Sept. 3, 1957 B. ROUS 2,805,033

CARTON DISPLAY HOLDER FOR CANS OR THE LIKE

Filed Nov. 18, 1954

FIG. 1.

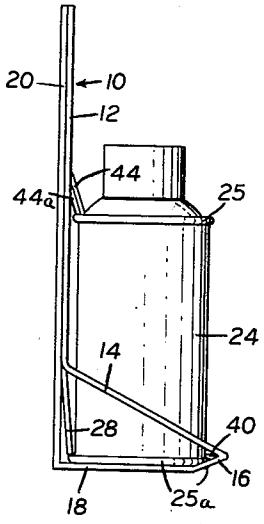


FIG. 2.

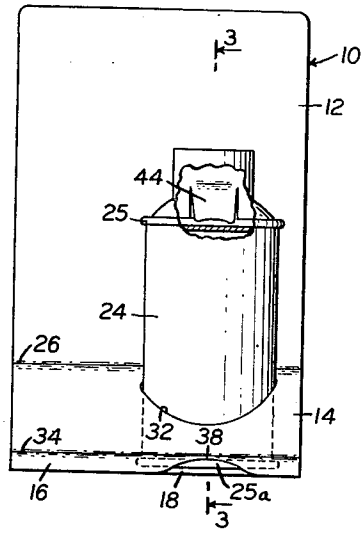


FIG. 3.

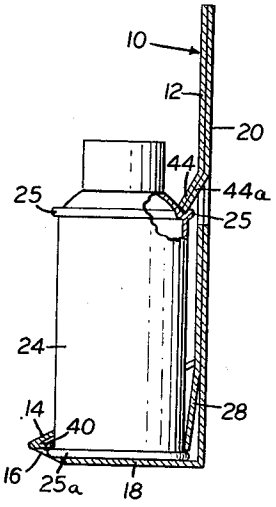


FIG. 4.

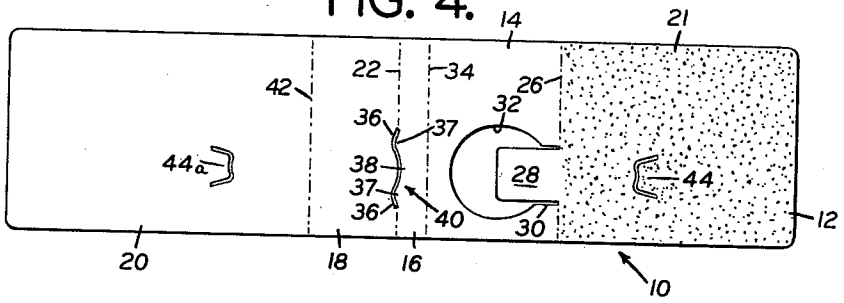


FIG. 5.

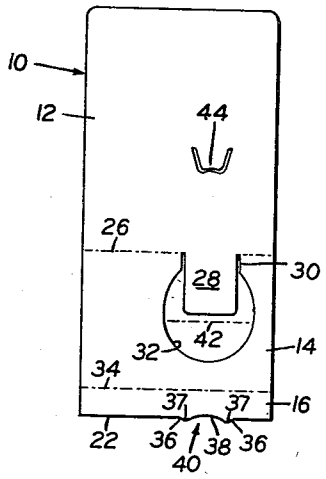
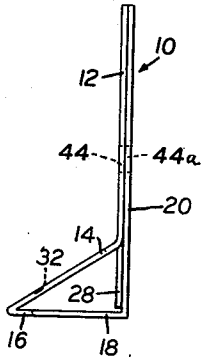


FIG. 6.



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CARTON DISPLAY HOLDER FOR CANS OR THE LIKE

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Application November 18, 1954, Serial No. 469,651

2 Claims. (Cl. 248—174)

This invention relates to improvements in display cards for cans and the like, and in particular relates to an improved display card which may be also used as a shipper.

The display card in accordance with this invention is adapted to be formed from a unitary blank of cardboard or the like which is cut, scored, folded and glued to form the completed display card, in collapsed form. This display card may then be set up or erected, and in its erected condition it is adapted to receive and hold a small, end-flanged can of a type commonly used as shipping containers for various articles of commerce. Said display card has appropriate tabs which are adapted to grip the respective end flanges of the can to prevent accidental dislodging thereof from the display card.

As an important feature of the invention, the improved display card in accordance with this invention is provided with means for retaining the can thereon even when the display card is inverted or is subjected to the other handling customary during shipment of articles in cans. As a result, it is possible for the shipper of the canned goods to mount the cans on the display card prior to shipment thereof. This makes it unnecessary for the ultimate retailer to assembly the cans with the display cards. This feature is quite important in view of the fact that the display cards are provided for the purpose of increasing sales of the canned goods; and if the display cards are shipped separately from the cans, the retailer frequently neglects to mount the cans thereon.

An important object of the invention is to provide a display card which is simple to manufacture, compact in construction, easily and quickly set up or erected into condition for display, and one upon which the intended item may be readily mounted and which provides therewith a three-dimensional display.

Other objects and advantages of the invention will become apparent from the following description in conjunction with the annexed drawings, in which a preferred embodiment of the invention is disclosed.

The drawings are substantially to scale of a working model of the invention.

In the drawings:

Fig. 1 is a side elevation of the improved display card showing the card erected and with a can mounted thereon.

Fig. 2 is a front elevation of the erected display card with the can mounted thereon.

Fig. 3 is a section on line 3—3 of Fig. 2.

Fig. 4 is a plan view of the blank from which the display card is formed.

Fig. 5 is a plan view of the completed display card, prior to erection thereof.

Fig. 6 is a side elevation of the erected display card.

Upon reference to the drawings in detail, it will be noted that display card **10** is shown in blank form in Fig. 4. Said blank is generally rectangular in shape, extends longitudinally, and comprises a plurality of successive generally rectangular panels connected to each other by scored hinge lines which extend laterally across the entire width of the blank. Said blank includes a front

panel **12**, the entire rear face of which is optionally glued at **21**. A front extension panel **14** is connected to said front panel **12** by means of lateral score line **26**. Said front extension panel **14** is provided with a cut-out **32** which is substantially circular in shape. While the lateral position of said cut-out **32** may be varied, the center of said cut-out **32** is optionally laterally off-set with respect to the longitudinal center line of the blank, in the model illustrated. The portion of cut-out **32** which is proximate to score line **26** is coextensive with a further cut-out portion **30** which extends to said score line **26**, the side edges of said cut-out **30** being substantially straight and extending substantially longitudinally.

Score line **26** is interrupted between the side edges of cut-out **30**. Front panel **21** is provided with an extension tab **28** which extends from the main portion of the panel between the side edges of cut-out **30** and approximately half way into cut-out **32**. Said tab **28** is substantially rectangular in shape and is of approximately the same width as cut-out **30**.

Connecting panel **16** is connected to front extension panel **14** by means of lateral score line **34**. Bottom panel **18** is connected to connecting panel **16** by means of lateral score line **22**. Rear panel **20** is connected to panel **18** by means of lateral score line **42**.

Score line **22** is interrupted along an intermediate portion of its length by a cut-out **40**, which is substantially alined longitudinally with cut-out **32**. This cut-out **40** has end portions **36** which extend inwardly from the respective inner edges of the segments of score line **22**, and which also extend away from score line **22** into panl **18**. Cut-out **40** also has a center portion **38** of arcuate shape. The center point of center cut-out portion **38** is located approximately in alinement with score line **22**, and cut-out portion **38** extends outwardly on either side of its center point and also into panel **18** to meet the respective inner ends of the end cut-out portions **36**. Cut-out portion **38** is preferably in the shape of a minor arc of a circle of approximately the same diameter as that of the can which is to be mounted on the card. It will be apparent that the provision of cut-out **40** results in the formation of a pair of wings or tabs **37** which project from panel **16** beyond score line **22**.

Reference is made to the drawings to complete the disclosure as to the shape of cut-out **40** and of tabs **37**.

Tab **44** is cut out of front panel **12** by means of a cut-out having substantially linear downwardly and inwardly extending side portions and a connecting lower portion which is optionally arcuate, said connection portion being preferably upwardly convex in the assembled and erected carton. A similar tab **44*a*** is cut-out from rear panel **20**, the only difference being that the tabs **44** and **44*a*** extend in opposite directions in the blank. Said tabs **44** and **44*a*** are preferably longitudinally alined with cut-out **32** and with cut-out **40**.

Hinge line **22** is preferably located half way between the ends of the blank, so that the combined length of panels **20** and **18** is substantially equal to the combined length of panels **16**, **14** and **12**.

In order to assemble the blank to the form shown in Fig. 5, the blank is folded on hinge line **22** in such a way as to bring the rear faces of panels **12**, **14** and **16** into abutment with the front faces of panels **18** and **20**. Panel **12** is secured to panel **20** by means of the glue backing **21**. In the assembled card, the tabs **44** and **44*a*** are in substantial registration with each other, with their cut-out edges substantially coinciding, as shown in Fig. 6 and in other views.

It will be apparent from the foregoing that the assembled carton of Fig. 5 is readily formed by simple cutting, scoring, folding and glueing operations, with minimum waste of stock. It will also become apparent from the

following that it is a simple matter to set up the display card **10**, in the assembled form of Fig. 5, and to mount a can **24** thereon. Said can **24** is of a type commonly used, having a cylindrical body portion which has the end beads **25** and **25***a*. Each said end bead forms a transverse end flange for the body portion of the can and also protrudes slightly beyond the periphery of the body portion of the can, as is clearly shown in Figs. 1–3.

In order to set up or erect the card of Fig. 5, the card is bent along all of its hinge lines so as to bring the base panel **18** into perpendicularity with rear panel **20**, and so as to bring the connecting panel **16** into substantially coplanar relation with bottom panel **18**, so that said panels **16** and **18** together serve as the base of the erected display card. It will be apparent that the front extension panel **14** extends forwardly and downwardly from front panel **12** and meets connecting panels **16** at an acute angle. It will also be apparent that the aforementioned bending operations may be accomplished quickly and substantially simultaneously.

The set up or erected position of card **10** is shown in Fig. 6. It is to be noted that the hinge lines are so formed that the card tends to return from its position of Fig. 6 to its collapsed position of Fig. 5, and that card **10** can be maintained in its erected position only manually or by the mounting of can **24** thereon.

After the card is erected, can **24** is inserted through cut-out **32** so that its bottom bead **25***a* rests upon bottom panel **18**. It will be apparent that the sides of the cut-out **32**, as well as the location of the cut-out **40** are preferably chosen to accommodate a can **24** of selected size. It is not necessary for the cut-out **32** to be elliptical in shape, corresponding to the exact section through the can formed by the plane of panel **14**, in view of the fact that card **10** is provided with positive means for engaging and holding can **24**.

The front portion of the bottom bead **25***a* of can **24** is then inserted into cut-out **40** so that the extension wings **37** of connecting panel **18** overlie the upper edge of bead **25***a*. The arcuate portion between said wings **37** then hugs the outer periphery of can **24**. The rear portion of bead **25***a* abuts the front face of rear panel **20** and is frictionally engaged between the lower edge of tab **28** and base panel **18**.

The combined tabs **44** and **44***a* are then pushed forwardly so that the rear portion of the upper bead **25** is frictionally engaged between said combined tabs **44** and **44***a* and the front panel **12**.

It will be apparent from the foregoing that the upper portion of the lower bead **25***a* is engaged at substantially diametrically opposed portions thereof by the respective wings **37** and by the tab **28**, so as to hold can **24** against the base of the card. It will also be apparent that the lower portion of can **24** is engaged by wings **37** and tab **28** against forward and rearward shifting of can **24** relative to the base of display card **10**.

It will also be apparent that the top of can **24** is engaged against upward movement by the combined tabs **44** and **44***a*, with said tabs also engaging the upper bead **25** so as to prevent movement of the upper portion of can **24** away from front panel **12**. As a result, can **24** is securely held by the display card against accidental dislodgement therefrom and it will be apparent that it is extremely easy to assemble can **24** with display card **10**.

A further important feature of the engagement of the front portion of the lower bead **25***a* within cut-out **40** is that it tends to prevent buckling of display card **10**. As previously stated, the panels of card **10** can only move from the erected position of Fig. 6 to the collapsed position of Fig. 5 in unison. It will be apparent that the engagement of the can in slot **40** prevents movement of connecting panels **16** and hence prevents collapsing or partial collapsing of the card.

In this connection, it is pointed out that the connecting panel **16** is essential to the construction of the card. The structure of the card must meet two conditions. The first condition is that the length of back panel **20**, below score line **26**, together with the length of panel **18**, must be equal to the combined lengths of panels **14** and **16** in the collapsed condition of the card. The second condition is that the square of the length of panel **14** must be equal to the sum of the square of the length of panel **20** below score line **26** and the square of the combined lengths of panel **18** and panel **16**. It may be readily demonstrated that these two conditions can only be met if the length of panel **16** is greater than zero. The provision of panel **16** adds somewhat to the instability of the card in its erected position but this difficulty is substantially overcome by the engagement of bead **25** within slot **40**.

It is pointed out that card **10** can be held in its set up and erected condition of Fig. 6 by the application of manual force thereon. When can **24** is mounted upon card **10** and flange **25***a* is accordingly inserted in slot **40**, the thickness of the flange causes panel **16** to become slightly inclined forwardly and upwardly from base panel **18**. This is shown in Figs. 1–3. The upward inclination of panel **16** is hardly noticeable when the combination card and can is displayed upon a counter or the like.

It will be apparent that it is entirely possible to assemble carton and card **10** prior to shipment of the can to the retailer, because can **24** is firmly held by card **10**, to prevent accidental separation thereof during shipment, and because can **24** acts upon card **10** to maintain it in its erected condition and to prevent collapsing thereof.

While a preferred embodiment of the invention has been disclosed, and various changes, omissions and additions have been indicated, it will be apparent that various other changes, omissions and additions may be made in the invention without departing from the scope and spirit thereof.

I claim:

1. A display card for end-beaded cans and the like, said card being adapted to be formed from a single generally rectangular blank of stiff sheet material, said blank being divided by transverse score lines into a first panel at a first end of the blank, a second panel hingedly connected along a first score line to said first panel, a third panel hingedly connected along a second score line to said second panel, a fourth panel hingedly connected along a third score line to said third panel, and a fifth panel at the other end of the blank hingedly connected along a fourth score line to said fourth panel, said card being assembled with said fifth panel superimposed upon and fixed to said first panel, said fourth score line being disposed intermediate the first end of the blank and the first score line, the distance between the fourth score line and the first score line plus the length of the second panel being equal to the combined lengths of the third and fourth panels, whereby the card may be maintained in flat condition with the third and fourth panels superimposed upon the first and second panels, said card being adapted to be erected with said second panel extending substantially perpendicularly to said first panel, said fourth panel having an aperture through which an end-beaded can may extend, said aperture extending to and interrupting said fourth score line, said second score line having a slot for reception of one end-bead of the scan and said first panel having a tab for reception within the other end-bead of the can to hold the card in erected condition and to hold the can to said card, said fifth panel having a further tab connected thereto along the interrupted portion of said score line, said further tab being superimposed upon said first panel and extending almost to the first score line, whereby the free transverse edge of said further tab is adapted to engage the first end-bead of the can.

2. In combination with a can having a cylindrical body portion with circumferentially extending, transverse end flanges, a display card, said card being adapted to be formed from a single generally rectangular blank of stiff

sheet material, said blank being divided by transverse score lines into a first panel at a first end of the blank, a second panel hingedly connected along a first score line to said first panel, a third panel hingedly connected along a second score line to said second panel, a fourth panel hingedly connected along a third score line to said third panel, and a fifth panel at the other end of the blank hingedly connected along a fourth score line to said fourth panel, said card being assembled with said fifth panel superimposed upon and fixed to said first panel, said fourth score line being disposed intermediate the first end of the blank and the first score line, the distance between the fourth score line and the first score line plus the length of the second panel being equal to the combined lengths of the third and fourth panels, whereby the card may be maintained in flat condition with the third and fourth panels superimposed upon the first and second panels, said card being adapted to be erected with said second panel extending substantially perpendicularly to said first panel, said fourth panel having an aperture, said aperture extending to and interrupting said fourth score line, said can being disposed against said card with its body portion extending through said aperture and with a first end

flange of said can resting upon said second panel, said second score line having a slot receiving said first flange of the can and said first panel having a tab hinged thereto and extending into the other end flange of the can to hold the card in erected condition and to hold the can to said card, said fifth panel having a further tab connected thereto along the interrupted portion of said score line, said further tab being superimposed upon said first panel and extending almost to the first score line, whereby the free transverse edge of said further tab is adapted to engage the first end-bead of the can.

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