherein the hook is capable of maintaining itself in such position and wherein the head of the external hanger itself is provided for manually releasably retaining the hook in its idle position. More particularly, the articulated joint of the present external hanger includes a spring which permits extension of the hook away from the joint. Pursuant to the present invention, a retaining latch is provided on the external hanger at a position spaced from the articulated joint and adapted to receive the hook when it is extended against the spring away from the articulated joint and to captively retain the hook upon release of the extending force on the hook.

More particularly, there is provided an external self-form maintaining wire hook comprising a shank 20 at the remote end of which is formed an arcuate bend 22 in the general shape of a wire hanger, i.e., an approximately 270° bend. The proximate end of the shank is provided with a head 24 for a purpose to be described herein. Through openings 50 in the base plate and its is captively retained within a metal turret 26 having the form of an internally arched, internally concave hemispherical dome of sheet metal including an outwardly annular flange 28 at its rim. Said flange is located adjacent an internally arched internally concave cap 30 of the rim 32 of which is bent up and over the flange 28 and permanently secured, as, for example, by clinching against the same, as appears particularly in FIG. 3. Alternatively, the cap may be welded or otherwise permanently peripherally secured to the turret.

The turret is formed with a radial slot 34 running from adjacent the rim to slightly past the apex of the turret and extending along a great circle. The slot is sufficiently wide to freely pass the shank 20 of the hook but is narrower than the head 24 whereby the head is captively retained in the turret. Pursuant to the present invention, a sheet metal base plate 36 is provided having a generally rectangular shape. At one end of the plate an opening 38 is formed. Said opening is surrounded by an upstanding collar 40 integral with the base plate, and an inturnd roof 42 is provided integral with said collar. The roof defines an opening 44 of smaller diameter than the opening 38. Said opening 44 is large enough to pass the dome of the turret but not the flange 28 and the associated rim 32 of the cap. The opening 38 is large enough to receive said rim 32. The collar 40 is of such height that when the turret dome extends through the opening 44 defined by the roof and the rim 32 is seated against the underside of the roof 42, the apex of the downwardly arched cap 30 lies in substantially the same horizontal plane as the bottom surface of the base plate.

The base plate is adapted to be secured to a stiffened wall 146 of the garment bag. Such securing is accomplished in a conventional manner as by rivets 48 passing through openings 50 in the base plate and registered openings (not shown) in the wall. As a result of the above described height of the collar 40 of the base plate, the turret-cap assembly is captively snugly rotatably held by said roof and collar against the end wall. Rotation of the turret is about an axis perpendicular to the horizontal plane in which both the base plate and end wall lie. Thus, the hook is connected to the end wall of the bag by a swivel joint that enables the shank to rotate about its own axis, to turn with the turret in the collar and to swing 90° along the slot 34 between erect and flat positions.

In order to maintain the hook in an operative position thereof while still permitting the hook to be collapsed to its flat position, means is provided to bias the head 24 of the hook against the internally concave surface of the cap and to bias a fitting located on the shank against the internally concave surface of the dome. Said biasing means is of such strength that friction created by the just described abutments will maintain the hook erect against the force of gravity and against forces caused by normal motion of the garment bag as a whole when the same is being manipulated for hanging of the garment bag by the hook from an external support. Said biasing means comprises a spring 52 whose free end is located on the shank 20 in compressed condition between the head 24 and the remote end of a hollow cylindrical fitting 54. The fitting is located in the turret with the shank 20 of the hook slidably received through the bore 55 of the fitting. The open end of the fitting faces the head 24 of the hook and is smaller than the bore so that the head cannot be received in the fitting, i.e., the facing surface of the head and the facing edge 56 of the fitting will abut one another if the head is moved towards the fitting. The bore of the fitting is large enough to receive the spring except at the end of the fitting remote from the head which end is provided with an internal flange 58 that narrows the bore sufficiently to block passage of the spring through said remote end. The portion of the fitting wherein the spring is receivable constitutes the skirt of the fitting.

The effect of the helical spring between the fitting and the head 24 of the hook is to bias the head 24 of the turret. As the helical spring is erected the head will be forced against the concave inner surface of the cap and the fitting is biased against the concave inner surface of the dome. The friction created by the aforesaid abutments serves to maintain the hook in erect position. The concavities of the surfaces against which the head and fitting move also permit smooth movement of the hook between its idle and its erect positions. The edge 60 of the head and the edge 62 of the fitting may be slightly rounded to ease movement of the head and fitting against the surface facing the same during manipulation of the hook between its idle and operative positions.

When the garment bag is hung from the hook the hook is pulled away from the turret and the spring 52 is compressed more than it is when the hook is merely erected. The skirt of the fitting serves as a spacer which prevents crushing of the helical spring in the fully extended position of the hook. In other words, the helical spring is fully relaxed within said skirt. Thus, the skirt can be fully extended, the skirt being deep enough to prevent the convolutions of the spring from being forced against one another, i.e. fully compressed, when the head abuts the skirt. Thus the skirt carries the weight of the loaded bag when the bag is hung by the hook, and the spring cannot be broken or splayed out as might be the case if the same were merely located between the head and the turret, and no skirted fitting was present. In FIG. 3 abutment of the head against the fitting is shown in dotted lines.

By virtue of the swivel joint, the hook 18 can be rotated in the turret about the longitudinal axis of the shank. Also, the hook can be moved between its idle position wherein it is substantially parallel to the base plate to an erect position which is desired for manipulation of the garment bag in order to place the hook over or on a fixed support. Furthermore, the turret can be rotated. Upon release of the garment bag after the hook has been placed on a fixed object, the hook will normally move to fully erect position (if it was not in such position as the garment bag was being hung). Erection and collapsing of the hook is permitted by the slot in the turret dome.

Further pursuant to the invention, manually operable means is provided to releasably retain the hook in its flat position. Said means constitutes a retaining latch 64 located at the opposite end of the base plate at that at which the turret is secured. Said latch constitutes an arcuate upstanding flange 66 integral with the base plate at one end of said flange and including integrally at the other end thereof a substantially perpendicular arcuate
overhang 68 facing in a direction away from the turret. The arc of the flange and overhang is of such contour as to form a seat in which the arcuate bend 22 of the hook is snugly receivable, i.e. said arc substantially matches the contour of the top of the hook. This may best be seen in FIG. 1.

The retaining latch is located a sufficient distance away from the turret such that the bend 22 of the hook cannot be swung therein in an unextended condition of the hook, i.e. when the helical spring has biased the hook to its fully retracted position within the turret. The reason is that the overhang 68 will block said bend from entering the seat. However, upon extension of the hook out of the turret, as by pulling against the bias of the helical spring, the hook will be moved a sufficient distance beyond the overhang of the retaining latch so that it can pass the same and enter the retaining latch seat. Then, upon release of the hook, the same will be retracted partially into the turret but with the bend retained against the flange 66 and under the overhang. As a result, the drawings is to the effect that the hook being moved accidentally downwardly out of the retaining latch or being moved downwardly out of its idle position during carrying or transportation of the same. But the hook can be easily removed from the retaining latch when it is desired to erect the hook by simply pulling the same to the overhang and moving the end past the overhang while the hook is in extended condition.

To permit the hook to lie absolutely flat in its idle position, a slot 70 is provided in the collar 40 and roof 42 which surround the turret cap assembly. Said slot is wide enough to pass the shank of the hook and faces the retaining latch so that the hook can lie adjacent and substantially parallel to the base plate only when the bend 22 is located in the retaining latch. Thus, the fully retained position of the hook cannot be achieved without manually releasably retaining the same in idle position. This is clearly shown in FIG. 1.

As a result of the foregoing construction there is provided a unitary external hanger containing within itself not only improved means to render the hook capable of maintaining an erect position but also means to manually releasably retain the same in its idle position.

It also will be observed that the hook, dome, cap spring and first constitute a unit which can be permanently pre-assembled by a hanger manufacturer and supplied to a bag manufacturer as a single piece so as to simplify the latter's operations and eliminate the handling and interfitting of small loose parts.

It thus will be seen that there is provided an external hanger for a garment bag which achieves the several objects of this invention and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described the present invention, there is claimed as new and useful and desired to be secured by Letters Patent:

1. In combination with a foldable garment bag having an outer end wall, a unitary external hanger assembly maintained on said wall, said assembly including a metal base, a bag hook for enabling the bag to be hung in outstretched full length condition from a support, a swivel joint carried by said base and located between the hook and said outer end wall, said swivel joint including means allowing the hook to be swung between an operative position in which it projects away from the outer end wall and an idle position in which it lies adjacent and substantially parallel to said outer end wall, means frictionally binding one end of the hook in the joint in an erect position of the bag hook and yet allowing said bag hook to be swung manually to idle position, and said hanger assembly further including means unitary with the base for manually releasably retaining the hook in the idle position thereof.

2. A combination of a foldable garment bag and a unitary external hanger assembly as set forth in claim 1 wherein in the assembly the swivel joint includes an internally concave hemispherical dome, means defining a radial slot running from adjacent the periphery of the dome slightly past the apex thereof along a great circle, said hook including a shank extending through the slot, a bend at the outer end of the shank, a head at the inner end of the shank, the friction binding means including a coil spring in the dome on the shank under compression between the head and the dome, and a cap permanently secured to the base of the dome to captively retain the head and the spring in the dome.

3. A combination of a foldable garment bag and a unitary external hanger assembly as set forth in claim 1 wherein in the assembly the swivel joint includes an internally concave hemispherical dome, means defining a radial slot running from adjacent the periphery of the dome slightly past the apex thereof along a great circle, said hook including a shank extending through the slot, a bend at the outer end of the shank, a head at the inner end of the shank, the friction binding means including a coil spring in the dome on the shank under compression between the head and the dome, and an internally concave cap permanently secured to the base of the dome to captively retain the head and the spring in the dome.

4. A combination of a foldable garment bag and a unitary external hanger assembly as set forth in claim 1 wherein in the assembly the hook includes a shank, one end of said shank being formed to an arcuate contour and the other end of the shank including an integral head, said head being disposed in the swivel joint, and wherein the friction binding means comprises a helical compression spring, a hollow elongated skirted fitting located in said joint, said fitting having a bore, an open end proximate to the head and an end remote therefrom, said spring being located on the shank and the shank extending through the bore of said fitting, said spring being under compression, in abutment with and between the head and the remote end of the fitting, the body of the spring being received in said skirted fitting and the shank being reciprocable axially in the fitting between a position in which the head abuts the proximate end of the fitting and a position in which the head abuts a surface of the joint opposed to the fitting, whereby the head is biased by the spring against the inner surface of the joint and the remote end of the fitting is biased against the inner surface of the joint so as to create sufficient friction to enable the hook to self-maintain itself in an erect position, and the head abutting the skirt before the spring is fully compressed, whereby the spring is protected by the skirt from being subjected to the weight of the bag on full extension of the hook when the bag is hung by the hook from a support.

5. A combination of a foldable garment bag and a unitary external hanger assembly as set forth in claim 1 wherein in the assembly the hook includes a shank, one end of said shank being formed to an arcuate contour and the other end of the shank including an integral head, said head being disposed in the swivel joint, and wherein the friction binding means comprises a helical compression spring, a hollow elongated cylindrical skirted fitting located in said joint, said fitting having a bore, an open end proximate to the head and an end remote therefrom, said spring being located on the shank and the shank extending through the bore of said fitting, the bore of the fitting at the remote end thereof being of lesser diameter than the bore throughout the remainder of the fitting, the cross-section of the spring being at least slightly greater than the bore of the fitting at the remote
end thereof but at least slightly less than the bore of the fitting throughout the rest of the fitting, whereby the spring is receivable in the skirt of the fitting but the end of the spring remote from the head of the hook is adapted to abut the fitting at the remote end thereof, the bore of the fitting at the end proximate the head being of such size that it blocks entry of said head into the fitting, said spring being under compression, in abutment with and between the head and the remote end of the fitting, the body the the spring being received in said skirted fitting and the shank being reciprocable axially in the fitting between a position in which the head abuts the proximate end of the fitting and a position in which the head abuts a surface of the joint opposed to the fitting whereby the head is biased by the spring against the inner surface of the joint and the remote end of the fitting is biased against the inner surface of the joint so as to create sufficient friction to enable the hook to self-maintain itself in an erect position, and the head abutting the skirt before the spring is fully compressed whereby the spring is protected by the skirt from being subjected to the weight of the bag on full extension of the hook when the bag is hung by the hook from a support.

6. A combination of a foldable garment bag and a unitary external hanger assembly as set forth in claim 1 wherein in the assembly the hook includes a shank, one end of said shank being formed to an arcuate contour and the other end of the shank including an integral head, wherein the shank includes an internally concave hemispherical dome, means defining a radial slot running from adjacent the periphery of the dome slightly past the apex thereof along a great circle, said means permitting the hook to be swung between its operative and idle positions, a helical compression spring on the shank under compression between the head and the internal surface of the dome, said shank being shiftable axially relative to the dome against and with the force exerted by the spring, and wherein the means for manually releasably retaining the hook in idle position comprises a retaining latch integral with the base plate at a location thereon remote from the shawl joint, said latch including a flange extending upwardly from the plate on the same face thereof as that on which the shawl joint is located, and an overhang integral with the flange at the end thereof remote from the plate, said overhang extending in a direction away from the shawl joint, said latch being so located with respect to the shawl joint that the arcuate end of the hook is blocked by the overhang from entering the latch unless the hook is extended from the shawl joint against the bias of the spring, whereby after extension of the hook the arcuate end can be fitted over the overhang and beneath the same, and the bias of the spring forces the arcuate end against the flange below the overhang so as to releasably hold the hook in its idle position.

7. A combination of a foldable garment bag and a unitary external hanger assembly as set forth in claim 6 wherein in the assembly the flange and overhang of the latch are of an arcuate contour substantially matching that of the arcuate end of the hook.

8. In combination with a foldable garment bag having an outer end wall, a unitary external hanger assembly for the same, said assembly including a bag hook for enabling the bag to be hung in outstretched full length condition from a support, a hollow swivel joint between the hook and said outer end wall, said swivel joint including means allowing the hook to be swung between an operative position in which it projects away from the outer end wall and an idle position in which it lies flat against said outer end wall, means frictionally binding one end of the hook in the joint in an erect position and thereby fixing the position of the bag hook and yet allowing said bag hook to be swung manually to idle position, said hook including a shank, one end of said shank being formed to an arcuate contour, and the other end of the shank including an integral head, said head being disposed in the swivel joint, the frictional binding means comprising a helical compression spring, a hollow elongated skirted fitting located in said joint, said shank being shiftable axially relative to the joint against and with the force exerted by the spring, said fitting having a bore, an end proximate to the head and an end remote therefrom, said spring being located on the shank and the shank extending through the bore of said fitting, said spring being under compression in abutment with and between the head and the remote end of the fitting, whereby the head is biased by the spring against the inner surface of the joint and the remote end of the fitting is biased against the inner surface of the joint so as to create sufficient friction to enable the hook to self-maintain itself in an erect position, and the head abutting the skirt before the spring is fully compressed, whereby the spring is protected by the skirt from being subjected to the weight of the bag on full extension of the hook when the bag is hung by the hook from a support.

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