April 11, 1961 H. BLONDER 2,979,192

DISPLAY PACKAGE

Filed March 22, 1960 2 Sheets-Sheet 1

FIG. 1.

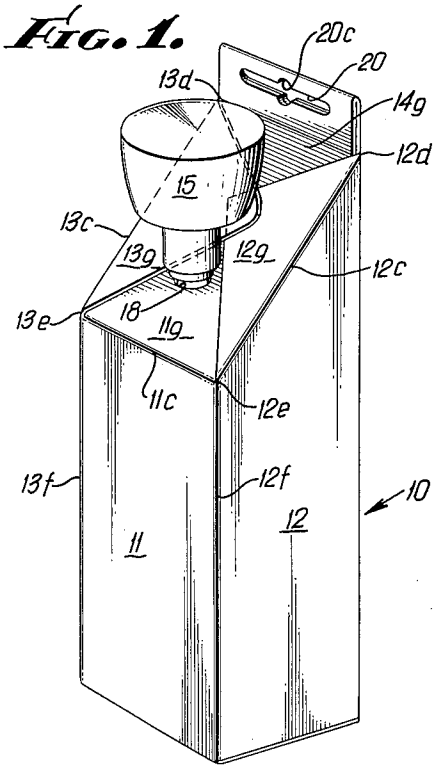


FIG. 2.

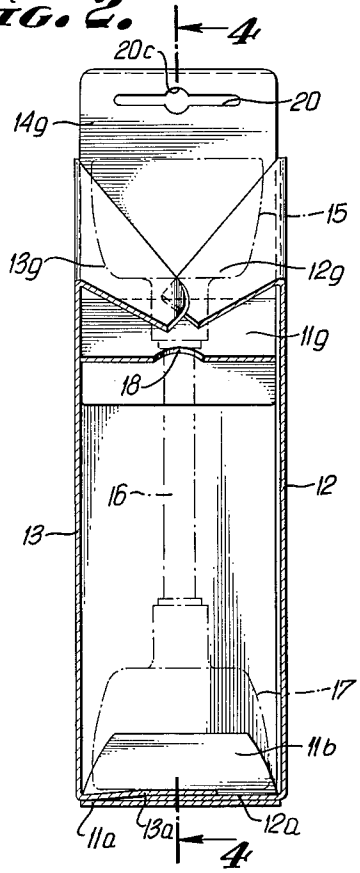


FIG. 4.

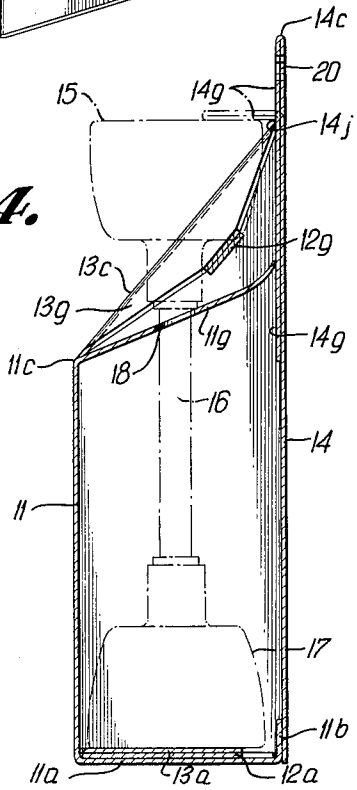
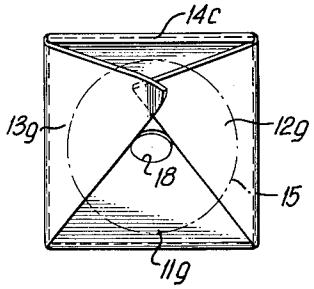


FIG. 3.



INVENTOR.
HOWARD BLONDER
BY Flam and Flam
ATTORNEYS.

April 11, 1961 H. BLONDER 2,979,192

DISPLAY PACKAGE

Filed March 22, 1960 2 Sheets-Sheet 2

FIG. 5.

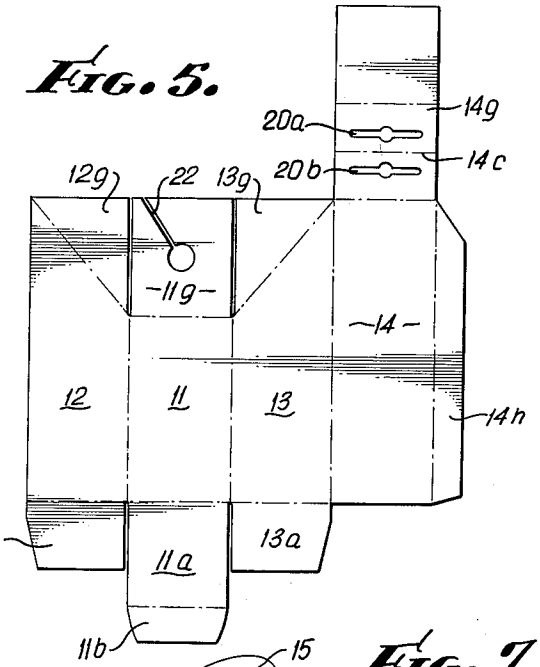


FIG. 6.

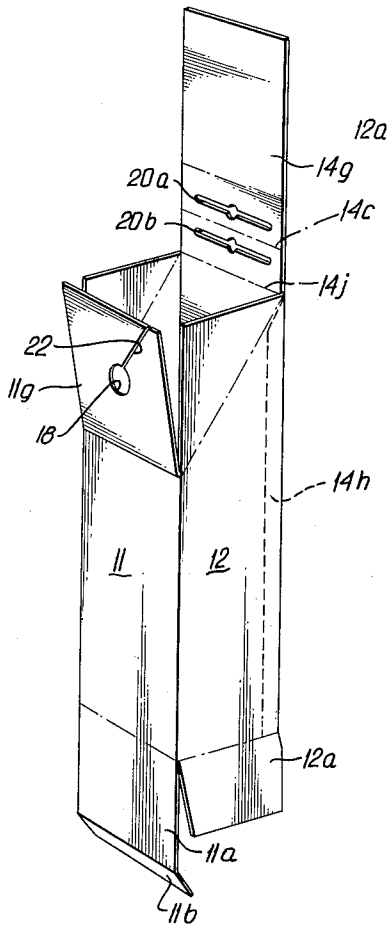
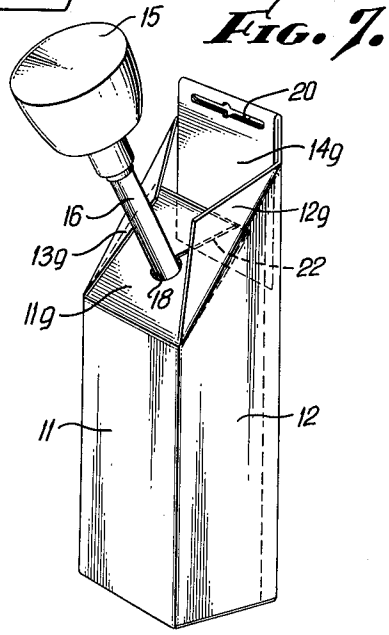


FIG. 7.



INVENTOR.
HOWARD BLONDER
BY
Flam and Flam
ATTORNEYS.

United States Patent Office 2,979,192 Patented Apr. 11, 1961

2,979,192

DISPLAY PACKAGE

Howard Blonder, Downey, Calif., assignor to Jaybee Manufacturing Corporation, Los Angeles, Calif., a corporation of California

Filed Mar. 22, 1960, Ser. No. 16,716

5 Claims. (Cl. 206—46)

This invention relates to a package construction and particularly to a display package for doorknob sets that includes a spindle upon opposite ends of which two knobs are mounted.

A substantial replacement market for such doorknob sets can be developed if a compact display package can be efficiently placed in an area that is well trafficked, as for example in a market or drug store. Furthermore, a buyer for a hardware store or chain may select a source of virtually standard hardware items on the basis of attractive and efficient packaging. Accordingly, the primary object of this invention is to provide an improved, inexpensive, attractive display package for doorknob sets or the like.

Display packages for such goods in the past have generally been rectangular or parallelepiped construction. The display of the wares has been accomplished by providing a cut-out or window at one end or along one side face. The provision of a cut-out or window however, impairs the proper operation of the end flap. This means, in general, that the size of the container must be increased in order that there be an end sufficiently remote from a window or cut-out to ensure adequate operation. A spacer, insert or stuffer is then required in order to hold the parts in proper position relative to the window. The result is increased shipping costs, and increased labor costs in assembly.

Another object of this invention is to provide a different and unique package, free of the foregoing disadvantages.

In carrying out the present invention, use is made of a package or box, the end of which is obliquely formed, one of two knobs being actually externally displayed at the frame defined by the oblique end. At the same time, the external knob is attached to the package.

Another object of this invention is to provide a display box of the foregoing character whereby the knob can be viewed not only from the front, but also from the sides.

Still another object of this invention is to provide a display box of this character that is provided with a tab by the aid of which the box with contents may if desired, be hung upon a display rack.

Still another object of this invention is to provide a package or display box of this character that is easy to assemble both by itself and with respect to contents.

Still another object of this invention is to provide an improved display package having height as its most substantial dimension in order to make possible the display of the items on a shelf with the utilization of only minimum area.

Still another object of this invention is to provide a display package of this character that requires no secondary printing operations in order to form a complete decorative display frame about the outer or exposed knob.

Still another object of this invention is to provide a box or display package of this character that is "pilfer proof" in that no one part of the package can be removed without visibly disrupting the entire package and this, despite

the fact that the second knob and the spindle are concealed from view. By the same token, a precise inventory can be taken without opening any package.

Still another object of this invention is to provide a display carton or package of this character that occupies very little space and that can readily be shipped. To implement this object, selective use is made of the hanging tab as a retaining end.

This invention possesses many other advantages, and has other objects which may be made more clearly apparent from a consideration of one embodiment of the invention. For this purpose, there is shown a form in the drawing accompanying and forming a part of the present specification. This form will now be described in detail, illustrating the general principles of the invention; but it is to be understood that this detailed description is not to be taken in a limiting sense, since the scope of this invention is best defined by the appended claims.

Referring to the drawings:

Fig. 1 is a perspective view of the assembled display package with contents, portions of the display package otherwise obscured by the contents being shown in dotted lines;

Fig. 2 is a longitudinal sectional view of the display package, the articles contained being illustrated in dot and dash lines;

Fig. 3 is a top plan view of the container;

Fig. 4 is a longitudinal sectional view taken along a plane indicated by line 4—4 of Fig. 2;

Fig. 5 is a plan view of the blank form from which the package is formed, and corresponding to the inside imprinted portions of the package;

Fig. 6 is a perspective view showing the display package glued along its side seam but preparatory to insertion of the doorknob sets; and

Fig. 7 illustrates the display package just prior to the final placement of the doorknob set therein.

The package **10** is generally rectangular, comprising a front wall **11**, two side walls **12** and **13** (see also Fig. 2) and a rear wall **14** (Fig. 4). These four walls define an elongate space for reception of the correspondingly elongate doorknob set. The doorknob set comprises three parts, a knob **15** (Figs. 2 and 4), a spindle **16** mounting the knob **15** at one end and a companion knob **17** at the other. The transverse dimensions of the space defined by the four main package walls **11**, **12**, **13** and **14** (Fig. 3) are just slightly greater than the maximum diameter of the knobs **15** and **17**. A lateral fit is thus provided, but the length of the space defined by the main walls is less than the length of the assembled doorknob set. While one knob **17** rests upon the bottom wall of the package, the other knob **15** projects beyond the boundary defined by the upper edges of the walls **11**, **12**, **13** and **14**.

The top edge **14***c* of the rear wall **14** (Fig. 4) extends above the top of the knob **15**, but the top edge **11***c* of the front wall falls slightly below the knob **15**. Edges **12***c* and **13***c* at the top of the side walls **12** and **13** extend upwardly from the corners **12***e* and **13***e* at the ends of the top edge **11***c* to points **12***d* and **13***d* located just below the top edge **14***c* of the rear wall and at the level of the top of the knob **15**. The knob **15** is thus substantially exposed.

The top edges **11***c*, **12***c*, **13***c* and **14***c* (Figs. 1 and 5) are all formed by integral flaps **11***g*, **12***g*, **13***g* and **14***g* all folded inwardly about fold lines corresponding to the top edges of the four walls. The side flaps **12***g* and **13***g*, which are triangularly formed due to the obliquity of the edges **12***c* and **13***c*, overlie the front and rear flaps **11***g* and **14***g* which are rectangular. The points or apices of the triangular overlying flaps **12***g* and **13***g* themselves

overlap and interlock behind that surface of the knob **15** located toward the rear wall **14**.

The flap **14***g* on the rear wall extends inwardly along the inner surface of the rear wall, and hence does not itself, serve to cover the upper opening. It has other functions to be described more fully hereinafter.

A triangular section of the front rectangular flap **11***g* is exposed by the triangular side flaps **12***g* and **13***g*. In this exposed portion there is provided an aperture **18** through which the upper end of the spindle **16** projects. The aperture **18** is so situated as to lie centrally between the planes of the four walls **11, 12, 13** and **14** when the flap is located substantially within and beneath the top edges **12***c* and **13***c* of the side walls, as shown in Fig. 4. The length of the flap **11***g* is greater than the distance between the front wall **11** and the rear wall **14**. Hence, the terminal portions of the flap **11***g* as shown in Fig. 4 are wedged against the rear wall **14**. The end of the front wall flap **11***g* tends to bight against the rear flap **14***g* upon attempted lifting. Due to this and to the lateral engagement of the front glap **11***g* with the inner surfaces of the side walls **12** and **13**, the front flap **11***g* is quite reinforced in order to oppose outward movement of the package contents.

The folds **12***c* and **13***c* forming the triangular flaps **12***g* and **13***g* extend from lower corners **12***e* and **13***e* at the ends of the front wall flap fold **11***c*. In order to ensure that the free points of the triangular flaps pass behind the knob, the lower corners **12***e* and **13***e* are spaced from the points of the flap a distance greater than the upper corners **12***d* and **13***d* are spaced from the free points.

All of the tabs **11***g*, **12***g*, **13***g* and **14***g* being folded inwardly from the corresponding walls, obviously the exposed portions thereof are continguous to the outer surfaces of the corresponding walls, and may thus be simultaneously printed therewith whereby a decorative frame is formed.

The tab **14***g* is formed by a fold **14***c* that lies slightly above the upper corners **12***d* and **13***d* of the triangular flaps. Registering horizontal apertures **20***a* and **20***b* (Fig. 5) in the flap **14***g* and rear wall **14** together form an elongated aperture **20** (Figs. 1 and 2) by the aid of which the package may be suspended upon a display rack. The central portion of the horizontal slit or aperture **20** is circularly enlarged as at **20***c* for engaging a rod-like finger of the display rack precisely at the center. Thus even though the rack finger is easily engaged by virtue of the relatively large aperture **20** the package hangs straight.

Figs. 5, 6 and 7 illustrate the manner in which the package may be formed and the manner in which the article may be assembled with respect to the package. In Fig. 5 the blank from which the package is made, is illustrated. The walls **11, 12, 13** and **14** laterally adjoin each other. A gluing flap **14***h* is formed along the outer edge of the rear wall **14** for cooperation with the side wall **13** whereby the parallelepiped configuration may be formed.

The package is closed at the bottom by conventional end tabs **12***a*, **11***a* and **13***a* formed at the bottom of the side, rear and side walls respectively.

In Fig. 6 the package is shown with the gluing tab **14***h* in place and the walls **11, 12, 13** and **14** moved to a rectangular parallelepiped arrangement. The bottom tabs **12***a* and **13***a* are about to be tucked inwardly. The hanging tab **14***g* is positioned. The assembled knobs and spindle may then be positioned with respect to the aperture **18**. An oblique slit **22** is formed in the tab **11***g* to provide access of the spindle to the aperture **18**. When the spindle is so placed, and the inner knob **17** is almost or actually abutting the under surface of the front wall tab **11***g*, the knob can be rotated into position with the tab **11***g*, as shown in Fig. 7. Thereupon, the knob **17** can be moved downwardly. Just before it contacts the bottom tabs **11***a*, **12***a* and **13***a*, the triangular flaps **12***g* and **13***g* are moved behind the outer knob **15**. Assembly is then completed.

The package precludes anyone from removing either knob **17** or **15** or the spindle **16** without detection by external viewing. Thus, if the knob **17** is missing, the knob **15** will tilt forwardly. Obviously if the spindle **16** is removed, the knob **15** will not be held at all. Accordingly, the package is, in this sense "pilfer proof."

For purposes of shipping the tab **14***g* together with the rear wall **14** may be folded along lines **14***j* and **14***k* as illustrated by the phantom lines shown in Fig. 4. In this position the corner formed by the fold serves to retain the knobs **15** against upward movement and the package with contents can readily be stored or shipped.

The inventor claims:

1. A display package for a doorknob set comprising two doorknobs and a spindle connected to the knobs at opposite ends, and for exposing one of the knobs at the upper end of the package, the package being made of a unitary blank printed on one side; the package including a front wall, two side walls, and a rear wall; each of the side walls having a triangular flap extending from upper edges of the side walls; the front wall also having a flap extending from its upper edge; the upper edges of each side wall extending from a lower corner common to an end of the upper edge of the front wall, and upwardly to an upper corner located at the rear wall; the flap of the front wall having an aperture for passage of the spindle; the average height of the side walls being slightly greater than the length of the assembled set less the length of the exposed knob; the triangular flap having points falling closer to the rear wall than to the front wall whereby the points may be locked behind the exposed knob as the exposed knob nests in the frame thereby provided.

2. The combination as set forth in claim 1 in which the front wall flap is rectangular, and has a length exceeding the distance between the front wall and the rear wall whereby the front wall flap interlocks the rear wall; the triangular flap overlying the front wall flap.

3. The combination as set forth in claim 1 in which the rear wall has an upper edge located above the said upper corners, and also having a tab extending from said upper edge into the box to complete the frame provided by said flap.

4. The combination as set forth in claim 1 in which the rear wall has an upper edge located above the said upper corners, and also having a tab extending from said upper edge into the box to complete the frame provided by said flap, said tab and the upper end of the rear wall having aligned apertures by the aid of which the package may be suspended, said tab and said rear wall also having fold lines extending between said upper corners by the aid of which the tab may restrain upward movement of the doorknob set.

5. The combination as set forth in claim 1 in which said front wall flap also has an oblique slit extending to its aperture, and located so as to be substantially concealed by said triangular flaps.

No references cited.