

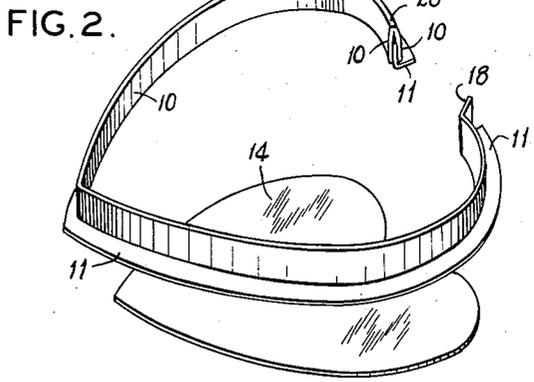
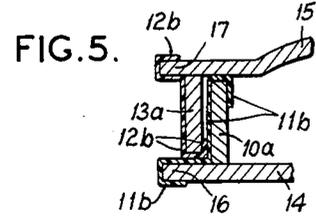
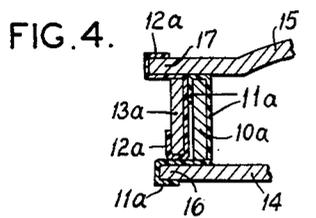
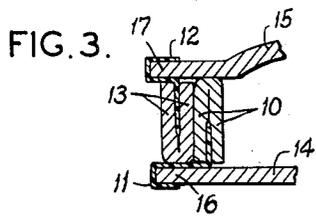
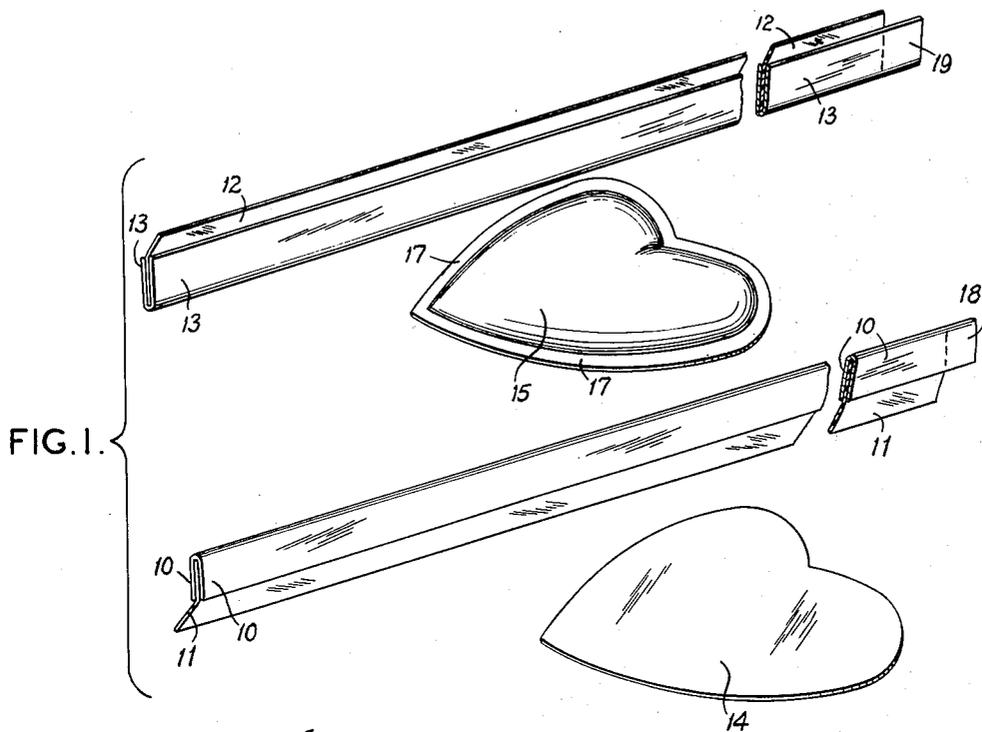
Aug. 30, 1960

D. B. ORTLEB

2,950,849

BOX CONSTRUCTION

Filed Sept. 16, 1959



INVENTOR,
DOUGLAS B. ORTLEB.
BY *Frank Groom Kirtz*
ATTORNEY

1

2,950,849

BOX CONSTRUCTION

Douglas B. Ortleb, 5456 Ruskin, St. Louis, Mo.

Filed Sept. 16, 1959, Ser. No. 840,300

3 Claims. (Cl. 229-8)

My invention relates generally to a box construction made of a relatively flexible material such as cardboard and more particularly to a box construction having an extension bottom and top.

In the practice of making such boxes heretofore the strip of cardboard which is formed to serve as the upstanding walls forming the side members has been customarily covered with a piece of white or cream colored paper. When this strip member was cut, the cut edge had been rough or rather sharp and contrasted in color with the remainder of the box. Consequently the covering paper had been used.

In addition various methods of construction have been employed which serve to glue the side members to the bottom member or the top member. Such constructions have always been difficult to form and have been uniformly difficult to seal so that it has been extremely difficult to provide an airtight or truly sealed box for such perishable products as candy and the like.

One of the principal objects of my invention has been to provide a box construction in which a truly airtight plastic seal has been provided between the side wall members and the top and bottom members.

Another object has been to provide a construction in which there is no rough cut edge disposed to view or to the touch of those handling the box.

With the above and other objects in mind, I have illustrated my invention in the drawings as employed in the manufacture of a heart-shaped box made up of a body section having an extension bottom and a cover section having an extension top. However it will be understood that this is done merely for the purposes of illustration and that my invention is not to be so limited except as stated by the claims attached.

For the attainment of these objects and such other objects as may hereinafter appear or be pointed out, I have illustrated in the drawings one form of my invention in which:

Figure 1 shows in perspective the blanks and strips from which the parts of the box will be formed;

Figure 2 is a perspective view of these elements which form the box body and which have been shaped to a predetermined conformation and which are ready for assembly;

Figure 3 is a vertical section, with thicknesses exaggerated, through the assembled box showing the construction employed to form the airtight seal;

Figure 4 is an alternative construction to form the airtight seal of Figure 3, and employing an unfolded cardboard strip for the side wall member;

Figure 5 is an alternative construction to form the airtight seal of Figure 4.

Those boxes which are intended to hold candy and similar articles are usually constructed to have an attractive appearance so that they may be used for presentation or gift purposes. This attractive appearance is usually gained by giving to the box an attractive con-

2

figuration as well as often embossing the top portion of the cover member.

In the illustrated embodiment I have shown both the cover member and the body or bottom member provided respectively with an extended top member and an extended bottom member. They are so arranged that they will telescope together, that is the side walls of the bottom member will fit snugly inside the side walls of the cover member. These side walls are formed from a strip of cardboard of predetermined length so shaped as to provide the desired continuous upstanding side wall, which may be heart-shaped, circular or of any other desired outline, including oval and square or rectangular.

In the drawings, I illustrate my method of forming a box of this character and upon viewing Figure 1 of the drawing, it will be observed that I employ a side-wall forming strip 10, cut from a predetermined length to form the side wall of the bottom of the box.

The strip 10 is formed of a piece of cardboard which has been folded longitudinally double and glued together upon itself by machine. Disposed between the folded together portions of 10 and projecting therefrom is the strip 11 which is formed from a sheet of plastic. I have had good results with using a sheet of polyethylene which is approximately three one-thousandths of an inch thick.

It will be noted that the strip portion 11 which extends from the bottom side wall in Figure 1 is somewhat longer in its extension than the strip portion 12 which extends from the top side wall 13. The bottom polyethylene portion is longer because it must be glued to the bottom member over a longer extension.

The bottom itself 14 and the top 15 are heart-shaped and provided with the extensions 16 and 17, while the top is embossed so that the uppermost surface has a central heart-shaped portion surrounded by a flat edge forming the extension 17.

The formation of the bottom or body portion will now be described in detail. The side wall portion 10, 11, 10 is first bent into the heart shape shown in Figure 2.

The side walls are then glued by machine to the bottom 14 by folding the stretchable and flexible polyethylene portion 11 around the extension 16 of the bottom 14 and gluing 11 to the underside and the upper-side of the extension 16 as shown in Figure 3.

The top or cover portion of the box is formed in a similar manner. The side wall 13, 12, 13 is formed of a strip of cardboard glued to itself and having a piece of flexible polyethylene 12 glued between and projecting therefrom. The portion 12 is glued to the underside and the upper side of the extension 17 of the top member 15. The end of each side wall is folded to form the overlapping tabs 18 and 19. The tab of Figure 2, that is 18, is glued to the end 20 to hold the ends together. A like arrangement is formed for the cover member, with tab 19.

It will be noted that the polyethylene can be used in a wide variety of colors harmonizing and is preferred, contrasting with the colors of the cardboard used to form the walls as well as the cover and bottom of the box. The polyethylene however forms a tight seal to bind the side walls to the cover and the bottom. It will be seen from Figure 3 that an extremely tight seal is formed for the entire assembly of the box.

In Figure 4 I show an alternative form. In this form the side wall 10a is formed of a single piece of cardboard and the polyethylene is glued to the extension portion 16 on the underside and the upper side both, similar to the construction shown in Figure 3. However the polyethylene 11a is glued to the inside of the

wall 10 and extends around the upper edge thereof and is glued to the outside of 10a partially extending down the outside of the wall 10a. At the same time it is glued to the upper and lower edges of 10a where it passes said edges.

Similarly the polyethylene 12a is glued to the upper-side and the underside of the extension 17 of the top or cover portion 15. The polyethylene however is also glued to the inside of the outer wall 13a and extends around the bottom edge thereof and is bent upon itself to extend partially up the outside of the outer wall 13a where it is glued in place. Also it will be noted that it is glued to the upper and lower edges of 13a where it passes around said edges.

Again I show a variation in Figure 5 of the seal of Figure 4. Here the polyethylene 11b is glued to the underside and the upperside of the extension 16 of the bottom portion 14. It then is glued to the outside of the bottom side wall 10a. It carries around the top edge of the bottom side wall 10a and extends partially down the inner side wall thereof where it is glued in place. Here the polyethylene only is glued to the top edge of the bottom side wall and not to the bottom edge.

The top portion 15 has an extension 17, shown in Figure 5 also. The polyethylene 12b is glued to the upperside and the underside of the extension 17. Then the polyethylene is glued to the outer side of the side wall 13a of the top portion. The polyethylene is carried around the bottom edge of the top portion's side wall 13a, to which it is glued, and extends partially up the inner side wall thereof where it is glued in position.

In all these variations of Figures 3, 4 and 5 it will be seen that the side walls 10 and 10a, as well as 13 and 13a do not expose a cut edge which is rough to the touch of the user. Also the outermost edge of the extensions 16 and 17 is in every case covered by polyethylene which is glued to the edges. In all cases the edges which are cut and exposed are covered with polyethylene and are hence even and smooth. In the construction of Figure 3 the edge of the side walls is formed of a longitudinal fold in the cardboard of the walls 10 and 13. In Figures 4 and 5, the edges are covered with the polyethylene strips 11a or 11b and 12a or 12b in all cases.

At the same time it will be noted that the joints between the side walls 10 and the bottom 14, as well as the joints between the side walls 13 and the top 15 are in all cases covered by the strip of polyethylene which is flexible enough to bend easily and to conform to the shapes and radii of curvature required in all cases. Despite this requirement the polyethylene in all cases glues perfectly flat, a characteristic which cannot be obtained with paper of any sort.

The seal formed is a thoroughly superior one so that candies which are packaged in such boxes are maintained in a fresh condition for a much longer period of time with all the attendant advantages of a seal of this type.

Having thus described my invention, what I claim is:

1. In a box having a body portion provided with side walls and a base, an extension on said base, a cover portion provided with side walls and a top member, an

extension on said top member, said side walls in both instances formed of a strip of cardboard folded longitudinally upon itself and glued together, a polyethylene strip disposed between and glued to the folded portions of said side walls and projecting therefrom, along its length, the base side wall being glued to the base by means of the projecting polyethylene strip which is glued to the upperside of the base extension, to the outer edge of the base extension, and to the underside of the base extension, the cover side wall being glued to the top by means of the projecting polyethylene strip which is glued to the underside of the top extension, to the outer edge of the top extension, and to the upperside of the top extension.

2. In a box having a body portion provided with side walls and a base, an extension on said base, a cover portion provided with side walls and a top member, an extension on said top member, a strip of polyethylene extending around and glued to the outside of the base side wall, glued to the top edge of the base side wall, extending down and glued to the inner side of the base side wall, extending between and glued to both the lower edge of the base side wall and the upper side of the base extension, extending around the outer edge of the base extension and glued thereto, and glued to the bottom surface of the base extension, a second strip of polyethylene extending around and glued to the outer side of the top side wall, glued to the bottom edge of the top side wall, extending up and glued to the inner side of the top side wall, extending between and glued to both the upper edge of the top side wall and the lower side of the top extension, extending around the outer edge of the top extension and glued thereto, and glued to the top surface of the top extension.

3. In a box having a body portion provided with side walls and a base, an extension on said base, a cover portion provided with side walls and a top member, an extension on said top member, a strip of polyethylene extending around and glued to the inner side of the base side wall, glued to the top edge of the base side wall, extending down and glued to the outer side of the base side wall, extending over and glued to the upper surface of the base extension, extending around and glued to the outer edge of the base extension, and glued to the bottom surface of the base extension, said base side wall glued at its lower edge to the base extension, a second strip of polyethylene extending around and glued to the inner side of the top side wall, glued to the bottom edge of the top side wall, extending up around and glued to the outer side of the top side wall, extending over and glued to the lower surface of the top extension, extending around and glued to the outer edge of the top extension, and glued to the upper surface of the top extension, said top side wall glued at its upper edge to the top extension.

References Cited in the file of this patent

UNITED STATES PATENTS

1,368,608	Klein	Jan. 5, 1926
2,115,417	Domenico et al.	Apr. 26, 1938