Nov. 7, 1967 R. W. GUYER, JR., ET AL 3,350,804

DISPLAYS

Filed June 28, 1965 2 Sheets-Sheet 1

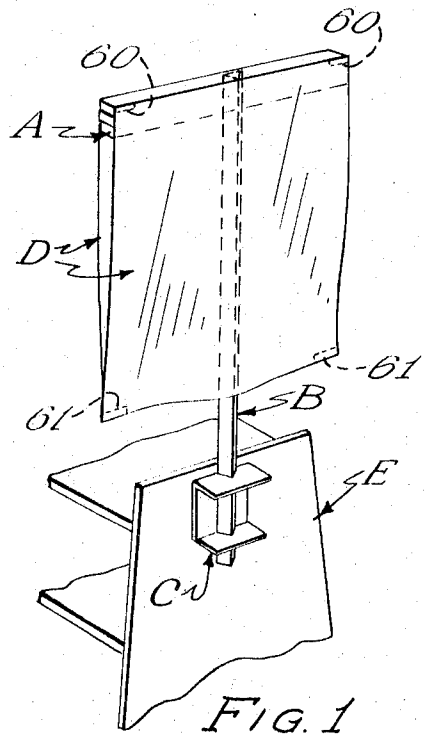


FIG. 1

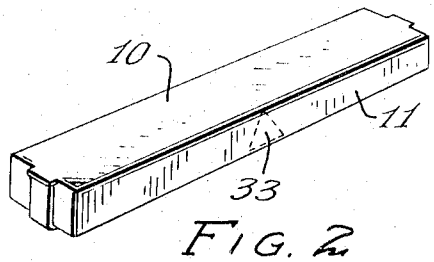


FIG. 2

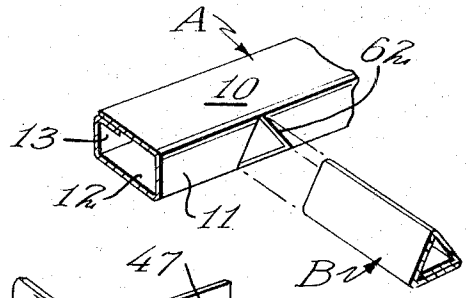


FIG. 3

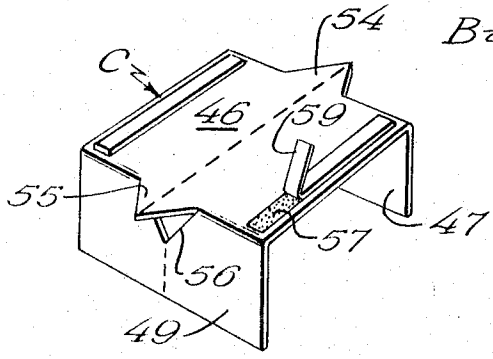


FIG. 5

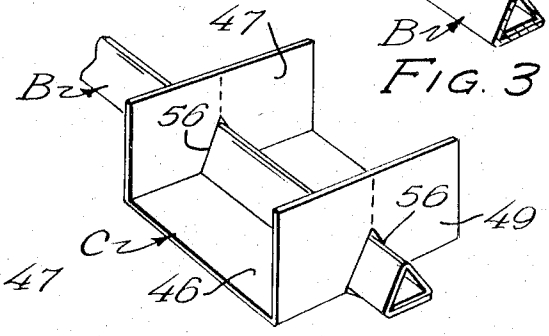


FIG. 4

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DISPLAYS

Filed June 28, 1965 2 Sheets-Sheet 2

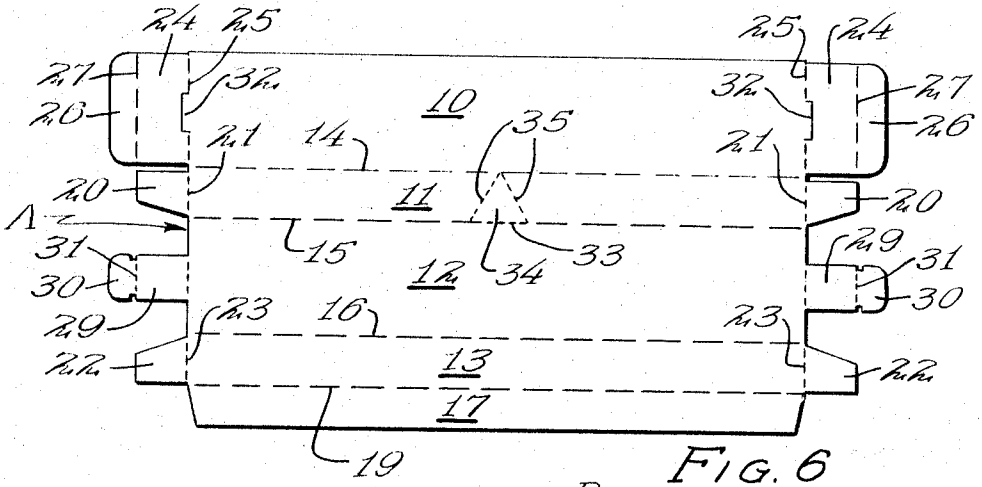


FIG. 6

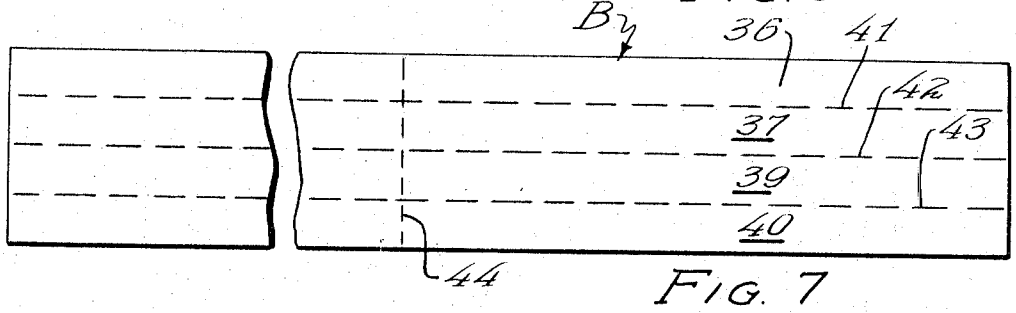


FIG. 7

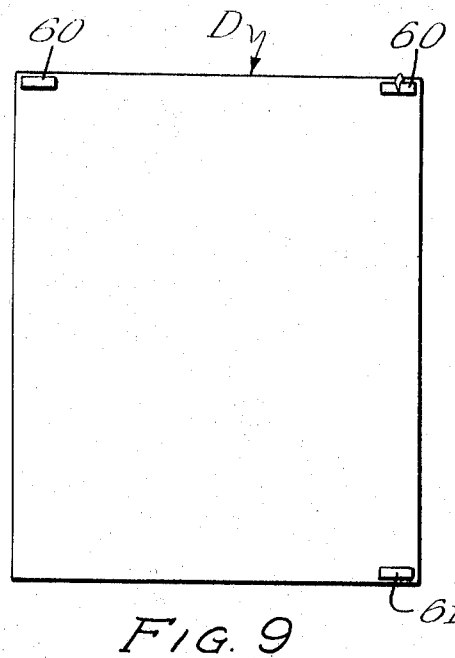


FIG. 9

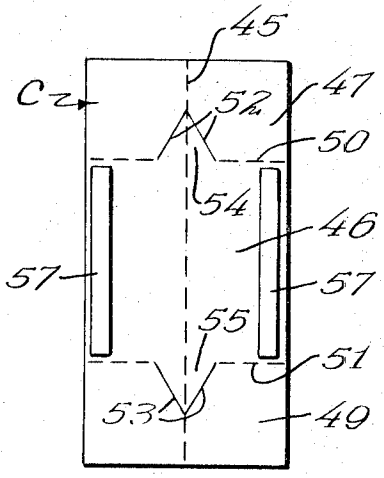


FIG. 8

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3,350,804

DISPLAYS

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Filed June 28, 1965, Ser. No. 467,777
1 Claim. (Cl. 40—124.1)

ABSTRACT OF THE DISCLOSURE

The invention resides in a display which forms its own shipping container. The display includes a standard comprising an elongated sheet of paperboard longitudinally creased to provide four hingedly connected panels which, when folded, forms a triangular post. A transverse crease line intermediate the ends of the sheet permit the sheet to be folded centrally longitudinally and folded transversely to fit into an elongated container substantially shorter and narrower than the sheet forming the post. A pair of rectangular paper display panels shorter in one dimension than the container and fit therein in rolled condition. A supporting bracket is provided which also fits into the container in folded form. The bracket folds into V-shaped form and triangular apertures are provided in opposite sides to accommodate the folded post. The container is an elongated tubular container with end closure flaps. A triangular detachable area is provided midway between the ends of one side wall providing, when removed, an aperture for receiving the upper end of the triangular folded post. The display panels are attached to opposite sides of the container to depend therefrom.

This invention relates to an improvement in displays and deals particularly with an inexpensive display structure which may be shipped and stored in a very compact space.

Display signs of the type used in supermarkets, drug stores and the like have been produced in increasing volume for some years. In many instances these displays are delivered to the destination by a representative of the company manufacturing the product to be displayed, and are erected by this representative at the location where it is used. However, such a procedure may not be economically possible where the product involved is relatively inexpensive and is sold in small volume. In such cases, it is only possible for the company producing the product to ship the display with a consignment of goods, and to trust the store managers to have the displays set up. When this procedure is followed, the displays are merely discarded due to the fact that the displays are oftentimes bulky, and as each person setting up the display must follow directions a step at a time in order to assemble the display. Obviously, much more time is required for a person seeing the display for the first time to assemble the various pieces, than would be required for a company representative to do the job. It is an object of the present invention to provide an effective display which is extremely easy to set up as the directions for accomplishing this task are very simple.

A further difficulty involved in connection with displays of this type lies in the fact that the displays are usually shipped in a large and rather bulky package. Such a package is often difficult to ship and also difficult to store when received until the display is erected. If the package is opened, certain of the parts of the display are lost, making the entire display unusable. It is an object of the present invention to provide a display which may provide a relatively large display area, but yet which may be entirely contained in an outer container designed to

form a part of the completed display. As a result, the various parts of the display are entirely contained in a container which may be readily mailed, eliminating the need for wrapping or otherwise enclosing the necessary parts.

A further feature of the present invention resides in the fact that the outer container of the display may be used to provide a cross member which may be readily supported at the top of a paperboard post and supported by a supporting element which is contained within the container. The dislay panels comprise flexible sheets which are attached overlying opposite sides of the cross member. As a result of this arrangement, the greater portion of the outer container is covered by the display sheets so that any disfiguration of the outer container caused during shipment will be concealed from view.

An added feature of the present invention resides in the provision of an elongated strip of corrugated paperboard or the like which is creased to provide four elongated panels. By folding the strip along these fold lines, a triangular post may be formed with the two edge panels of the strip in overlapping relation, thereby forming a firm support for the cross member. The elongated strip is also preferably creased intermediate its ends so that a supporting post may be provided almost twice the length of the outer container in which it is shipped.

An added feature of the present invention resides in the provision of perforations in a wall of the outer container defining a triangular area which may be detached to permit an end of the triangular post to be inserted through the opening and so that the end of the post may abut the wall of the outer container opposite that bearing the removable portion. When the end of the triangular post is inserted through the opening, the post is held in triangular form without other fastening means.

A further feature of the present invention resides in the provision of a post supporting member comprising a rectangular sheet of corrugated board or the like which may be centrally folded to fit within the outer container. When this sheet is unfolded, it may be refolded along spaced fold lines to form a U-shaped attaching member. Triangular apertures are formed in opposite sides of the U-shaped member through which the lower end of the triangular post may be inserted. The post fits frictionally within the openings of the attaching member to permit adjustment of height of the post. The center portion of the U-shaped member is provided with areas of pressure sensitive adhesive, to permit the attaching member to be adhered to a vertical surface such as the end of a counter or display rack with the post extending upwardly therefrom.

A further feature of the present invention resides in the provision of areas of pressure sensitive adhesive on the flexible display sheets and by means of which the display sheets may be secured to opposite sides of the cross member to depend downwardly therefrom. Similar areas of adhesive may be provided at the lower edges of the display sheets so that they may be sealed together on opposite sides of the post to prevent the display sheets from curling or twisting out of shape.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claim.

In the drawings forming a part of the specification:

FIGURE 1 is a perspective view of the display in display position.

FIGURE 2 is a perspective view of the outer container which contains all of the parts of the display.

FIGURE 3 is a perspective detail showing the manner in which one end of the triangular post may be inserted into an opening formed by detaching a portion of the outer container.

FIGURE 4 is a perspective detail showing the manner in which the post is connected to the U-shaped bracket.

FIGURE 5 is a perspective view of the bracket bent in U-shaped form showing the areas of pressure sensitive adhesive used for attaching the bracket to the end of a counter display rack or the like.

FIGURE 6 is a diagrammatic view of the blank from which the outer container is formed.

FIGURE 7 is a diagrammatic view showing the blank from which the triangular post is formed.

FIGURE 8 is a diagrammatic view of the blank from which the supporting bracket is formed.

FIGURE 9 is a diagrammatic view of one of the display sheets, showing the areas of pressure sensitive adhesive thereupon.

The display includes five pieces including the outer container A, the post B, the supporting bracket C and two display sheets D which may be identical insofar as construction is concerned. The display sheets D are of a width slightly less than the width of the outside container A so that the two sheets may be rolled together and inserted in the container. The bracket C is of shorter vertical length than the length of the outer container A and is centrally divided to fold into a shape slightly less than the width of the outer container A. The post B is approximately twice the width and twice the length of the outer container A, but is longitudinally folded along its center line and also transversely folded so that all of the parts fit within the outer container A during transportation and shipment.

The outer container A is shown as including a face panel **10**, a bottom panel **11**, a rear face panel **12**, and a top wall panel **13** hingedly connected together along parallel fold lines **14** and **15** and **16**, respectively. A glue flap **17** is hinged to the top panel **13** along a fold line **19**. The glue flap **17** is normally adhered in overlapping relation to the inner surface of the face panel **10** to complete the tubular structure. Closure flaps **20** are hingedly connected to opposite ends of the bottom panel **11** along parallel fold lines **21**. Similar closure flaps **22** are hinged to the ends of the top panel **13** along fold lines **23** which are aligned with the fold lines **21**. End closure flaps **24** are hinged to the ends of the front panel **10** along fold lines **25** which are aligned with the fold lines **21** and **23**. Tuck flaps **26** are hinged to the closure flaps **24** along fold lines **27**. The tuck flaps **26** are designed to tuck inwardly of the opposite or rear panel **12**.

In the particular arrangement illustrated, locks are provided for locking the tuck flaps in closed position. These locks comprise flaps **29** hinged to the ends of the rear panel **12** along fold lines generally aligned with the fold lines **21** and **23**. Locking tongues **3** are hinged to the locking flaps **29** along fold lines **31**. The fold lines **25** which connect the closure flaps **24** to the front panel **10** are interrupted by a pair of U-shaped cut lines **32** which extend into the end closure flaps **24**. These cut lines **32** provide slots at the inner edges of the closure flaps **24** when the closure flaps are in closed position adapted to receive the locking tongues **30** hinged to the opposite walls.

The outer container A also includes a detachable rectangular area **33** at the longitudinal center of the bottom wall panel **11**. The area **33** is defined by a perforated line **34** extending along the fold lines **15**, and a pair of converging perforated lines **35** which extend from the ends of the perforated line **34** to the score line **14**.

The post section B comprises an elongated rectangular strip of corrugated paperboard or the like preferably arranged with the corrugations of the board extending longitudinally thereof. The post B is divided into four panels **36**, **37**, **39**, and **40** by parallel fold lines **41**, **42**, and **43**. In preferred form, three of the panels, or possibly all four of the panels, are of equal width so as to form an equilateral triangle. While the panels have been described as being equal in width, the dimensions are actually such that the completed post is substantially equilateral, and the width of the panels must compensate for the thickness of the board from which the panels are formed.

A transverse fold line **44** extends across the blank B intermediate the ends thereof and at right angles to the fold lines **41**, **42**, and **43**. When the post is packaged, the blank B is folded along the fold lines **44** to provide two superimposed panels, which are then folded along the longitudinal center line **42** to form a folded unit of four thicknesses. When folded in the manner described, the folded post is approximately equal in area to container panels **10** and **12** and about one-half or somewhat less than the width of the panels **11** and **13**.

The bracket C also is formed of an elongated blank of corrugated paperboard or the like including a central longitudinally extending fold line **45** along which the blank may be doubled. When folded in this manner, the blank is of a width substantially equal to the width of the panels **10** and **12** so that the bracket can fit into the outer container. Bracket blank C is divided into a center section **46** and a pair of end sections **47** and **49** by transversely extending fold lines **50** and **51**. The fold line **50** is interrupted by a pair of converging cut lines **52**, the lower ends of which are spaced apart a distance substantially equal to one panel of the supporting post, and the cut lines **52** being of substantially the same length as the sides of the triangular post B. The fold line **51** is similarly interrupted by a pair of cut lines **53** which converge, as do the cut lines **52**, on the center fold line **45**. As a result of this arrangement, when the end portions **47** and **49** are folded rearwardly as viewed in FIGURE 8 into parallel relation, the triangular areas **54** and **55** remain in the plane of the center portion **46** of the bracket, and apertures such as **56** are opened in the end portions **47** and **49** which are of proper dimensions to accommodate the triangular post.

As indicated in FIGURES 5 and 8 of the drawings, adhesive strips **57** are applied to opposite sides of the center portion **46** of the bracket C. The strips are double faced adhesive strips which, when applied, have a protective covering of Holland cloth or similar material so that the pressure sensitive adhesive will be covered. When the bracket C is to be attached, this covering strip, which is indicated at **59** in FIGURE 5, is peeled away to expose the actual body of adhesive **57**.

The display panels D are flexible sheets of paper or coated fabric which are printed with a suitable display, not illustrated in the drawings. The width of the sheets D is slightly less than the length of the outer container so that sheets D may be rolled up and inserted into the outer container. The length of the display sheets D may vary to suit the display, but obviously the sheets must be of somewhat less height than the height of the post B.

The display sheets D are provided on their reverse surfaces with two spaced areas **60** of pressure sensitive tape, the tape normally including a detachable covering strip of the type described. The areas **60** are near the opposite upper corners of the sheets D. An additional area **61** is provided on each sheet, the area **61** being shown near the lower right corner. These areas **61** could also be on the lower left corners, as long as the location was uniform on both of the sheets used.

In the packaging of the display, one end of the outer container A is closed, and the folded post B, the folding bracket C, and the rolled display sheets D are inserted into the other end. The container is then closed and then locked ready for shipment.

Directions for setting up the display are usually printed on the outer surface thereof. To set up the display, the contents of the outer container are removed, the triangular section **33** is removed, and the outer container reclosed and locked. The post B is bent along the parallel fold lines **41**, **42**, and **43** to place the edge panels **36**

and 40 in overlapping relation. Obviously, the folded post is unfolded and placed into the flat form shown in FIGURE 7 before the start of the post folding operation. While holding the post in folded form, one end thereof is inserted into the triangular aperture 62 which is formed by the removal of the triangular section 33.

The bracket C is then formed into U-shaped position as indicated and the other end of the post B is inserted through the apertures 56 formed in the end portions 47 and 49 of the bracket. The post B is frictionally engaged in the apertures 56 due to the normal tendency of the end portions 47 and 49 to fold back into a common plane with the center portion 46 of each bracket.

The display sheets D are then attached to opposite panels 10 and 12 of the outer container A which now serves as a cross bar at the top of the post. This is accomplished by removing the protective covering from the adhesive areas 60 and pressing the top corners of each sheet against a corresponding side panel of the outer container A. In order to hold the sheets D from curling, the protective covering is also removed from each adhesive coated area 61 and the lower corners of the sheets are attached. Obviously, both of the areas 61 could be on one of the sheets. However, as the sheets are reversed when attached to the container A, the sheets may be made of identical form by having one such area at a predetermined lower corner of each sheet.

The display thus formed is then attached to a vertical surface such as to the end of a counter or display rack E. This is accomplished by merely removing the protective covering 59 from the adhesive coated areas 57, and attaching the bracket in vertical position. The height of the display may be adjusted within limits by raising or lowering the post B relative to the bracket C.

It will be seen that the display completely contained in a compact package, the length of which is determined merely by the width of the display desired, and the height of the supporting post. All of the operations required to assemble the display may be simple and readily understandable. In actual practice, one of the panels 10 or 12 of the outer container is printed to show each step of the assembly operation when completed, the paper display sheets are held in substantially flat position by the adhesive coated areas. No tools whatsoever are required to complete the assembly.

In accordance with the patent statutes, the principles of construction and operation of this improvement in displays have been described, and while an endeavor has been made to set forth the best embodiment thereof, it should be understood that changes may be made within the scope of the following claim without departing from the spirit of the invention.

We claim:

A display including:

an elongated rectangular container including four rectangularly arranged wall panels secured in tubular relation, and end closure flaps secured to the ends thereof and foldable to close the ends of the tubularly arranged walls,

a triangular potentially removable area in one wall panel of said container substantially midway between the ends of said container defined by weakened lines of separation,

an elongated substantially rectangular sheet of paperboard of a length greater than the length of said container and less than twice the length thereof,

said sheet being creased along three longitudinally extending fold lines into four panels which may be folded to provide a triangular tubular standard, said sheet being foldable substantially centrally to provide two sheet sections in face contact, said sections being narrower in width than said container,

said sections being provided with a transverse fold line along which said sections may be folded to provide section ends shorter in length than said container, whereby said sheet, when folded along the longitudinal fold line and said transverse fold line may be inserted into said container,

said sheet, when folded into tubular form being insertable into said potentially removable area after removal thereof to hold said container at substantially right angles to said tubularly folded sheet, and

an attaching bracket comprising a generally rectangular sheet of paperboard having a central fold line dividing said sheet into two areas which are narrower in width than said container and shorter than said container,

said last named rectangular sheet having a pair of parallel fold lines thereacross intersecting said first mentioned fold line therein at right angles and dividing said last named sheet into a central base portion and a pair of similar end portions foldable into parallel relation and including opposed triangular apertures adapted to accommodate said post when folded into triangular tubular form with the outer panels of said first named sheet in face contact, and

a generally rectangular display panel of flexible material adapted to be rolled up, one dimension of said panel being shorter than said container to permit the rolled panel to be enclosed within the container.

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