

Dec. 31, 1935.

G. R. KREIDER, JR

2,026,047

DECORATED BOX

Filed July 1, 1932

2 Sheets-Sheet 1

Fig. 1

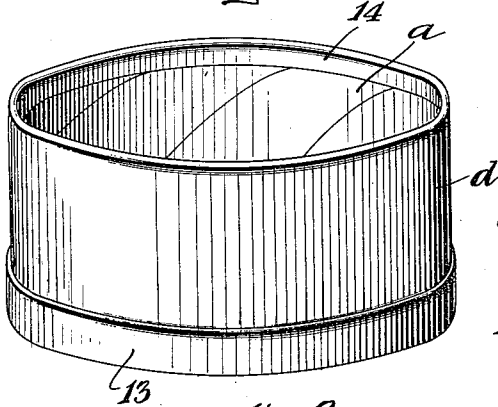


Fig. 3

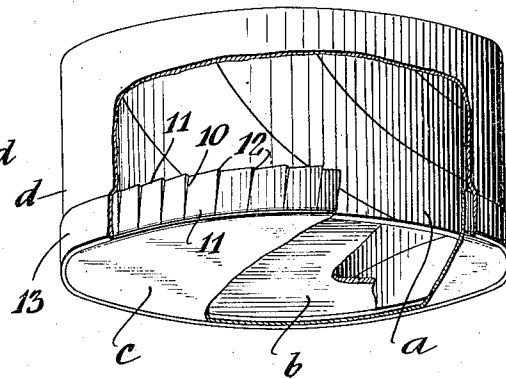


Fig. 2

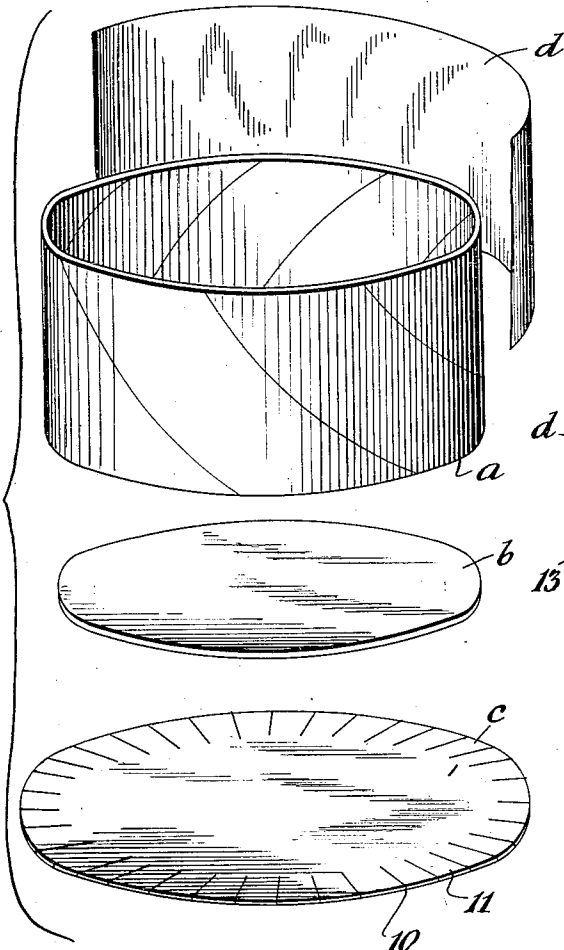
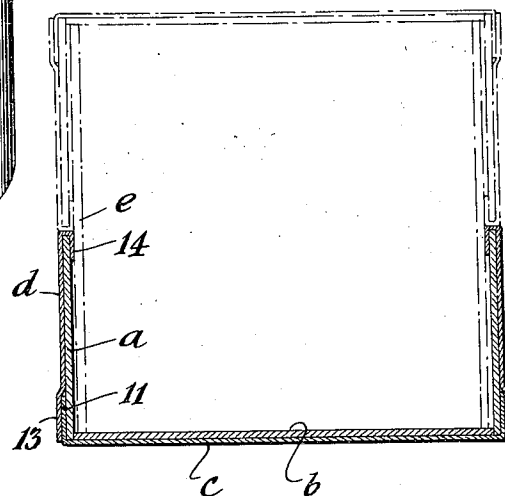


Fig. 4



INVENTOR
Gideon R. Kreider, jr.
BY
Austin & Dief
ATTORNEYS

Dec. 31, 1935.

G. R. KREIDER, JR

2,026,047

DECORATED BOX

Filed July 1, 1932

2 Sheets-Sheet 2

Fig. 5

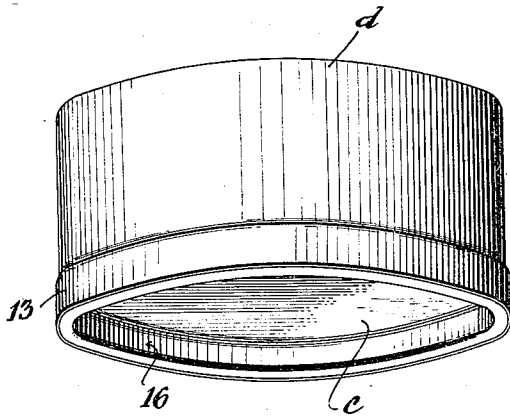


Fig. 7

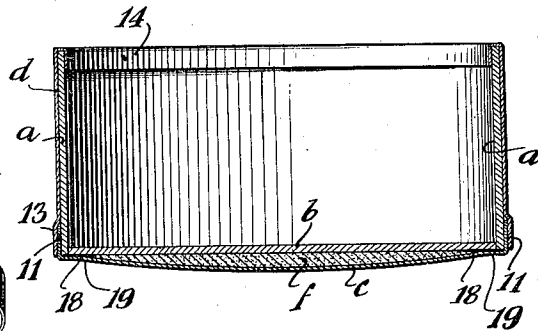


Fig. 8

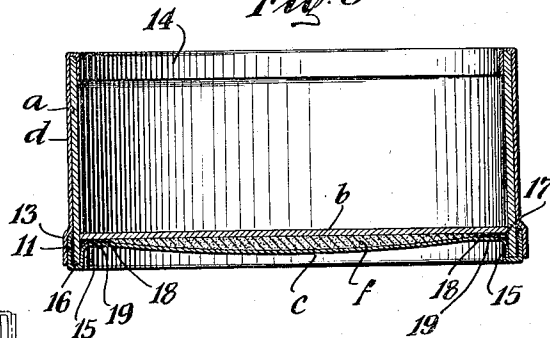


Fig. 6

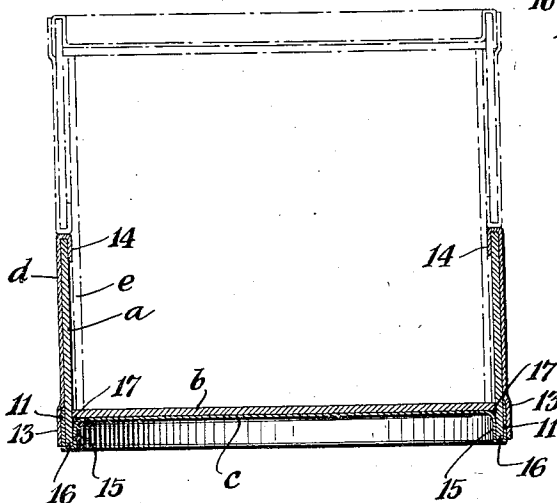
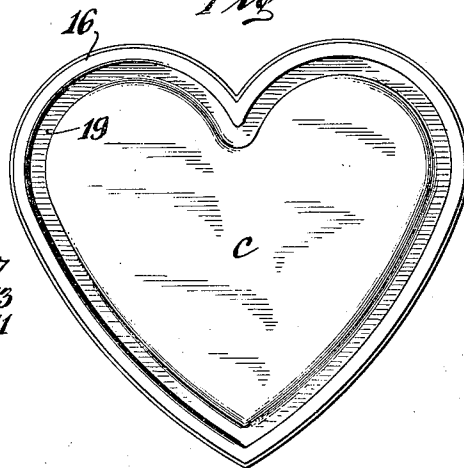


Fig. 9



INVENTOR
Gideon R. Kreider, jr.
BY

Austin & Dix
ATTORNEYS

UNITED STATES PATENT OFFICE

2,026,047

DECORATED BOX

Gideon R. Kreider, Jr., Lebanon, Pa.

Application July 1, 1932, Serial No. 620,394

6 Claims. (Cl. 229—5.5)

This invention relates to decorated boxes and more particularly to boxes which possess pleasing and decorative effects useful in connection with the packaging and displaying of merchandise.

Boxes forming the subject matter of this invention are preferably formed of cardboard and comprise a continuous side wall member of the desired shape, an end wall member which is inserted within the side wall. The end wall may be inset within the side wall to provide a vertically extending rim portion. When the end wall is inset it is preferable to dispose a shoulder of glue around the inside face of the side wall so as to provide a seat upon which the end wall may rest and be supported. A wrap sheet, which may be applied automatically, is glued to cover the outside face of the bottom wall and the rim portion of the box, the edges of the wrap sheet being secured to the outside face of the side wall of the box. That part of the wrap sheet which is secured to the outside face of the side wall is preferably provided with slits so as to provide tab portions. When the side wall of the box is other than polygonal or straight sided or in other words is round, oval, elliptical, concave, convex, or arcuate in form it is preferable to slit the outer edge of the wrap tangentially so that the tab portions will partially overlap when glued in position. The outer edge of the wrap sheet will lie more smoothly and evenly if applied in this manner. It has been found practical to fully wrap the outside face of the side walls with the tab portions of the wrap sheet, in the case of straight sided or polygonal shaped boxes. When the side wall is arcuate, however, it is preferable to use a wrap strip which extends around the outside face of the side wall, preferably overlapping the tab portions of the bottom wrap sheet and extending over the top edge of the box and secured to the inside face thereof. Boxes with padded end walls can also be made by securing the padding to the outside face of the end wall and covering the padding with the wrap sheet. In making padded boxes it is preferable to glue the intermediate portion of the wrap sheet to the outer part of the end wall so as to secure the wrap sheet securely to the end wall. The edge portion of the wrap sheet extends around the rim of the box and laps over the outside face of the side wall of the box, as before. By gluing the wrap sheet to the end wall at certain points, a recessed trim portion surrounding the padded center portion is provided, which enhances the appearance of the box. The

box parts are held together entirely by the wrap sheet except for the shoulder of glue which provides a seat for the end wall which may be used in some cases, if desired.

These boxes may be made in many different attractive designs and patterns. The box may be provided with a vertically extending rim portion, or it may be provided with a flat end wall. If the end wall is padded, various decorative effects may be obtained by securing the wrap sheet to the end wall along certain lines to provide trim recesses, with padded portions disposed in between. The wrap sheet itself may carry any variety of designs and may comprise different types of decorative paper, "Cellophane," cloth, tinsel, thin sheet metal and other material. The boxes furthermore may assume many different shapes, regular or irregular in outline. These boxes are especially adapted for machine production, they are strong and durable, attractive in appearance, and can be very economically made.

An object of this invention is to provide a decorative box which is especially adapted for machine production, which is strong and durable, attractive in appearance, and which can be made at low cost.

Another object of this invention is to provide a box of a decorative character adapted to be made automatically and which is provided with a vertically extending decorative rim portion.

Another object of my invention is to provide a box which is especially resistant to lateral thrusts against the side walls of the box.

Another object of my invention is to provide a box which can be economically made of any desired configuration on an automatic wrapping machine.

Another object of my invention is to provide a decorative box having a padded end wall with a recessed trim portion arranged in a decorative and attractive manner, the box parts being held together by a simple wrap sheet which can be applied automatically by a wrapping machine.

Still another object of my invention is to provide a wrapped box which can be economically made and which is provided with wrapped side walls of unusual smoothness.

Further objects of this invention will become apparent as the disclosure proceeds.

Although the novel features which are believed to be characteristic of this invention will be particularly pointed out in the claims appended hereto, the invention itself, as to its objects and advantages, and the manner in which it may be carried out, may be better understood by re-

ferring to the following description taken in connection with the accompanying drawings forming a part thereof, in which

Fig. 1 is a perspective view of a completed box as it appears when fully wrapped;

Fig. 2 is an exploded view of the box shown in Fig. 1, illustrating particularly the various parts from which the box is made;

Fig. 3 is a perspective view of the box with certain parts broken away to illustrate certain features of the construction;

Fig. 4 is a vertical cross-sectional view through a pair of boxes such as shown in Figure 1 telescoped together over a collar member, this view being presented for the purpose of illustrating how the boxes may be used either as a container member, or as a cover member, as desired;

Fig. 5 is a perspective view of a decorative box more particularly characterized by a vertically extending rim portion and an inset end wall;

Fig. 6 is a vertical cross-sectional view through a pair of boxes such as shown in Figure 5, one box serving as a cover member, a collar member being used to connect the same;

Fig. 7 is a vertical cross-sectional view of a box similar to that shown in Figures 1, 3 and 4, except that the end wall thereof is padded;

Fig. 8 is a vertical cross-sectional view of a box similar to that shown in Figure 5 but provided in addition with a padded end wall; and

Fig. 9 is a top view of a heart-shaped box having a vertically extending rim portion and a padded end wall surrounded by a recessed trim portion, this view being presented as an illustration of the many different shapes, forms and modifications of boxes which can be made by using the principles of this invention.

Similar reference characters refer to similar parts throughout the specification and the several views of the drawings.

I have shown in Figures 1 to 4, inclusive, a paperboard box of cylindrical form having the outer face of the end wall lying flush with one edge of the side wall. The box comprises more particularly a continuous side wall member *a* and an end wall member *b* snugly fitted within the side wall member. A bottom sheet *c* is glued to the outside face of the end wall *b* with the edges of the wrap sheet extending over and secured to the outside face of the side wall *a*, as shown more particularly in Figures 3 and 4. It is preferable to slit the outer edge of the wrap sheet *c* as at 10 to provide tab portions 11. In the case of boxes having arcuate side walls, the slits 10 are so made that the parts 12 of the tab portions 11 overlap so as to give a shingled effect thereto. This overlapping of the tab portions can be obtained by cutting the slits tangentially. The word tangentially is used to express the idea that the slits do not extend or radiate diametrically, but radiate from the edge of the blank in an off-center direction. This tangential arrangement of the slits facilitates the application of the tabs in overlapping relationship by automatic machinery. It has been found that the side walls of the box can thus be given an unusually smooth surface which is substantially free from wrinkles and other defects. When the box is straight sided or polygonal in form each tab portion 11 can be of sufficient size to cover an entire side wall, and if desired, extend over the top edge of the side wall and secured to the inside face thereof. In the case of side walls of arcuate form, however, it is preferable that the tab portions

be made shorter as shown in Figure 3, with the outside face of the side wall covered with a wrap strip the lower edge portion 13 of which covers the overlapping tab portions 11 and the upper edge 14 extending over the top edge of the box and secured to the inside face thereof.

The box as thus described, is especially adapted for automatic machine production. Boxes of attractive shapes, including boxes having round, elliptical, oval, concave, convex and irregular 10 shaped side walls can be economically made by machine at low cost. Various color effects may be produced by using wrap sheets of attractive design and color combinations. It has been found that if a wrap sheet of fair strength is 15 used, the box as above made is unusually strong and is especially resistant to crushing forces which tend to crush the side walls of the box inwardly.

A box having a vertically extending rim portion may be easily provided by inseting the end wall *b* the desired distance within the side wall *a* so as to provide a rim 16 of the desired height. In such event, it is preferable to deposit a shoulder of glue 17 around the inside face of the side wall *a* so as to provide a seat upon which the end wall *b* may rest and be supported. The center portion of the wrap sheet *c* is then secured to the outside face of the end wall *b*, the intermediate portion 15 of the wrap sheet *c* being secured to the inside face of the rim portion 16 of the box, and the tab portions 11 being secured to the outside face of the side wall *a*, as heretofore described. All these portions can be automatically assembled together on a wrapping machine. It is seen that the end wall *b* of the box is doubly supported both by the rim or shoulder 17 of glue and by the wrap sheet which is glued to the end wall *b* and to the rim portion 16 of the box.

I have shown in Figure 7 a box having a padded end wall. This box is made by providing a padding *f* which may comprise a cheap grade of cotton, wool, or other fibrous material formed into a layer of the desired shape and thickness. The padding is preferably glued to the end wall *b* before the end wall is inserted within the side wall *a* of the box. The center portion of the wrap sheet extends over and covers the padding *f*. The intermediate portion 19 of the wrap sheet is preferably in contact with the outer part of the end wall *b* of the box and is glued, as at 18, thereto. The tab portions 11 of the wrap sheet are secured to the outside face of the side wall *a* as before. By gluing the intermediate portion 19 of the wrap sheet *c* to the end wall at certain arranged points, a box of unusual strength is developed and at the same time a very attractive trim portion is provided which surrounds the padded portion of the end wall. The artistic effect thus produced is made evident by referring to the heart-shaped box shown in Figure 9.

The term "box" as herein used refers to structures having side walls and end walls and it is understood that this term is meant to include the container part and/or the cover part of an enclosed container. It is also understood that the boxes herein disclosed may be variously modified within the purview of this invention and may also be used together connected by a collar member *e*.

By using the principles herein disclosed, various attractive shapes of boxes can be made. The box may be provided with a vertically extending rim portion or may have padded end walls as

desired. The padding may be so arranged as to provide an attractive decorative effect surrounded and divided by recessed or raised trim portions. At the recessed trim portions the wrap sheet may also be secured to the box to greatly strengthen the same. The boxes are adapted for manufacture and assembly on automatic wrapping machines and can thus be made economically, uniformly, and at a low cost.

While certain novel features of the invention have been disclosed and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of the invention.

What is claimed is:

1. A decorative box adapted to be assembled by machine operation characterized by a vertically extending rim portion comprising, a side wall, an end wall inset within the side wall, and a wrap sheet having slits in the outer edge thereof, said sheet being secured to the lower edge of said side wall with the tab portions thereof secured to the side wall in overlapping relationship, holding the box parts in assembled set-up relationship, and a decorative wrap strip extending over the top edge of the side wall.

2. A decorative box adapted to be assembled by machine operation characterized by a vertically extending rim portion comprising, a side wall, an end wall, and a wrap sheet, the center portion of said sheet being secured to said end wall, an intermediate portion of said sheet being secured to the inside face of said side wall and the edge portion of the sheet being secured to the outside face of said side wall.

3. A decorative box adapted to be assembled by machine operation characterized by a vertically extending rim portion comprising, a side wall, an end wall inset within the side wall, and a wrap sheet having slits in the outer edge thereof defining tab portions, the center portion of said sheet being secured to said end wall, an intermediate portion of said sheet being secured to the inside face of the side wall, and the tab

portions of said sheet being secured to the outside face of the side wall.

4. A decorative box adapted to be assembled by machine operation comprising, a side wall, an end wall, and a wrap sheet having tangentially extending slits in the outer edge thereof defining tab portions, the center portion of said sheet being secured to said end wall, an intermediate portion of said sheet being secured to the inside face of the side wall, and the tab portions being secured to the outside face of the side wall in overlapping relationship.

5. A decorative box adapted to be assembled by machine operation comprising, a side wall, an end wall inset within the side wall, padding positioned centrally on the outside face of said end wall, and a wrap sheet having slits in the outer edge thereof defining tab portions, the center portion of said sheet extending over and covering the padding, an intermediate portion of said sheet contacting and glued to the outer part of said end wall and the inside face of said side wall, the tab portions being secured to the outside face of the side wall, said sheet holding the box parts in assembled set up relationship.

6. A decorative box adapted to be assembled by machine operation characterized by a vertically extending rim portion and a padded end wall comprising, a side wall, an end wall set within the side wall, a rim of glue extending around the inside face of the side wall to provide a seat for the end wall, padding positioned centrally on the outside face of the end wall, and a wrap sheet having slits in the outer edge thereof providing tab portions, the center portion of said sheet covering said padding, an intermediate portion of said sheet contacting with and secured to the outer part of the end wall and a portion of the inside face of the side wall, said tab portions extending around the edge of the rim and secured to the outside face of the side wall, said sheet holding the box parts together in fully assembled set up relationship.

GIDEON R. KREIDER, JR.