This invention relates to an improvement in article attaching device and deals particularly with a means of attaching a small article to a paper board panel and to the method of operating the same.

In many instances it has been found desirable to attach a small article to a paper board panel for display purposes. In some instances this panel may comprise one of the closing flaps of the paper board carton. Many ways have been devised for forming such an attachment. It is an object of the present invention to provide a simple and inexpensive means of providing the attachment and in a simple method of operating the structure.

A feature of the present invention resides in the provision of a paper board panel such as the closing flap of a carton or the like which is cut and creased to provide a tongue portion located near the center of the panel. The panel is folded back on itself leaving the tongue projecting from the line of fold. A piece of wrapping material such as cellophane or the like is attached to the outer portion of the folded panel to overlie the projecting tongue. This outer portion is folded back into the plane of the remainder of the panel, the wrapping sheet will wrap about a small article overlying the projecting tongue thereby providing a transparent end enclosure attaching the article to the panel.

A feature of the present invention resides in the simplicity of operation. The wrapping sheet may be attached to the carton during the formation thereof so as to overlie a portion of the interior surface of the carton. A U-shaped cut is provided in one of the carton closing flaps, the base of the cut extending parallel to the line of fold connecting this flap to a wall of the carton. The carton may either have top closing flaps that are hinged to all of the side walls of the carton or may be a tuck end carton of the type shown in FIG. 1, 2, 3, 4, 5 and 6 which top closing flaps are hinged to all of the side walls of the carton or may be a tuck end carton of the type shown in the drawings. The carton B is shown as including a front wall panel 10, a rear wall panel 11, and parallel side wall panels 12 and 13. Tuck flaps 14 and 15 are hingedly connected to the upper edges of the side walls 12 and 13 respectively. A cover panel 16 is hingedly connected to the upper edge of the rear wall 11. The cover flap 16 is provided with a tuck flap 17 hingedly connected thereto along a fold line 19. When the carton B is closed, the two flaps 14 and 15 are folded down into a common plane and the cover flap 16 overlies the flaps 15 and 16 and the tuck flap 17 tucks between the forward edges of the flaps 14 and 15 and the inner surface of the front wall 10 as shown in FIG. 1.

A U-shaped cut line 20 is provided in the center portion of the top panel 16, this U-shaped cut line including a base portion 21 which is generally parallel to the line of fold connecting the cover panel 16 to the rear panel 11 and a pair of spaced substantially parallel end cut lines 22 communicating with the ends of the base cut line 21 and extending at substantially right angles thereto. In the particular arrangement illustrated, the ends of the U-shaped cut line 20 are substantially midway between the front and rear edges of the top panel 16. Aligned fold lines 23 and 24 extend from opposite ends of the cut line 20 to the side edges 25 and 27 of the top panel 16. As a result of this arrangement, the outer portion 26 of the top panel 16 which supports the tuck flap 17 may be folded to 180° to lie flat upon the inner top panel section 27. In other words, the aligned fold lines 23 and 24, together with the U-shaped cut line 20 separate the top panel 16 into an inner section 27 which is attached to the rear wall 11 and an outer section 26 to which the tuck flap 17 is secured. A lining or wrapping sheet 29 is foldably connected to the outer section 26 of the top panel 16, preferably along a line of adhesion indicated at 30 on the inner or outer surface of the top panel. In the event the ends of the article A are to be enclosed, the wrapping sheet 29 is somewhat wider than the length of the article A although this width may vary depending upon whether it is desired merely to provide a band around the article or to completely enclose it. The wrapping sheet 29 is preferably narrower than the cover panel 16 and the rear wall 11 to which it is attached so that this sheet may be adhered to the inner surface of the blank before the glue seams of the blank is adhered. As usual practice, one of the wall panels is provided with a glue flap which overlaps and is adhered to the adjoining panel to form the tubular wall structure. The carton is thus normally furnished to the consumer in flat form.

The method of wrapping the article A is substantially as follows. The lower end of the carton B is usually closed first by any suitable means and the contents of the carton are then placed within the carton. The two flaps 14 and 15 are then folded down into a common plane and the top panel 16 is doubled back upon itself so that the two sections 26 and 27 are in surface contact. The sections are folded to partially overlap the flaps 14 and 15 in the position shown in FIGURES 3 and 4 of the drawings. While the article A must preferably be shorter than the distance between the cut lines 22, it may be wider to a slight extent than the length of the cut lines 22, although preferably the article A is no larger than the area defined by the U-shaped cut line. When the top panel has been folded in the manner described, the area 31 enclosed by the U-shaped cut line projects beyond the lines of fold 23 and 24 and the wrapping sheet 29 overlies the area 31 or at least a part of this area. The wrapping of the ar-
Article A is then accomplished by swinging the section 26 of the top panel 16 through 180° and into the plane of the connected section 27. As this takes place the wrapping sheet 29 is drawn beneath the article A and around the article. As the wrapping sheet 29 is attached to the under surface of the top panel 16, the adhered edge of the wrapping sheet as well as the opposite end thereof are completely beneath the top panel 16. Where the wrapping sheet 29 is wider than the length of the article wrap, the portions of the sheet projecting beyond the ends of the article A are drawn downwardly and extend through the slits formed by the cut lines 22. When both sections of the top panel are on substantially a common plane, the wrapping sheet is held in place by extending through the slit formed by the U-shaped cut line, this slit frictionally engaging the sheet securely enough to hold the article A firmly on top of the package. The wrapping sheet 29 is preferably transparent so that the contents of the wrapper or the article A may be viewed through this wrapper.

In accordance with the patent statutes I have described the principles of construction and operation of my article attaching means, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. An article attachment connecting an article to a paperboard panel, the article being of smaller dimensions than said panel, the panel including a U-shaped cut line having a base and spaced ends defining an area the size of the article, and aligned lines of fold connecting the ends of the cut line to opposite edges of said panel, and an article wrapping sheet secured to the under surface of the panel along a line generally parallel to the fold line and outwardly of the base of the U-shaped cut line, said article overlying the area of the panel defined by the cut line and said wrapping sheet extending around said article, the end of the wrapping sheet opposite the secured end extending through the cut line particularly across the base thereof.

2. The structure described in claim 1 and in which said wrapping sheet is wider than said cut line, the ends of the wrapping sheet extending through the ends of the U-shaped cut line.

3. The structure of claim 1 and including means for holding said panel substantially flat.

4. An article attachment connecting an article to a carton having a tubular body and closing flaps on one end thereof, one of said flaps having a U-shaped cut line therein including a base portion parallel to the line of fold connecting this flap to its side wall and including spaced end cuts, aligned fold lines parallel to said line of fold and extending from the ends of the U-shaped cut line to opposite edges of said one flap, the article being of smaller dimensions than the area defined by said U-shaped cut line, a wrapping sheet secured to the under surface of said one flap between said cut line and the free edge of said one flap which is parallel to said line of fold, said wrapping sheet extending through said U-shaped cut line, around said article overlying the area defined by said cut line, and back through said U-shaped cut line to terminate beneath said one flap.

5. The structure defined by claim 4 and including means holding said one flap in superimposed relation to the remaining of said closing flaps.

6. The method of attaching an article to a carton having a tubular body and closing flaps secured to an end thereof and foldable into superimposed relation one closing flap having a U-shaped cut line therein with the base of the cut line being parallel to the line of fold connecting said one flap to the tubular body, said one flap also having aligned fold lines connecting the ends of the cut line to opposite sides thereof, the article being of smaller dimensions than the area defined by said cut line, and including a flexible article covering sheet, the method consisting in folding said one flap along said aligned fold lines to move the outer portion of the flap over the inner portion thereof, attaching the covering sheet to the outer portion of said one flap, the covering sheet overlying the area defined by said cut line, placing the article on the portion of the covering sheet overlying the area defined by the cut line, and folding the outer portion of said one flap back into the plane of the inner portion of the one flap.

7. The method of claim 6 and including the further step of securing said one flap in superimposed relation to the remaining closing flaps.

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