Nov. 17, 1964 W. M. TOLAAS 3,157,275

DISPLAY FOLDER AND METHOD OF MAKING SAME

Filed March 8, 1961 4 Sheets-Sheet 1

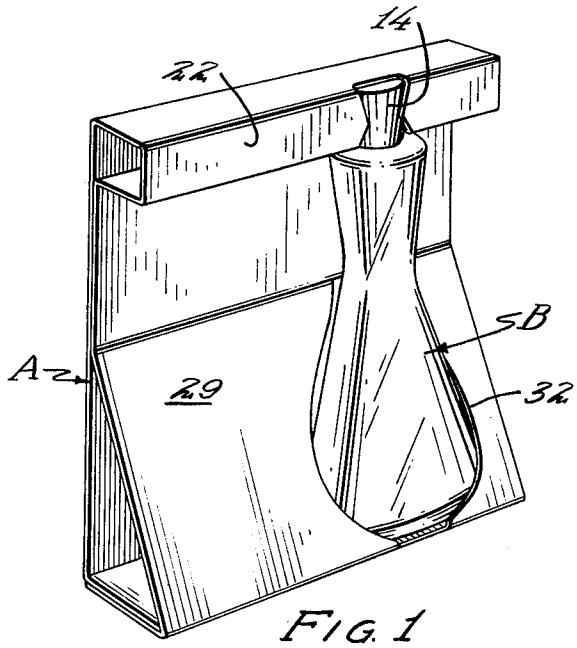


FIG. 1

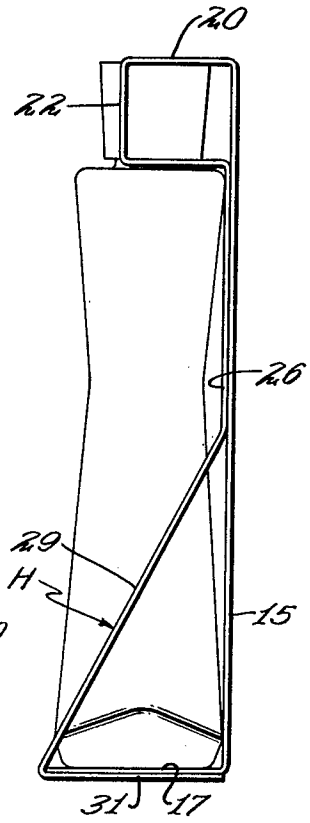


FIG. 2

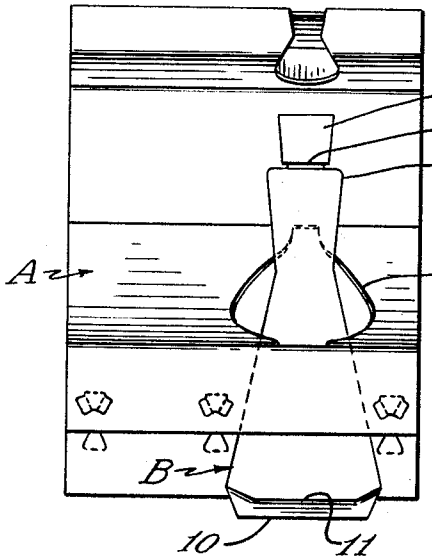


FIG. 4

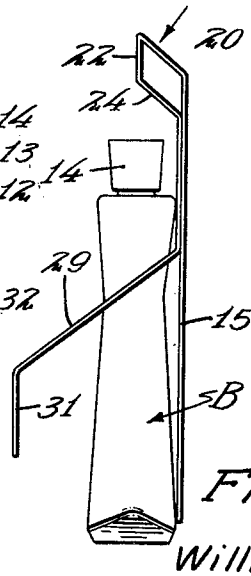


FIG. 3

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Nov. 17, 1964 W. M. TOLAAS 3,157,275

DISPLAY FOLDER AND METHOD OF MAKING SAME

Filed March 8, 1961 4 Sheets-Sheet 2

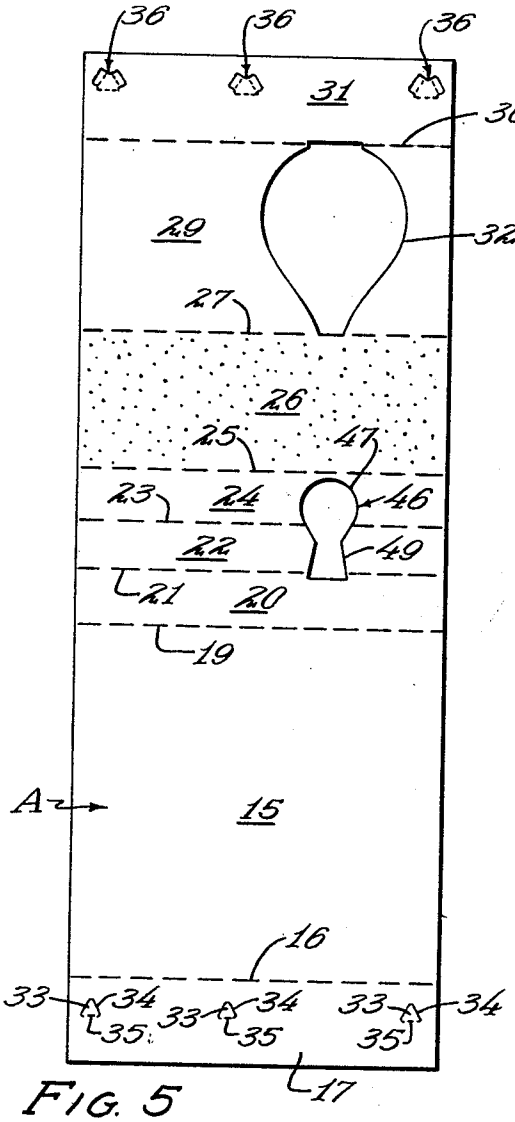


FIG. 5

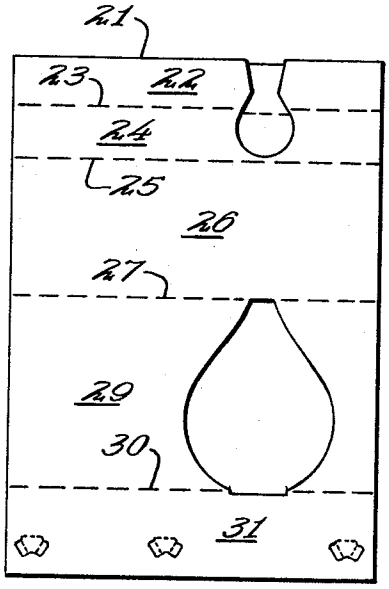


FIG. 6

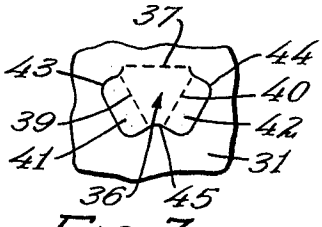


FIG. 7

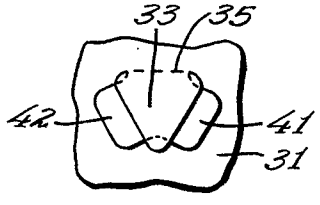


FIG. 8

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Nov. 17, 1964 W. M. TOLAAS 3,157,275

DISPLAY FOLDER AND METHOD OF MAKING SAME

Filed March 8, 1961 4 Sheets-Sheet 3

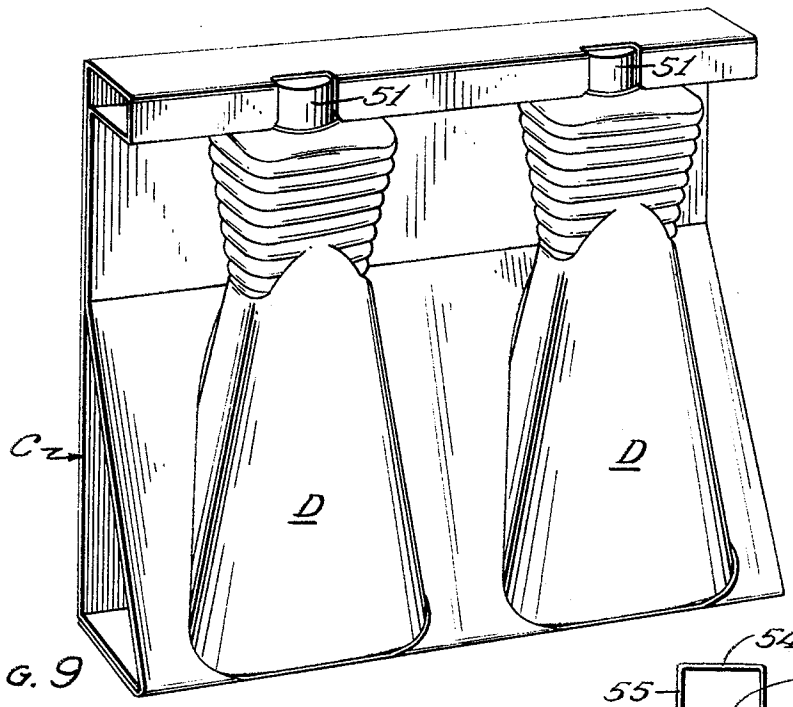


FIG. 9

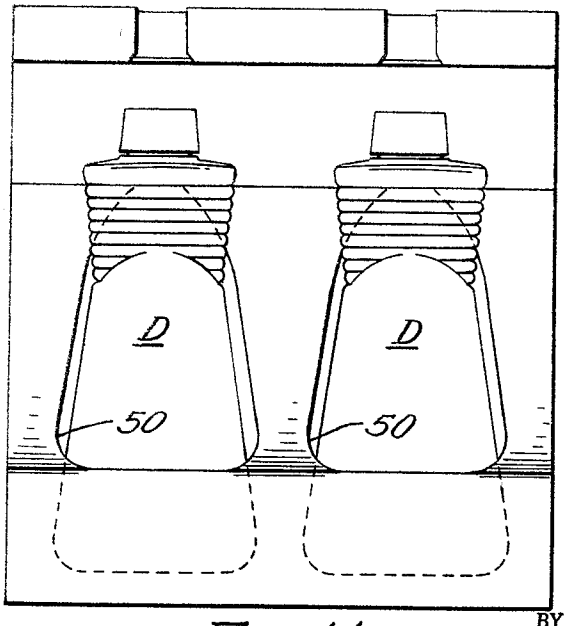


FIG. 11

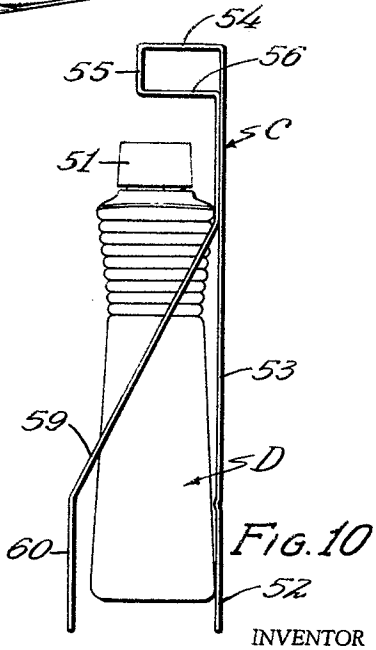


FIG. 10

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Nov. 17, 1964 W. M. TOLAAS 3,157,275

DISPLAY FOLDER AND METHOD OF MAKING SAME

Filed March 8, 1961 4 Sheets-Sheet 4

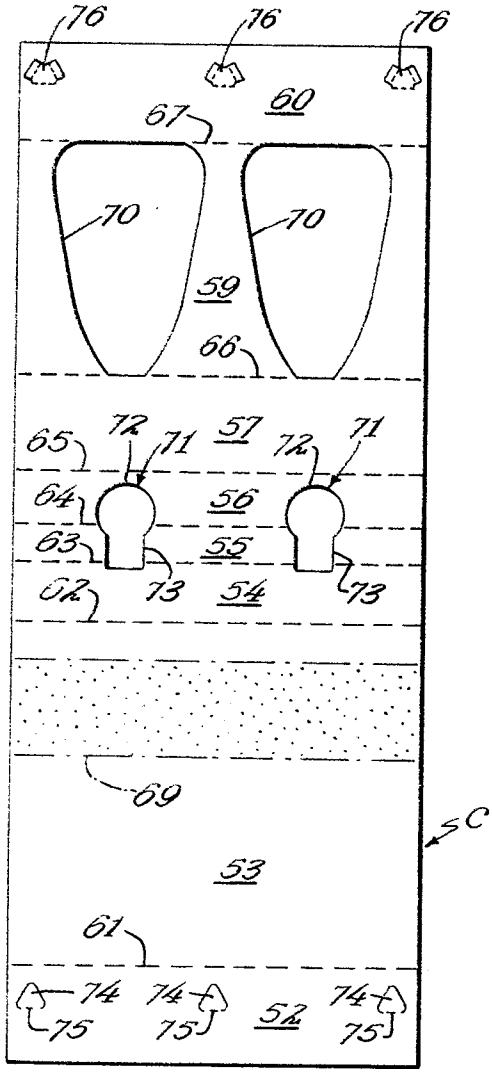


FIG. 12

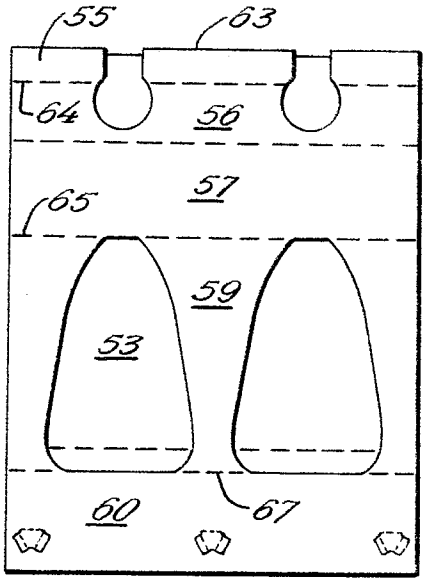


FIG. 13

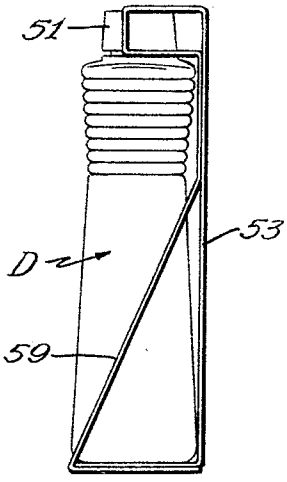


FIG. 14

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3,157,275
DISPLAY FOLDER AND METHOD OF MAKING SAME

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Filed May 8, 1961, Ser. No. 108,604
4 Claims. (Cl. 206—45.14)

This invention relates to an improvement in display folder and method of making same and deals particularly with a simple display of paper board or the like capable of holding and supporting elongated objects preferably of the type having a relatively small periphery upper end and a relatively large periphery lower end.

In view of the fact that bottles and jars have a limited area for advertising purposes, it is common practice to use a display card of some type or another in combination with the objects so that the purpose of the product is readily apparent. This is particularly true where two objects or two products are being displayed. In such an event, the display serves as a means of unitizing the two objects, as well as explaining their purpose.

In many instances products such as cosmetics, hair treating lotions and the like, are packaged in decorative bottles of a distinctive style, and in such cases, the producer is often reluctant to package the bottles in a paper board carton or the like, which would provide the necessary display area, but which would conceal the shape and design of the product. However, in shipping such items, it is necessary to hold the objects in properly spaced relation to eliminate breakage. It is an object of the present invention to provide a display folder which will hold the objects being displayed in properly spaced relation so that they can be readily shipped in an outer container.

A further feature of the present invention resides in the provision of a novel display folder which can be automatically packaged in a continuous operation. The folders are so constructed so as to fold flat when not in use, for storage and shipment. The display is provided with a box shaped upper portion which is apertured to accommodate part of the small diameter top or cap of the object. The major portion of the bottle or other object is visible forwardly of a back card, and the folder includes a downwardly inclined display panel having an aperture which snugly fits about the bottle or similar object at a point spaced from its lower end, the lower end preferably being of larger periphery than the portion of the object extending through the aperture. As a result, the folders may be opened automatically in a continuous operation, the objects to be packaged may be forced through the generally aligned apertures, and the bottom portion of the folder may be folded to enclose the lower ends of the items to complete the display. Due to the particular form of construction of the display, the erection and filling of the display is extremely simple.

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

In the drawings forming a part of the specification:

FIGURE 1 is a perspective view of a display in erected and completed form.

FIGURE 2 is a side elevational view of the display indicated in FIGURE 1.

FIGURE 3 is a side elevational view of the display in partially set up form, showing the manner in which the object is inserted into the display.

FIGURE 4 is a front elevational view of the display and product in the position shown in FIGURE 3.

FIGURE 5 is a diagrammatic view of the blank from which the display is formed.

FIGURE 6 indicates the blank of FIGURE 5 in folded and glued form in readiness for shipment and use.

FIGURE 7 is a planned view of the typical type of lock used for holding the bottom panels of the display in overlapping relation.

FIGURE 8 is a detailed view of the inner side of the lock in locked condition.

FIGURE 9 is a perspective view of a modified form of display showing the display used for unitizing a pair of objects.

FIGURE 10 is a side elevational view of the folder shown in FIGURE 9 in partially folded position.

FIGURE 11 is a front elevational view of the folder and objects in the position shown in FIGURE 10.

FIGURE 12 is a diagrammatic view of the blank from which the display shown in FIGURE 9 is illustrated.

FIGURE 13 shows the blank of FIGURE 12 in folded and glued position in readiness for use.

FIGURE 14 is a side elevational view of the completed folder in closed position.

The display folder A which is illustrated in FIGURES 1–6 of the drawing is designed to support a bottle B in display position. As is perhaps best illustrated in FIGURE 4 of the drawings, the bottle B includes a short tapered lower end 10 which leads to an area 11 of largest periphery which is closely adjacent to the lower end. The upper end 12 of the bottle B is of relatively small peripheral length and is provided with a neck 13 which supports the bottle cap 14.

As is indicated in FIGURE 5 of the drawings, the folder A includes a rear panel 15 which is foldably connected along its lower edge by a fold line 16 to a bottom panel 17. The back panel 15 is foldably connected along its upper edge by the fold line 19 to a top panel 20. The top panel 20 is foldably connected along the fold line 21 to a front panel 22. The front panel 22 is connected by the fold line 23 to the partition panel 24. The partition 24 is connected along the fold line 25 to the intermediate panel 26 which in turn is connected along a fold line 27 to the display panel 29. The lower edge of the display panel 29 is connected along the fold line 30 to a bottom panel 31. All of the fold lines which have been described are in parallel relation.

The display panel 29 is provided with an aperture 32 which extends therethrough, and which is designed to accommodate the bottle B. The marginal edge of the aperture 32 is shaped to fit snugly about the wall of the bottle B when the panel 29 is in position to extend in an inclined plane forwardly and downwardly from the rear panel. Due to the shape of the particular bottle B which is described, the aperture 32 is of tear drop shape. The top panel 20 and the partition panel 24 are of equal width, and are designed to provide a boxlike ledge along the upper portion of the display which is generally rectangular in cross section. In the formation of the display, the blank is folded along the fold line 21 so that the portion of the blank on one side of the fold line is folded into face contact with the portion of the blank on the opposite side thereof. As is indicated in FIGURE 5, adhesive is applied to the panel 26 or to the portion of the rear panel 15 to which the panel 26 comes in contact so that the blank is folded into the shape illustrated in FIGURE 6 of the drawings. When in this position, the blank is shipped and stored until it is used.

While the bottom panels 17 and 31 may be adhered together if preferred, in the particular arrangement illustrated, they are provided with locks designed to secure the bottom panels in face contact. The locks include generally triangular tabs 33 which are defined by

generally V shaped cut lines 34 and which are connected to the bottom panel 17 along a line fold lines 35 which are parallel to the previously described fold line such as 16. Locking tabs 36 are provided in the bottom panel 31 which are illustrated in FIGURE 7 of the drawings. The locking tabs or tongues 36 include triangular areas defined by triangularly arranged fold lines 37, 39, and 40. The fold line 37 hingedly connects the tabs to the panel 31. The fold lines 39 and 40 connect the triangular areas with diverging tongues 41 and 42 which are defined by generally U-shaped cut lines 43 and 44. These cut lines 43 and 44 are connected at 45 so that the tabs 36 may fold out of the plane of the panel 31.

In the operation of the locks, the bottom panels 17 and 31 are folded into face contact and the tabs 36 are forced against the triangular tabs 33, the wings or tongues 41 and 42 flexing along their respective fold lines to pass through the panel 17. As a result, these tongues 41 and 42 engage beneath the panel 31 as indicated in FIGURE 8 of the drawings and the tabs 33 lie beneath the tabs 36. As a result, the panels 17 and 31 are securely locked together.

An aperture 46 is provided in the partition panel 24 in centered alignment with respect to the aperture 32. In the particular arrangement illustrated, the aperture 46 includes an arcuate portion 47 which leads to the fold line 23, and continues to form a generally rectangular slot 49 extending across the front panel 22. The purpose of this arrangement is to permit a portion of the bottle cap 14 to extend through the front wall 22 for display purposes. This arrangement also slightly reduces the width of the top panel 20 and partition panel 24 although the major advantage is the display of the cap. The arcuate portion 47 is of somewhat more than 180 degrees in extent, and is of proper radius to accommodate the cap. The slot 49 is of a width somewhat less than the diameter of the cap so as to retain the cap from moving forwardly through the slot.

The folder thus formed is designed for automatic loading as is diagrammatically illustrated in FIGURES 3 and 4 of the drawings. As the bottles B travel along a conveyor, the folders are partially opened by swinging the display panel 29 and the bottom panel 31 forwardly away from the rear wall 15, and by swinging the top panel 20, the partition panel 24 and the front panel 22 forwardly until top panel 20 and partition 24 are at substantially right angles to the back panel. The folders within the display panel 29 swung forwardly as shown in FIGURES 3 and 4 are lowered over the tops of the bottles B, the bottles extending through the aperture 32. As the folders reach their lower extreme position, the bottle cap 14 is forced through the arcuate portion 47 of the aperture 46, the bottle cap 14 extending partially through the slot 49 and holding the upper portion of the display in generally rectangular form.

To complete the operation, bottom panel 17 is folded beneath the bottles B, and the bottom panel 31 is folded to underlie the panel 17. The locking tabs 36 are then forced through panel 17 to complete the operation.

When the folder is locked, the upper rectangular portion of the folder is held from unfolding by engagement with the bottle cap, and the bottle B is held engaged by the shape of the aperture 32. The folder acts to hold the bottles B in spaced relation from bottles placed in similar display folders during handling and shipment in containers.

In FIGURES 9 through 14 of the drawings, are disclosed a modified form of construction of display which is very similar to that previously described, but which is designed to accommodate two bottles B in spaced relation. As in the previous arrangement, the bottles B are provided with an area 50 of greatest periphery at a point near the lower ends of the bottles, the bottles tapering inwardly and upwardly from this point of greatest periphery. As is also indicated, the bottles are provided with bottle caps 51 which are of small periphery relative to the portion 50 near the lower ends of the bottles.

As indicated in FIGURE 12, the blank of the display folder C includes, in series, a bottom panel 52, a back panel 53, a top panel 54, a front panel 55, a partition panel 56, an intermediate panel 57, a display panel 59, and a bottom panel 60, the various panels being connected along the parallel fold lines 61, 62, 63, 64, 65, 66, and 67. As is also indicated, in the folded condition of the blank, shown in FIGURE 13 of the drawings, the intermediate panel 57 is adhered to the back panel 53 along the area indicated by the broken line 69.

The display panel 59 is provided with a pair of spaced tapered apertures 70 extending therethrough, the apertures being widest near their lower edge which is defined by the fold line 67. The apertures 70 are of proper out line to fit snugly about the wall of botiles B when the display panel 59 is in downwardly and forwardly inclined relation from the back panel 53 as indicated in FIGURE 9 of the drawings. The bottles and the apertures are preferably spaced so as to hold the bottles from axial movement once they are engaged.

The partition panel 56 is provided with a pair of apertures 71 which are aligned with the apertures 70 and which are of proper radius to accommodate the caps 51 of the bottles. The apertures 71 include the arcuate portions 72 and generally rectangular slot portions 73 which extend across the front panel 55, the apertures being generally of keyhole shape. The slots 73 permit portions of the cap 51 to project forwardly beyond the front panel 55 as is indicated in FIGURE 14 of the drawings.

The bottom panel 52 is provided with a series of spaced generally triangular tabs 74 which are hinged thereto along aligned fold lines 75, and the bottom panel 60 is provided with a series of locking tabs 76 which are designed to register with the tabs 74 when the panels 52 and 60 are folded into face contact. The locks are similar to those which have been previously described in some detail.

The display folder C is loaded in the manner indicated in FIGURES 10 and 11 of the drawings. The display panel 59 is swung forwardly from the back panel 53, and the folder C is lowered over the top of the bottles D as indicated in FIGURES 10 and 11. The upper portion of the folder including the top panel 54, the front panel 55, and the partition panel 56 is folded down so that the top panel and partition panel are in generally right angular relation to the back panel 53. The bottle caps 51 are forced through the arcuate portion 72 of the apertures 71 until the tops of the caps engage the under surface of the top panel 54. The bottom panel 52 is then swung into position beneath the bottles D, and the panel 60 is swung to underlie the panel 52. The locking tabs 76 are then forced through the openings formed by the tabs 74, and the structure is complete.

In accordance with the patent statutes, I have described the principles of construction and operation of my improvement in display folder and method of making same, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A package including a folder for displaying an elongated object having a relatively large periphery lower end and a relatively smaller periphery upper end, the object having an intermediate portion above said lower end and adjacent thereto which is of a periphery smaller than said lower end and larger than said upper end, the folder including a back panel extending upwardly along the rear of said object, a top panel connected to the upper portion of said back panel and overlying said upper end of said object, a front panel connected to the forward edge of said top panel and extending downwardly there-

from, a partition panel extending rearwardly from the lower edge of said front panel and having an aperture therethrough through which the upper end of said object extends, an intermediate panel connected to the rear edge of said partition panel and extending downwardly therefrom rearwardly of said object, a display panel inclining downwardly from the lower edge of said intermediate panel and having an aperture therethrough through which said intermediate portion of said object extends, said aperture being too small to accommodate the lower end of said object, a bottom panel underlying said object and means connecting said bottom panel and said back panel to hold the same in substantially right angular relation, while the object is positively retained and cannot be removed through the panel.

2. A package for displaying a tapered bottle having a large periphery lower end and a smaller diameter upper end, a cap removably secured on said upper end, the package including a folder including, in series, a back panel, a top panel, a front panel, a partition panel, an intermediate panel and a front display panel, the back panel, top panel, front panel and the partition panel forming a hollow tubular body when said intermediate panel is in face contact with said back panel, said partition panel and front panel having communicating apertures therein adapted to receive said bottle cap partially projecting therefrom, the portion of said apertures in said front wall being narrower than the cap diameter to retain the cap in position, the front display inclining forwardly and downwardly and having an aperture therethrough of a size to snugly accommodate said bottle and being sufficiently narrower than the lower end of said bottle to prevent the withdrawal of the lower end of the bottle through the aperture, and bottom panels foldably connected to the lower edges of said back panel and front display panel and attached in overlapping relation.

3. A package for displaying a tapered bottle having a larger periphery lower end and a smaller diameter upper end, a cap removably secured on said upper end, the package including a folder including, in series, a back panel, a top panel, a front panel, a partition panel, an intermediate panel and a front display panel, the back panel, top panel, front panel and the partition panel forming a hollow tubular body when said intermediate panel is in face contact with said back panel, said partition panel having an aperture therein to accommodate said bottle cap, the front display inclining forwardly and downwardly and having an aperture therethrough of a size to snugly accommodate said bottle and being sufficiently narrower than the lower end of said bottle to prevent the withdrawal of the lower end of the bottle through said aperture, and bottom panels foldably connected to the lower edges of said back panel and front display panel and attached in overlapping relation.

4. The structure of claim 3 and in which the bottom panels include cooperable locking means.

References Cited in the file of this patent

UNITED STATES PATENTS

1,007,109	Jagenberg	Oct. 31, 1911
1,632,344	Modlin	June 14, 1927
2,442,980	Lewis	June 8, 1948
2,955,706	Emrick	Oct. 11, 1960
2,959,276	Srofe	Nov. 8, 1960
2,983,368	Vander Lugt	May 9, 1961
3,003,620	Srofe	Oct. 10, 1961

FOREIGN PATENTS

448,902	Italy	May 30, 1949