July 1, 1969 R. L. HART 3,452,922

DISPLAY TOTE BAG WITH HOOK HANDLE CLOSURE

Filed Sept. 27, 1967

FIG. 1

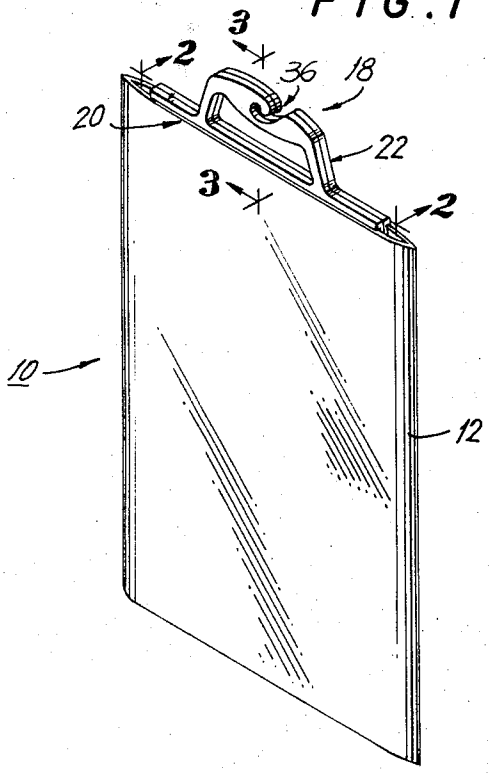


FIG. 3

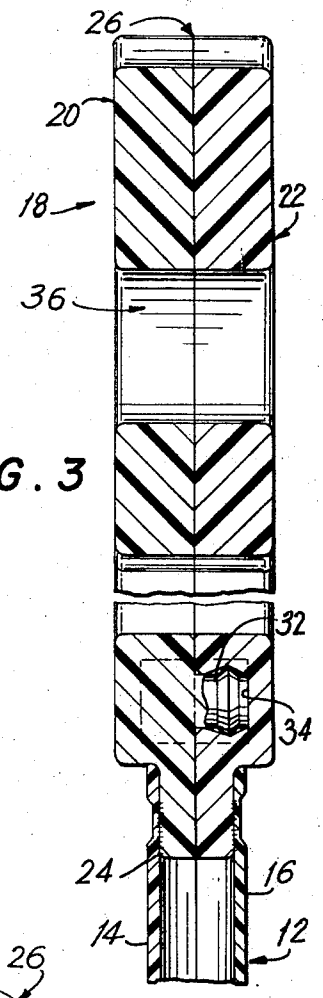
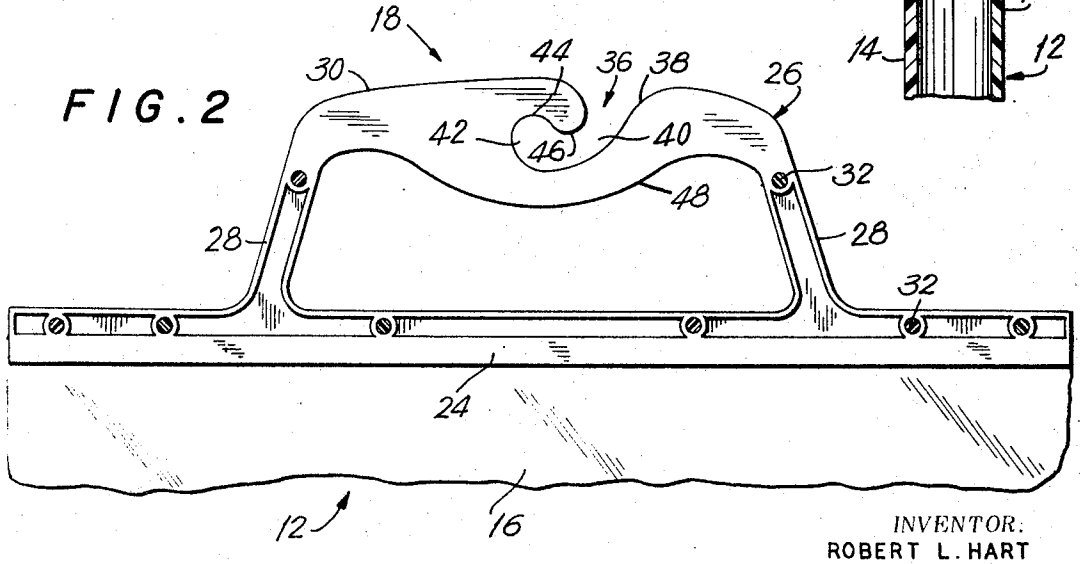


FIG. 2



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United States Patent Office 3,452,922 Patented July 1, 1969

3,452,922

DISPLAY TOTE BAG WITH HOOK HANDLE CLOSURE

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Filed Sept. 27, 1967, Ser. No. 670,972
Int. Cl. B65d 33/06
U.S. Cl. 229—54 3 Claims

ABSTRACT OF THE DISCLOSURE

A transparent plastic bag having an open mouth to opposite sides of which are fixed snap together halves of a closure device which is shaped to act as a bail handle and as a suspension means, the suspension means constituting an inclined J-shaped slot which enables the handle to present a substantially straight upper surface so as not to interfere with grasping of the handle.

BACKGROUND OF THE INVENTION

Field of the invention

A flexible transparent bag with an open mouth that is designed to be closed by snapping together of two halves that are permanently mounted on opposite sides of the mouth of the bag, the halves when coupled together functioning both as a tote handle and as a suspension device for display purposes.

Description of the prior art

In keeping with the modern concept of presenting maximum benefit to a consumer by providing a secondary use for packages in which merchandise is sold, it has been proposed heretofore to supply transparent flexible flat bags for containing merchandise to be displayed and sold. These bags had open mouths and included a handle closure device. The handle closure device constituted a pair of elements each of which was permanently engaged, as by heat sealing, to a different edge of a wall of the bag mouth. The two members were so fashioned that they could be quickly detachably coupled or uncoupled, whereby when they were coupled they effectively closed the mouth of the bag and thus retained merchandise therein and when they were uncoupled merchandise could be inserted into or withdrawn from the bag. The members, moreover, were shaped to include bails, the bails being elongated in the direction of the length of the mouth of the bag and squat in a direction parallel to the plane of the bag and perpendicular to the length of the mouth. Hence, the bag could be carried about with the original merchandise in it as well as displayed with the original merchandise and could, after withdrawal of the original merchandise, be used as a tote bag, i.e., as a general purpose or convenience bag, to place in and carry about any articles that the user might desire to insert therein, e.g., as a shopping bag, beach bag or cosmetic bag.

Although articles of the foregoing type have been widely and favorably accepted, they are subject to a serious drawback which arises in connection with their use for merchandising purposes. It has been customary for years to so arrange merchandise that it can be removed from a display by purchasers and carried to a check-out counter. At the same time the merchandise must be displayed to its best advantage. Some retailers display merchandise on open counters. However, this limits the number of articles to which direct access is afforded since the merchandise packages are stacked on one another. Hence, many retailers have turned to an alternate method of displaying merchandise for sale which consists in bagging the merchandise and providing the

bag with a suspension means that enables the merchandise to be hung from an approximately horizontal display rod, for instance, a rod which extends away from a wall fixture or from a pegboard.

Bags having combined handles and closures seemingly are suitable for such suspension inasmuch as the bails provide openings which can be threaded on the display rods. However, in practice this method of display and offer for sale has not proven to be satisfactory. For one thing, the bail is elongated in the direction of the bag mouth so that the bail tends to be displaced away from a symmetrical suspension position causing the merchandise to be skewed or cocked and hence disarrayed. Moreover, a more serious disadvantage arises when the merchandise displayed varies in size or color, although being of the same type. This disadvantage becomes apparent when one considers that where all of the merchandise thus displayed is of the same size, color, type, etc. a plurality of like articles suspended from a rod can be arranged in any order, inasmuch as the front item, being no different from the items in back of it, will be the one which the purchaser will detach from the rod and carry to the check-out counter. But when the articles displayed are of the same general character but differ in detail, the problem becomes apparent. For instance, supposing that there are several shirts thus displayed, the shirts all being of the same size, but different in color, then the prospective purchaser may wish to obtain a shirt which is not the front shirt on the rod. Such purchaser will have to pull off all of the shirts in front of the desired one, then take off the desired shirt in its package, and, if the purchaser is a neat person, will have to thread back all of the unwanted shirts onto the rod. The difficulty involved in performing this operation is sufficient to possibly prevent a prospective purchaser from making a point-of-sale selection.

Nor would this drawback be cured by adding to the bail a hook which extends upwardly from the top reach of the handle because this hook would prevent the handle from being grasped in a comfortable manner when the purchaser used the handle to carry the bag about, either as a prime sale merchandise container, or for its secondary use as an after-sale tote container.

SUMMARY OF THE INVENTION

The present invention seeks to provide an improved handle and closure device for a tote bag wherein the handle and closure device also serves the function of a retail display suspension means of the hook type, i.e., a suspension means which is readily detachable from a hanger, such as a hanger rod, but wherein the suspension means does not protrude from the upper reach of the bail, thereby enabling the bail to be comfortably grasped in an ordinary manner as a handle.

Accordingly, it is an object of the present invention to provide a display tote bag with hook handle closure device which includes a new and improved suspension means that does not protrude from the upper reach of said device.

It is another object of the present invention to provide an article of the character described wherein the suspension means is added without requiring incorporation of any separate parts and necessitating merely a minor change in the mold for the handle closure device.

It is another object of the present invention to provide an article of the character described which is simple and effective in operation, particularly as a suspension means.

It is another object of the present invention to provide an article of the character described which constitutes relatively few and simple parts and can be made by 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 device hereinafter described and of which the scope of application will be indicated in the appended claims.

Brief description of the drawings

In the accompanying drawings in which is shown one of the various possible embodiments of the invention,

FIG. 1 is a perspective view of an article embodying the present invention; and

FIGS. 2 and 3 are enlarged fragmentary sectional views taken substantially along the lines 2—2 and 3—3, respectively, of FIG. 1, the scale of enlargement of FIG. 3 being substantially greater than that of FIG. 2.

Description of the preferred embodiment

Referring now in detail to the drawings, the reference numeral **10** denotes an article embodying the present invention.

One of the components of the article is a flat tote bag **12**. The bag is flexible and pellucid, being made of any suitable sheet material having these characteristics. For example, the bag can be made of cellophane, cellulose acetate or polyethylene, and the material of the bag is thermoplastic, or if the material is not thermoplastic, is provided with a coating of thermoplastic, so that when heat and pressure are applied to a surface of the bag, such surface will become sufficiently adhesive to be autogenously welded to an abutting surface of similar material. The bag is of the flat type, which is to say, it has a front wall **14** and an opposed rear wall **16** which are coextensive in area and which are joined along the side edges thereof by seams or folds. Usually, the bottom edge will consist of a fold and the side edges will consist of seams where said edges are heat sealed to one another. The top edges of the bag, which form the mouth thereof, are not directly connected to one another, except at the sides of the bag and therefore the bag is considered to have an open top mouth.

The mouth is arranged to be closed by a hook handle closure device **18** which has a triple function, already indicated heretofore. Thus, said device **18** operates to selectively close the mouth of the bag, or to open the mouth of the bag, if previously closed. The device when closed also serves as a tote handle, providing a carry about bail for that purpose. Finally, the device **18** when closed serves as a suspension means to enable individual bags to be readily connected to or detached from a hanger or rod regardless of the location of the bag in a series of such bags on the hanger or rod, i.e., without having to slide the bag over the tip of the rod.

Specifically, the device **18** is composed of two members **20, 22**, the number **20** being at the front and the member **22** being at the rear of the device. The two members are mirror images of one another in a front-to-back direction, that is to say, they are complementary and when coupled together mutually form the device **18**. The two members are coextensive in area and are registered when coupled. In view of the foregoing, only one of the members will be described in detail. However, there are differences between the two members so far as their detachable coupling means are concerned, and these will be described subsequently.

In particular, each of the members **20, 22** includes an elongated straight strip **24**. The length of the strip is less than the length of the mouth of the bag. For a reason which subsequently will become clear, the members **20, 22** are made of a flexible material. Moreover, they are made of a material which can be heat sealed to the material of the bag **12**. Hence, they are either made of a thermoplastic material or of a material coated with a thermoplastic layer which can be heat sealed to the walls **14, 16**. Preferably, the members **20, 22** and the bag are made from polyethylene.

The strips **24** of the two members **20, 22** are located inside the mouth of the bag (see FIG. 3) with their outer faces presented to and abutting against the inner faces of the top edges of the bag mouth. The strips **24** are permanently and firmly secured to the inner surfaces of the bag mouth, as by adhesion or mechanical means, but preferably by heat welded seams, the same being created by the application of heat and pressure to clamping bars which force the strip and walls of the bag mouth together during manufacture.

Each strip **24** has an upwardly extending bail **26** centrally located thereon and unitary therewith. The bail consists of a pair of spaced substantially vertical side reaches **28** joined at their upper ends by a substantially horizontal top reach **30**, so that the bail of each member essentially is in the form of an inverted squat U and together with the included portion of the strip between the two vertical reaches forms an opening that is elongated in the direction of the bag mouth and functions as a tote handle when the members **20, 22** are coupled. More specifically, the bails of the two members **20, 22** which are in face-to-face abutting contact, being so held therein a manner soon to be described, conjointly form the handle. Each bail per se is capable of functioning as a handle. However, each bail and its associated strip is attached only to one wall of the mouth of the bag. Hence, the two bails must be in abutment so as to efficiently function as a handle for the entire bag. Moreover, the abutment of the two bails and of the strips stiffens the flexible material so that it is firmer and serves more efficiently as a handle and also operates as a closure for the bag.

In order to render the two members **20, 22** capable of quick and easy engagement and disengagement (coupling and uncoupling), suitable detachable engaging means is provided. Said means constitutes a series of studs **32** on one of the members **20**. Eight such studs are included in the article shown (see FIG. 2). There are two studs on the strip **24** between the inwardly inclined vertical reaches **28**. There are four more studs on the strip **20**, two on the outer side of each vertical reach **28**. There are, moreover, two studs on the bail **26**, one adjacent the top end of each of the vertical reaches **28**. More or less studs may be provided depending upon the size of the bag. Usually, a bag with a longer mouth will have more studs and a bag with a shorter mouth less studs. Similarly, a larger bag which is designed to carry more merchandise preferably will have more studs on its member **20** than a smaller bag designed to carry lighter merchandise.

To conserve the amount of plastic employed each of the strips **24** and vertical reaches **28** is grooved on its inner face. The top reach **30** is of full thickness to increase its rigidity. The mouths of the grooves face one another (see FIG. 3). It may be mentioned that the studs **32** need not all be in any single one of the members. Some of the studs may be provided on one member and other studs on the other member.

The member other than the one having any given stud thereon has facing the stud in a registered position (when the members **20, 22** are registered) a mating socket **34**. The sockets are shaped and dimensioned to frictionally receive and hold the matching studs. Preferably, in order to prevent accidental disengagement of studs and sockets, each stud is provided with a slightly enlarged head and each socket is provided with a mating annular groove to receive the head. The radial height of the enlargement (rib) on the head and the radial depth of the groove are quite slight, in the order of a few thousandths of an inch, so that taking into account the flexibility of the material, a stud can be forced into the socket, the walls of the socket yielding slightly as this transpires, and until the enlarged head snaps into the mating groove. Similarly, due to the flexibility of the material, a stud can be deliberately and forcefully withdrawn from its affiliated socket. The action to engage or disengage a stud and

socket is accompanied by a slight, sudden movement of the two parts as the head enters or leaves the groove. Hence, the engagement of the two is properly considered as a "snapping" one. When the two members are thus interengaged through the use of the studs and sockets, the inner surfaces of the members **20**, **22** abut against one another, except for the bases of the grooves located in said members along the bails and strips, as shown in FIG. 3. The studs and sockets constitute mutually, readily interengageable and disengageable halves of detachable coupling means.

Preferably, the studs and sockets are located within the grooves so as not to require any additional thickness in the members, and not to provide external protuberances or depressions.

Because of the flexibility of the members **20**, **22**, it is possible to flex the walls of the bag after the members are uncoupled from one another and the mouth of the bag is opened, so that the members do not interfere to any substantial extent with insertions or withdrawal of merchandise into or from the bag as they would if the members were stiff. Moreover, this flexibility permits the strips **24** to extend for substantially the full length of the bag mouth and still enable the bag mouth to be opened wide, which would not be possible if the strips were stiff. When said members are coupled the interengaged strips function to hold the mouth of the bag closed.

Moreover, when the two members are joined to one another, the bails acting together present a joint rigidity sufficiently great to enable them to be used as a handle for carrying the bag about or for other purposes. The handle is essentially flat and in the plane of the flat bag.

To permit the bail **26** further to act as a suspension means, but without interfering with grasping of the top reach for comfortable carrying about of the bag, the horizontal reach **30** of each of the bails **26** is pursuant to the present invention, formed with an inclined J-slot **36**. The mouth **38** of the slot is located at the top edge of the horizontal reach **30** forming an entrance opening to the slot. The shank **40** of the slot extends downwardly and centrally from the mouth at an angle to the upper edge of the horizontal reach. A suitable angle is about 45°. Hence, the shank extends both downwardly and laterally into the horizontal reach. The mouth **38** is offset from the center of the bail **26** for a reason which soon will be apparent. The shank **40** terminates at its inner end remote from the mouth **38** in an upwardly inclined base **42**, the center **44** of the tip of which is at the center of the horizontal reach **30**. In other words, the J-shaped slot is characterized by its downwardly and centrally extending shank and by its termination in an upwardly and centrally extending base, the center of the tip of which is at the center of the bail. Due to the upward inclination of the base of the J-slot, a lobe **46** is formed which extends downwardly and outwardly toward the shank **40**, the tip of the lobe being below the tip of the base of the J-slot. Thus, tracing out once again a path through the J-slot from the mouth **38** inwardly, the path first goes downwardly and centrally and then upwardly and centrally.

The lower edge **48** of the horizontal reach is formed with a central bulge to accommodate the downward extension of the shank of the J-slot. The bulge is symmetrical with respect to the center of the bail so as to form a comfortable grasping surface for the curled end pads of a user's fingers.

To employ the registered J-slots of the coupled members **20**, **22** as a suspension means is quite simple. The mouths of the combined slots are threaded over a hanger rod so as to cause the hanger rod to pass down into the combined shank of the slots, and then up into the combined retroverted tips thereof. Then, when the bag is left to hang from the rod, the rod will slide to the combined centers **44**. Any sidewise displacing movement will not disengage the suspension means from the hanger because the combined lobes **46** prevents sidewise movement of the hanger out of the slots.

It will be observed that this suspension means does not protrude above the top edge of the bail and hence does not interfere with natural firm convenient manual grasping of the bail by the user.

It thus will be seen that there is provided a device which achieves the several objects of the 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 described or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

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

1. A display tote bag with a hook handle closure device, a group of said bags being adapted to display by hanging from a rod merchandise of the same general character but differing in details such as size, color and type, said bag comprising a pair of opposed thin flexible pellucid walls of sheet material joined to one another at their side and bottom edges and having an open top mouth, said hook handle closure device comprising a pair of complementary members of flexible material, each including a closure strip extending along a different edge of the mouth of the bag and permanently joined thereto, each strip having a bail unitary therewith and extending upwardly therefrom and symmetrically disposed with respect to the center of the mouth of the bag, each bail including side reaches and a top reach, the top reach having a substantially straight top edge, said members having mutually readily interengageable and disengageable halves of detachable coupling means, said bails when the two members are joined together functioning as a handle for the bag, and in the top reach of each bail an inclined J-slot having an open mouth at the top edge of the top reach, a shank which is inclined downwardly and centrally, and a base which is inclined upwardly and centrally from the bottom of the shank, the tip of the base being located at the center of the top reach, said J-slots being registered when the members are interengaged, whereby the two J-slots then form a suspension means to or from which the closure can be engaged or disengaged from a hanger rod by movement of the rod into or out of the slot through the open mouth thereof without the necessity of sliding the bag along the rod.

2. A display tote bag with a hook handle closure device as set forth in claim **1** wherein the shanks are inclined at an angle of about 45° to the upper edges of the top reaches.

3. A display tote bag with a hook handle closure device as set forth in claim **1** wherein the lower edge of the top reach of the bail has a centrally downwardly extending bulge to form a comfortable grasping surface for a user.

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