

Jan. 22, 1957

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2,778,555

BAG CARRIER

Filed June 12, 1953

2 Sheets-Sheet 1

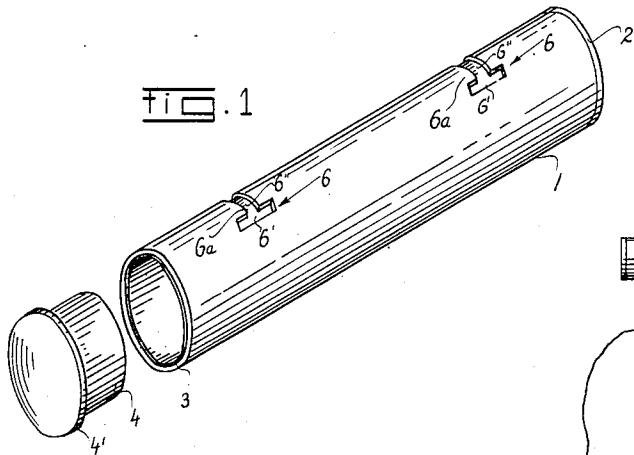


FIG. 1

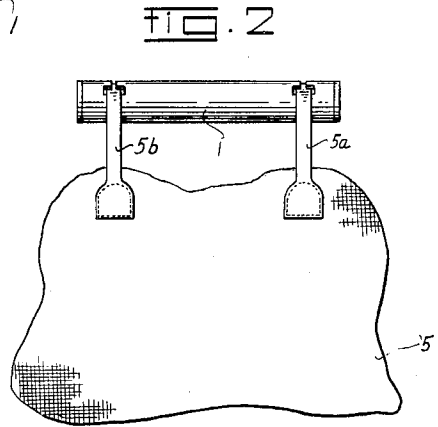


FIG. 2

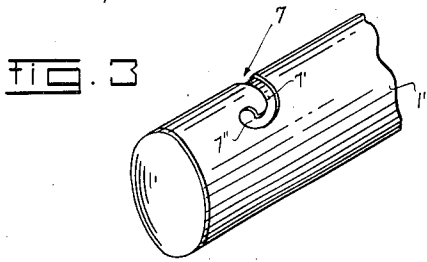


FIG. 3

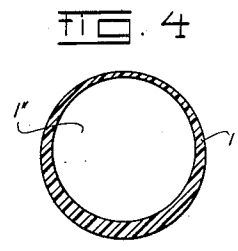


FIG. 4

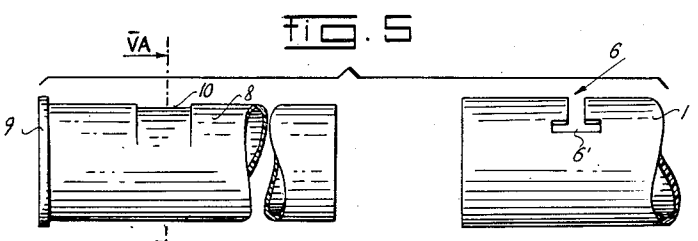


FIG. 5

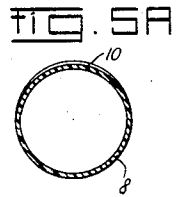


FIG. 5A

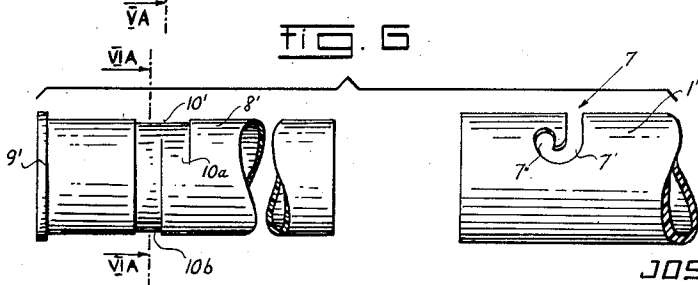


FIG. 6

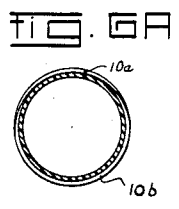


FIG. 6A

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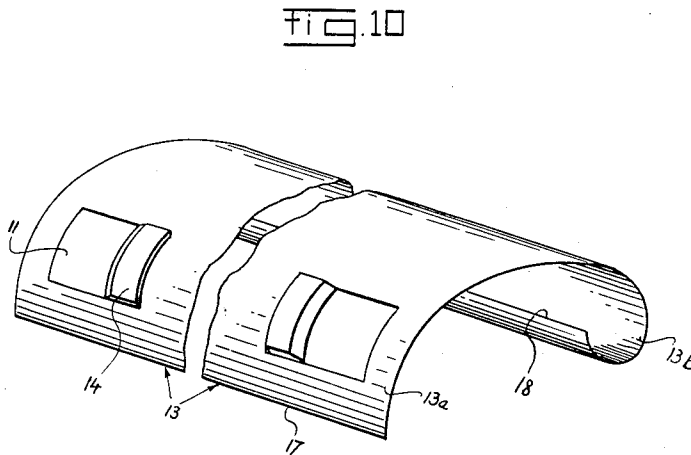
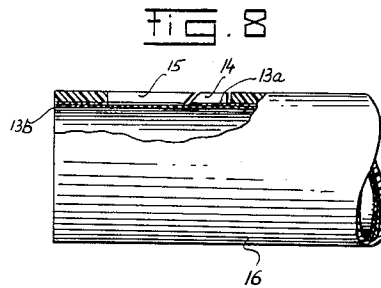
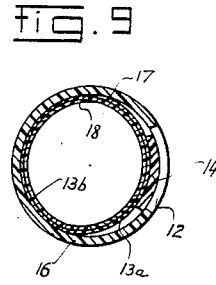
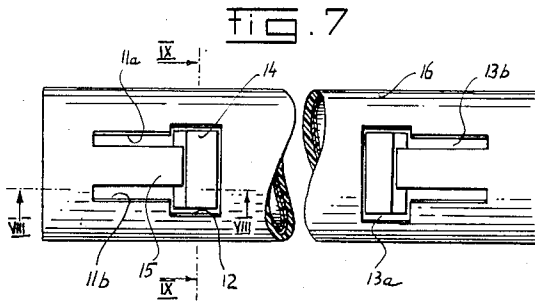
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2 Sheets-Sheet 2



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2,778,555

**BAG CARRIER**

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14 Claims. (Cl. 224—45)

My present invention relates to means for carrying a foldable bag in folded or unfolded condition, and more particularly to a convenient device which may be used as a container for an empty bag and also as a handle for carrying the full bag.

Various thin and strong fabrics, nettings or other flexible materials are available for use as shopping bags or the like. Such bags, when empty, can be folded so as to take up very little space. It is convenient for the user to place the empty, folded bag in a small container which may be easily held and carried. It is equally convenient to have a handle by which to carry the full bag.

It is the principal object of the present invention to provide a bag carrier which can be used alternately as a container for a folded bag and as a handle for the same bag when unfolded and filled with articles.

It is another object of this invention to provide a bag carrier of the above description which is neat in appearance and can be conveniently carried about when the folded bag is placed therein and which, at the same time, will securely hold the straps of the bag when used as a handle for carrying the full bag, thereby avoiding the inconvenience of carrying a heavy bag by means of straps or strings having a tendency to cut into the hands of the user.

It is an additional object of the invention to provide improved strap-retaining means in a bag carrier.

The above and other objects are accomplished, broadly, by providing a hollow container having one or more slots spaced from respective ends of the container, these slots being so shaped that the straps of the bag may be received and held therein when the container is used as a carrying handle for the bag. The slots or notches may, for instance, be H-shaped if the straps of the bag are wide. They may be hook-shaped if the straps are relatively narrow. In either case, the inner wall of the container may be lined with a flexible sheet which presses against the wall and will positively hold the straps in the slots.

The hollow container, preferably a tube, is closed at one end and has preferably two transverse slots or notches spaced from respective ends of the container, these slots being so shaped that the straps of the bag may be received and held therein when the container is used as a carrying handle for the bag. The slots or notches may, for instance, be H-shaped if the straps of the bag are wide. They may be hook-shaped if the straps are relatively narrow. In either case, the inner wall of the container may be lined with a flexible sheet which presses against the wall and will positively hold the straps in the slots.

In one embodiment of the invention, the open end of the hollow container is closed by a removable cover or plug member. In another embodiment, the flexible inner sheet is replaced by an open-ended tube adapted to be telescoped and fitted snugly into the first container. In this case, the folded bag is placed in the inner tube which is then telescoped into the first container to form a closed unit therewith. The inner tube is provided with peripheral recesses corresponding to the slots or notches in the first container for purposes which will be explained hereinafter.

If desired, the hollow container may have walls of varying thickness to give the structure added strength while allowing flexibility of those wall parts which define the slots or notches.

The above and other features and advantages of the

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invention will be more fully understood in connection with the following detailed description of certain now preferred embodiments thereof, taken in conjunction with the accompanying drawing wherein:

5 Fig. 1 shows a perspective view of one embodiment of the invention;

Fig. 2 is a side view of the device shown in Fig. 1, with a bag attached thereto;

10 Fig. 3 is a perspective view of a device similar to that of Fig. 1 but having different transverse slots or notches;

Fig. 4 shows a cross-section of a tube with wall portions of varying thickness;

15 Fig. 5 is a side view of an outer container, such as shown in Fig. 1, and an inner tube adapted to be telescoped thereinto;

Fig. 5A is a cross-section along line VA—VA of Fig. 5;

Fig. 6 is a side view of an outer container, such as shown in Fig. 3, and an inner tube adapted to be telescoped thereinto;

20 Fig. 6A is a cross-section along line VIA—VIA of Fig. 6;

Fig. 7 is a top view of another embodiment of my invention, including modified strap-retaining means;

25 Fig. 8 is a fragmentary side elevation, partly in section, along line VIII—VIII of Fig. 7, of the device shown in the latter figure;

Fig. 9 is a cross-section along line IX—IX of Fig. 7; and

Fig. 10 is a perspective view of a flexible sheet forming part of the embodiment of Figs. 7—9.

30 While the carrier has been illustrated as a cylindrical tube and this form appears to be the most convenient and practical one, it should be clearly understood that hollow containers of square or other polygonal, oval or elliptical cross-section could be used at least in certain embodiments of the invention and fall within the scope thereof.

35 Referring now to the drawing, Fig. 1 shows a tube comprising longitudinal wall 1 and end wall disk 2. The tube may be of any suitable material and have any desired wall thickness, e. g. of the order of 1/8". Widely available plastics of limited flexibility, e. g. polystyrene, have been found acceptable although in some instances a more flexible substance, such as polyethylene, may be preferred. Thus, the invention is not limited to any specific materials or dimensions. The inner wall of the tube is lined with a snugly fitting, flexible sheet 3, movably inserted therein to serve as a strap-retaining means in the manner more fully described hereinafter. The flexible sheet may also be of plastic or other suitable material, e. g. cellulose acetate. The space within the flexible sheet serves to receive a folded bag. When the folded bag of relatively thin, flexible material is placed therein, cover or plug member 4 having rim 4' is pressed into the open end of the tube, thus forming a compact, closed carrier or container for the bag. This compact unit may be conveniently carried in the hand or in a pocket or pocket-book.

40 When it is desired to use bag 5 (Fig. 2), cover 4 is removed, the bag is taken out of the tube and unfolded and straps 5a and 5b of the bag are inserted into transverse slots or notches 6. If the bag straps are wide, the slots preferably take the form shown in Figs. 1 and 2, i. e. they have the shape of an H. The two longitudinal portions 6' (only one shown) of each slot are about as long as or slightly longer than the width of the straps while the transverse portion 6'' is considerably narrower than the straps. Each strap is inserted into a respective one of the slots without difficulty since the underlying sheet 3 is flexible and will yield when the strap is inserted. Sheet 3, because of its flexibility and resiliency, will, however, resume its snug fit with the inner wall of the tube after the straps are inserted and will thus retain the straps in place; the sheet may, if desired,

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be fastened to the tube wall at a location remote from the slots 6. The tube is now ready to be used as a handle for carrying the bag.

It may be desirable to give the projections 6a added flexibility for easier insertion of the straps and the upper portion of the tube wall 1 carrying the slots may, therefore, be made rather thin. If the entire tube wall is too thin, the structure may not be strong or rigid enough for most convenient or lasting use. It may, therefore, be found advantageous to make the tube wall 1 of lesser thickness in the portion provided with the slots while giving it structural strength by making the remainder of the wall of increased thickness. Such a tube wall structure is shown in cross-section in Fig. 4 and is characterized by the eccentricity of the bore 1" in the tube 1.

If straps 5a, 5b are rather narrow or have a circular cross-section, the transverse slots in the tube may take the shape shown in Fig. 3. Tube wall 1' is provided with a hook-shaped transverse slot or notch 7 having a generally peripherally extending portion 7' with two J-shaped portions 7" (only one shown). As will be readily understood, the narrow strap is introduced through portion 7' into end portion 7" and will be held therein by the flexible sheet 3. The two slots 7 adjacent respective tube ends may, of course, also be combined into a single slot near the center, this slot having pairs of bent-over ends 7" facing in opposite directions.

Figs. 5 and 6 show somewhat different embodiments of the invention wherein flexible sheet 3 is replaced by an inner tube 8 (or 8'). In these embodiments, the folded bag is placed within the inner tube which is then telescoped into the outer tube. The inner tube is provided with an end plate 9 (or 9') and will thus form a compact and neat unit with the outer tube.

When it is desired to use the bag with this embodiment, the inner tube is removed, the bag is taken out and unfolded and the inner tube is again telescoped into the outer tube. The straps are then inserted in slots 6 or 7, as in the embodiments shown in Figs. 1 and 3. To make the strap insertion possible, the inner tube is provided with recesses registering with the slots in the outer tube.

In the case of H-shaped slots 6, the recess in the inner tube wall is a substantially rectangular depression 10 corresponding in width to the length of longitudinal slot portions 6', as shown in Fig. 5, and having a length slightly greater than that of transverse slot portion 6".

If a hook-shaped slot is used, the recess 10 (Fig. 6) in the inner tube wall will comprise a small depression 10a in registry with slot portion 7' and a circumferential groove 10b in registry with the bent-up ends 7" of the J.

In the embodiment shown in Figs. 5 and 6, the straps are clamped into position after being inserted in the slots by turning the inner tube so as to replace the depression 10 (or 10a) underneath the entrance channel 6" (or 7') with a peripheral portion of the inner tube 8 (or 8') lying snugly against the outer tube 1 (or 1').

In the modification of Figs. 7-10 the tube 16 is provided with tongues 15 defining pairs of longitudinal slots 11a, 11b which are generally similar to the axially extending portions 6' of the slots 6 in Figs. 1 and 5. Tongue 15 has a beveled free edge overlying an oppositely beveled edge of a depressible locking element 14 which is mounted resiliently within a cutout 12 of the tube 16. The resilient connection between element 14 and tube 16 is effected by a flexible strip member 13a which, in this embodiment, is shown to form part of a sheet 13 wound in two convolutions 13a, 13b within the tube 16 and fastened to the inner tube wall along an edge 17 of the sheet. The sheet 13 may consist, for example, of cellulose acetate and may be fastened to the tube as well as to the blocks 14 by a suitable bonding agent, e. g. acetone. Sheet convolution 13a is cut away at 11 to form a clearance underneath the slots 11a, 11b for insertion of the bag straps below tongue 15; sheet convolution 13b, on the other

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hand, has a solid portion in registry with the cutouts 11 so as to provide a resilient backing for the bag straps in the same manner as does the sheet 3 in Fig. 1.

The locking elements or blocks 14 may be manually depressed, as illustrated in Fig. 9, to widen the spacing between these blocks and the tongues 15, thereby enabling introduction of the bag straps into the slots 11, 11b; when the blocks 14 are released, the straps are clamped between sheet convolution 13b and tongues 15 and will not, therefore, spontaneously dislodge themselves from the slots 11a, 11b. It may be mentioned that depressing a block 14 will somewhat compress the two convolutions of sheet 13, thereby causing the free edge 18 of the sheet to move clockwise with respect to the fixed edge 17 as viewed in Fig. 9; accordingly, some clockwise motion will also be imparted to the block 14 itself and the cutout 12 should provide sufficient clearance along the lower edge of this block, as viewed in Fig. 7, to allow for such movement.

It will be readily apparent that the configuration of the slots 11a, 11b in Fig. 7 may be made similar to the slot portions 7" in Figs. 3 and 6 if round instead of wide straps are to be used. It will also be understood that two separate, concentric sheets, or portions thereof, may be provided in lieu of the portions or convolutions 13a, 13b of a single sheet 13.

The bag carrier of the present invention is exceedingly simple in construction and, therefore, economical in manufacture. It is convenient in use, serving alternately as a neat container for a shopping bag or the like and as a carrying handle for it. It should be noted that the insert 3, 8, 8' or 13 has the dual function of locking the straps in position when the device is used as a carrier and of protecting the bag from contact with the slot edges when the device is employed as a container.

While the invention has been described in connection with certain preferred embodiments thereof, a number of changes and modifications of its broad principles and particularly of the slot configurations may occur to those skilled in the art without departing from its spirit and scope as defined in the appended claims.

I claim:

1. A carrier for a bag having a strap, comprising an open-ended tubular container provided with at least one generally transverse slot in its wall, said slot defining a projecting wall portion adapted to overlie a bag strap inserted in said slot, and a tubular insert displaceably hugging the inner wall surface of said container for releasably clamping said inserted strap in position within said slot.

2. A bag carrier according to claim 1, wherein each slot has the form of an H arranged in longitudinal direction of said wall portion.

3. A bag carrier according to claim 1, wherein each slot is hook-shaped and comprises a peripherally extending channel with a pair of bent-over end portions.

4. A bag carrier according to claim 1, wherein the container is a tube with an eccentric bore.

5. A bag carrier according to claim 1, wherein said insert is an open-ended tube frictionally fitting inside said container, said tube having at least one shallow recess displaceable between a position of alignment and a position of disalignment with said slot, said recess being so dimensioned as to facilitate insertion of said strap in said position of alignment.

6. A bag carrier according to claim 5, wherein said tube is rotatably held in said container.

7. A carrier for a bag having a strap, comprising an open-ended tube provided with at least one generally transverse slot in its wall, said slot defining an overhanging wall portion adapted to overlie a bag strap inserted in said slot, a flexible and resilient lining hugging the inner wall of the tube, and an end member for covering

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the open end of the tube, said lining exerting pressure upon said inserted strap.

8. A carrier for a bag having a strap, comprising an open-ended, tubular container provided with a peripheral wall portion having at least one slot, a tongue extending into said slot and defining a pair of longitudinal, parallel slot portions and a transverse channel interconnecting said slot portions, and a tubular insert displaceably hugging the inner wall surface of said container for releasably clamping a bag strap in place in said slot.

9. A bag carrier according to claim 8, wherein said wall portion is provided with a cutout adjacent the free end of said tongue and with a locking element resiliently supported on said container within said cutout.

10. A bag carrier according to claim 9, wherein said locking element and said tongue are provided with beveled, overlapping edges.

11. A bag carrier according to claim 9, wherein said strap-insert comprises a flexible sheet.

12. A bag carrier according to claim 11, wherein said sheet is wound in at least one complete convolution and at least part of an additional convolution within said container, said complete convolution supporting said locking element and having an aperture underneath said slot, said additional convolution having a solid portion underlying said aperture and said slot.

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13. A carrier for a bag having a strap, comprising an open-ended tube provided with at least one pair of peripherally spaced slots in its wall and with a cutout communicating with said slots on one side thereof, and a locking member resiliently supported on said tube wall within said cutout for substantially closing said one side of said slots in a normal position of said member, thereby retaining a bag strap within said slots.

14. A bag carrier according to claim 13, further including a resilient insert within said tube for releasably clamping said bag strap within said slots.

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