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Jacobs et al.

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[54] **NEWSPAPER DELIVERY MEANS AND METHOD**

[75] Inventors: **John P. Jacobs; Melvin F. Jacobs,** both of Hastings, Mich.

[73] Assignee: **J-Ad Graphics Inc.,** Hastings, Mich.

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[52] **U.S. Cl.** ..... **232/1 R;** 248/95; 248/97

[51] **Int. Cl.²** **B65B 67/12**

[58] **Field of Search** ..... 232/1 R; 211/57, 53; 248/97, 95, 100; 150/42, 49, 15, 3

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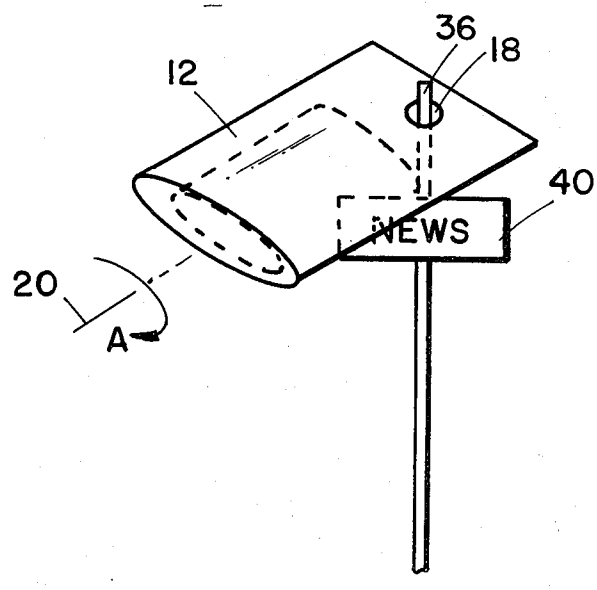
Primary Examiner—Roy D. Frazier
Assistant Examiner—Peter A. Aschenbrenner
Attorney, Agent, or Firm—Price, Heneveld, Huizenga & Cooper

[57] **ABSTRACT**

A method and apparatus for delivering printed material wherein the apparatus includes a printed material carrier comprising a bag and a stanchion operable for engaging a ground surface and supporting the bag above the ground surface. The stanchion includes an upwardly projecting rod operable to engage apertures within the bag at one end thereof. Printed material to be delivered is retained within the interior of the bag. The bag and printed material contents normally hang downwardly against a crosspiece transversely connected to the stanchion rod. The bag is provided with at least a 180° twist about the longitudinal axis while maintaining the aperture thereof in a stationary posture. The crosspiece further serves to provide torque stabilization for the bag in this twisted posture.

The method includes the steps of inserting printed material within the interior of an open mouth bag, aligning apertures of the bag with the free end of an upright rod portion of a stanchion, sliding the bag down the rod, twisting the bag and printed material contents about the longitudinal axis of the bag while preventing the aperture from twisting and vertically supporting and torque stabilizing the bag by a member connected to the rod in a posture above the ground surface.

2 Claims, 6 Drawing Figures



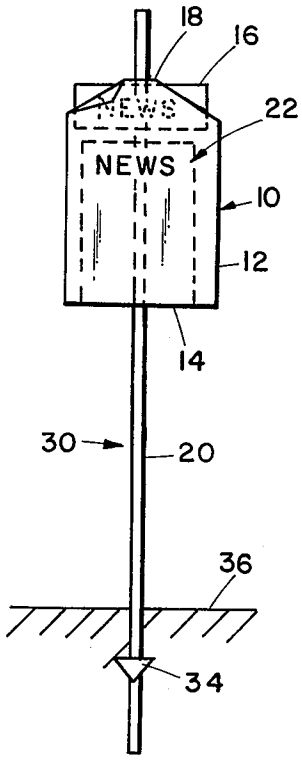


FIG 1

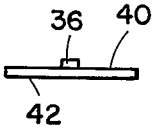


FIG 3

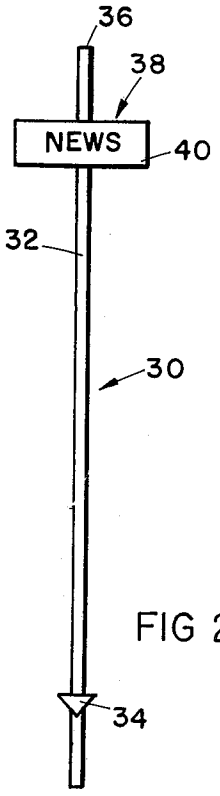


FIG 2

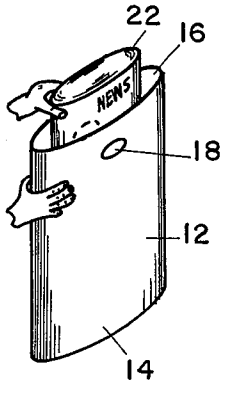


FIG 4

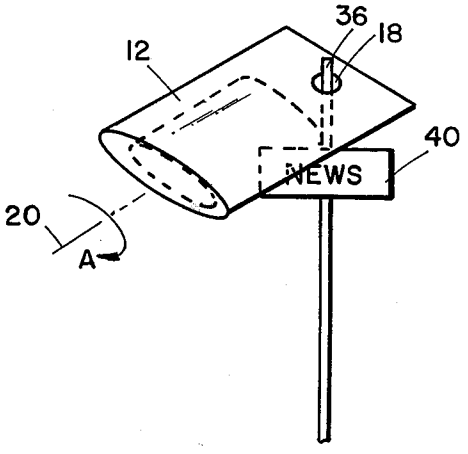


FIG 5

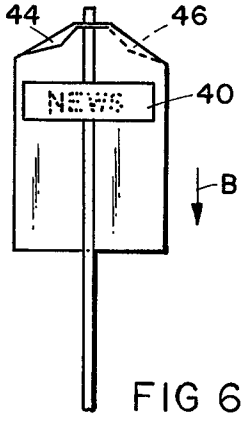


FIG 6

NEWSPAPER DELIVERY MEANS AND METHOD

BACKGROUND OF THE INVENTION

This invention relates to a method and apparatus for delivering materials to individual residences. More particularly, the invention pertains to a method and apparatus for delivering printed material such as newspapers to individual residences.

In the past distributors of printed materials, such as newspapers to individual residences along a roadway, utilized the homeowner's conventional mail box. Such mail box structures however tend to vary widely in design due at least in part to individual tastes and preferences. Most of these units however, are provided with a lid or door which must be opened and closed during each delivery. This opening and closing operation along with encountering a wide variety of designs and access locations tended to impede the delivery process which in some instances may entail **300** to **400** individual residences. Further, the government postal service objects to such use of these mail boxes.

Paper distributors in seeking a means for minimizing this bottleneck and thus facilitating paper deliveries to individual residences designed tubular delivery units having one closed end and one end continuously open. Such devices are mounted upon an upright member such as a wooden or metal post and are positioned at the edge of a roadway. According to conventional practice, a newspaper carrier may then drive along the open mail receiving tubes and deposit a rolled or folded newspaper rapidly within the units.

While cylindrical tubes of the foregoing design have achieved significant commercial utilization over the past few years, room for significant improvement remains. In this connection, previously known mail delivery tubes are frequently constructed of plastic and, thus, subject to vandalism and breakage. These units are costly to initially install and replace. Still further, tubular mail receiving sleeves tend to be somewhat visually displeasing and clutter a roadway particularly along densely populated areas.

The cost of installing these tubes could be significantly reduced in rural areas if they could be mounted on the same post as that used for the mail box. This expedient, however, is impractical because it necessitates their being located below the mail box at a height which is inaccessible when delivery is made by passenger car or truck.

Accordingly, it would be highly advantageous to provide a simplified method and apparatus for delivering printed newsmatter which would be easy to manufacture, initially erect and subsequently replace, if necessary. Still further, it would be desirable to provide a system relatively small in size which would tend to visually blend in with the surrounding environment.

Another difficulty often associated with the sleeve type paper delivery units is the propensity of the units to receive and collect moisture and dust thus soiling and/or soaking the printed material. Still further, in many instances, it may be difficult or impossible for a resident to accurately determine if a paper has been delivered unless a trip is made to the paper delivery unit. This is very irritating, particularly in bad weather.

It would, therefore, be advantageous to provide a method and apparatus for delivering printed news materials wherein the tendency for the papers to collect dust and moisture would be minimized. Additionally, it would be highly desirable to provide a delivery system wherein a homeowner could accurately visually determine at a considerable distance from the delivery unit whether a paper had been delivered.

OBJECTS AND SUMMARY OF THE INVENTION

Objects of the Invention

It is, therefore, a general object of the invention to provide a novel method and apparatus for delivering printed material which will obviate or minimize problems of the type previously described.

It is a particular object of the invention to provide a novel method and apparatus for delivering printed material which is relatively uncomplicated in design so as to be readily and economically manufactured.

It is a further object of the invention to provide a novel method and apparatus for delivering printed material which is relatively small in size and visually unobtrusive even in densely populated regions.

It is still a further object of the invention to provide a novel method and apparatus for delivering printed material which may be readily erected and replaced in the event of excessive wear or damage.

It is another object of the invention to provide a novel method and apparatus for delivering printed material wherein the tendency of the printed material to be soiled by dirt or soaked with moisture is minimized.

It is yet another object of the invention to provide a novel method and apparatus for delivering printed material which facilitates a rapid delivery system and achieves many of the desirable features of conventional open mail delivery tubes while concomitantly eliminating or minimizing the undesirable aspects of such devices.

It is still another object of the invention to provide a novel method and apparatus for delivering printed materials to individual residences wherein the delivery of a newspaper or the like may be readily and accurately visually ascertained even from a distance.

BRIEF SUMMARY OF THE INVENTION

A method and apparatus for delivering printed material according to a preferred embodiment of the invention, operable to achieve at least some of the foregoing objects, includes a printed material carrier comprising a bag and a stanchion operable for engaging a ground surface and supporting the bag above the ground surface. The stanchion includes an upwardly projecting top for receiving thereover an apertured moisture resistant, flexible article container which by twisting can be made weather tight. The stanchion includes a crosspiece to hold the container against twisting back to its original condition and to stabilize and support it against wind. The invention also includes the method of accomplishing the delivery of the printed material.

BRIEF DESCRIPTION OF THE DRAWINGS

Other objects and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings wherein:

FIG. **1** is an oblique view of apparatus for delivering printed material such as newspapers according to a preferred embodiment of the invention;

FIG. **2** is a front elevation view of a stanchion utilized to support a printed material carrier according to a preferred embodiment of the invention;

FIG. 3 is a plan view of the stanchion disclosed in FIG. 2; and

FIGS. 4–6 schematically disclose in seriatim a method for packaging and delivering printed material according to a preferred embodiment of the invention including inserting the printed material in a bag, positioning the bag upon a free end of a stanchion, twisting the bag at least 180° and lowering the bag to a resting posture upon a torque stabilizing cross member connected to the stanchion.

DETAILED DESCRIPTION

Structure

Referring now to the drawings wherein like numerals are utilized to designate like parts, and more particularly to FIGS. 1–3 thereof, there will be seen an apparatus according to a preferred embodiment of the invention.

The apparatus includes a printed material carrier or envelope **10** comprising a generally rectangular bag **12** having a closed bottom end **14** and an open upper end **16.** An aperture **18** is fashioned through both sides of the bag **12** and normal to a general longitudinally extending axis **20** of the bag **12** adjacent the upper end thereof (FIG. **4**).

The printed material carrier **10** is of the type designed to conveniently carry a folded newspaper **22,** magazine or the like.

The bag **12** comprising the printed material carrier may be composed of a stretchable paper composition but preferably is comprised of a thin film of transparent polymeric composition having properties of dust and moisture resistance in combination with sufficient strength to support a folded paper or the like.

The printed material carrier is designed to be received upon and supported by a stanchion **30** which, as specifically detailed in FIGS. **2** and **3,** includes a generally straight upstanding rod **32** having a generally triangular ground engaging member **34** affixed at a lower end thereof. The member **34,** in an operative mode, is inserted beneath the ground surface **36** (note FIG. **1**) to stabilize the stanchion in an upright posture.

The rod **32** is preferably circular in cross section as disclosed in FIG. **3** and serves inter alia to carry plate **40** affixed thereto.

Secured to the front on the rod is a crosspiece which in the preferred embodiment is a rectangular plate **40.** The plate **40** is permanently secured to the rod by any suitable means such as welding. The plate **40** is located sufficiently below the top of the rod **30** to prevent the envelope **10,** once loaded on the post, from being blown off, as by wind. It is located high enough above the ground that the top of the post is conveniently positioned for the person delivering the loaded envelopes. This will be governed by the mode of delivery, as for example, whether by bicycle, passenger car or truck. The height of the plate **40** above the ground is determined by the depth to which the rod is driven into the ground.

Plate **40** serves a plurality of functions and in a first instance serves as a stop, limiting the descent of the printed material carrier downwardly along the rod **32.** Further the plate **40** serves as a torque stabilization member for the printed material carrier when the carrier is rotated about the central axis **20** thereof at least **180°** in a manner to be discussed in detail hereinafter. It also holds the carrier against being twisted and thrashed around by wind. Still further, the planar surface **42** of the rectangular plate **40** may be advantageously utilized to carry advertsing indicia, the identity of the publication or the like desired.

Method of Operation

With reference now particularly to FIGS. **4, 5** and **6,** there will be seen a schematic disclosure of a method for delivering printed material according to a preferred embodiment of the invention. In this connection and with particular reference to FIG. **4,** an initial step entails inserting printed material, such as a newspaper or magazine through the open end of the envelope.

Once the printed material such as a newspaper **22** is inserted into the envelope **12,** the apertures **18** are aligned with the axis of the rod **32** and inserted over the free end **36** thereof. When the envelope has passed down the rod **32** to seat against the plate **40,** the envelope **12** is rotated **180°** about its central longitudinal axis **20** as indicated by directional arrow A in FIG. **5.** Rotation of the bag **12** at least **180°** about its central longitudinal axis **20,** while maintaining the apertures **18,** from concomitantly rotating, twists or consolidates the areas of the polymeric bag peripherally extending about the apertures in a rolled shape. This action strengthens the area of the envelope in the area wrapped about the rod, thus, reinforcing the envelope against ripping and tearing as the result of wind. It also reinforces this area of the envelope against excessive stretching as a result of the concentration of load immediately about the rod. Further, it causes the envelope at its point of engagement with the rod to wrap tightly about the rod, further securing it against the effects of wind.

Further, and as particularly illustrated in FIG. **6,** the corners **44** and **46** of the upper end **16** of the envelope simultaneously fold downwardly to effectively close the top of the envelope sealing it against the entry of moisture and dirt. This is important when delivery is made in rainy or snowy weather. It also protects the contents from being splashed with water, mud or slush by passing vehicles. This solves one of the serious disadvantages of the conventional tubular delivery system now in use. As a result of the twisting of the top of the envelope about its central vertical axis **20,** the corners fold in opposite directions, that is, one will fold forwardly and the other rearwardly.

The envelope having been twisted to lock it to the rod and close its top is released to rest against the plate **40** (note directional arrow B in FIG. **6**). In this posture, the upper most end of the envelope and the printed material inserted therein lies against the generally planar surface **42** of the plate **40.** The plate **40** then serves as a torque stabilizer to prevent the envelope from untwisting and to prevent the wind from twisting it further and possibly rupturing it where it engages the rod.

While the prior discussion has been directed to an open mouth twisted bag to provide a dust and moisture barrier, in some instances it may be preferable to seal the open end of the envelope before mounting it on the rod to further provide a dust and moisture barrier for the printed matter. However, when this is done, the envelope should be twisted when inserted on the rod to obtain the reinforcing effect.

From the foregoing detailed description, several distinct advantages of the method and apparatus for delivering printed material according to a preferred embodiment of the invention have been specifically deliniated.

In sum, however, it will be appreciated that the subject invention provides a relatively small, uncomplicated method and apparatus for delivering printed material which is inexpensive and readily manufactured. Its original cost is only a fraction of that of the conventional tube. Moreover, its installation is also substantially less than that of the tube. Moreover, the relatively small size of the upright stanchion visually tends to be unobtrusive to the surrounding environment. The subject stanchion is easily erected and replaceable if necessary.

By twisting the open end of the envelope, in a single step the open end is closed against weather and the envelope reinforced about its point of attachment to the rod. By using the upright portion of the rod to secure the envelope, the twisted portion surrounding the rod is held at an angle out of the plane of the remainder of the envelope and toward the plate **40**. This biases the envelope against the plate and rod thus positively securing it against being untwisted and torn from the rod by wind. The customer can pick up his paper simply by tipping the loaded envelope sufficiently to clear the plate, rotating it **180°** and lifting it off the post. The customer benefits from receipt of his publication in undamaged condition and the fact that he can readily determine whether or not delivery has been made without having to walk out to the delivery point for this purpose. Whereas the printed material carrier is affixed to the extension of the stanchion, delivery of a paper may be readily detected by a homeowner, even at a considerable distance.

Still further, the foregoing advantages are achieved while maintaining the central objective of providing a method and apparatus to facilitate the delivery from an automobile or the like of a newspaper at individual residences along a roadway.

While the invention has been described with reference to preferred embodiments, it will be appreciated by those skilled in the art that additions, deletions, modifications and substitutions, or other changes not specifically described, may be made which will fall within the purview of the appended claims.

The embodiment of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for delivering printed material comprising the steps of:

inserting the printed material within the interior of an open mouth bag made of a thin film of polymeric material and having an aperture extending through each side of said bag adjacent the open mouth end thereof;

aligning the apertures of said bag with the free end of an upright rod portion of a stanchion operable to support the bag and printed material contents above a ground surface, said apertures being of generally the same size as the cross section of said rod portion of said stanchion;

sliding the bag down on the rod with the rod engaging said bag through said apertures;

twisting the bag and contents about the longitudinal axis of the bag while preventing the apertures from twisting to cause the corners of the bag on each side of the apertures to fold downwardly so as to close the open end of said bag and prevent the entrance of dirt and moisture; and

vertically supporting and torque stabilizing said twisted bag by a member connected to said rod in a laterally extending posture above the ground surface.

2. Apparatus for delivering printed material, said apparatus comprising:

a stanchion having a straight vertical post;

a ground engaging stabilizer member adjacent one end;

a cross member rigidly secured to said post adjacent to but spaced from the other end thereof;

said crosspiece extending laterally from each side of said post;

a printed material receiving envelope made of a thin film of a polymeric material and having an open end;

said envelope adjacent said open end, having an aperture extending through both sides and centered between the edges thereof for receiving said other end of said post therethrough to hang said envelope and its contents therefrom, said apertures being of generally the same size as the cross section of said vertical post;

said envelope after being loaded with printed material being secured to said post by passing said other end of said post through said holes and twisted **180°** about an axis extending lengthwise of said envelope and intersecting said holes to fold over the portion of said envelope adjacent said open end and to fold the adjacent corners thereof downwardly in opposite directions to close said envelope against the entry of weather and dirt;

said twisted portion of said envelope being bent out of the plane of the remainder of said envelope to bias said envelope against said crosspiece whereby said crosspiece holds said twisted envelope against untwisting.

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