Sept. 27, 1938. R. I. RHODES 2,131,389

CONTAINER AND METHOD OF MAKING

Filed Oct. 8, 1937

Fig. 1.

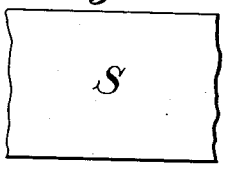


Fig. 2.

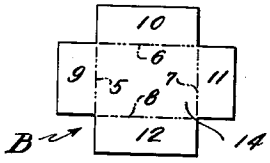


Fig. 3.

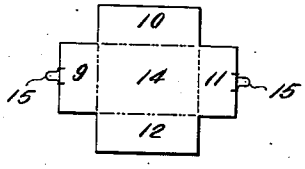


Fig. 4.

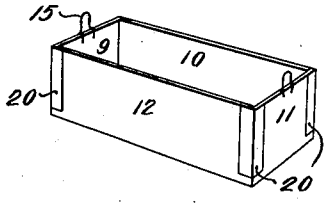


Fig. 5.

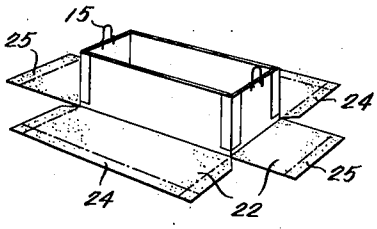


Fig. 10.

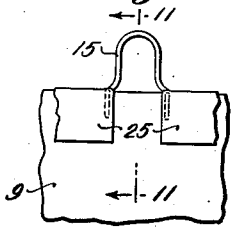


Fig. 11.



Fig. 12.

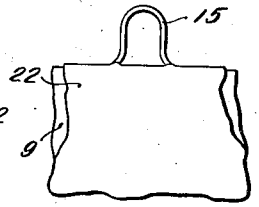


Fig. 13.

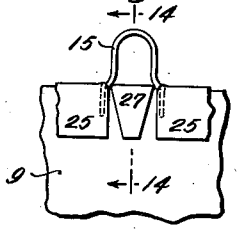


Fig. 14.

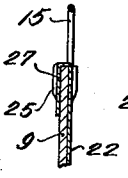


Fig. 15.

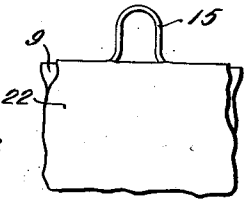


Fig. 16.

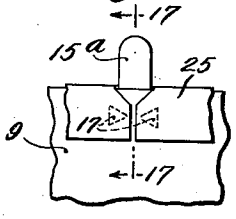


Fig. 17.

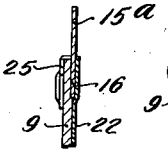


Fig. 18.

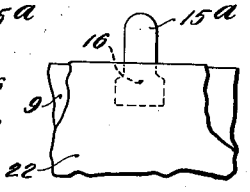


Fig. 6.

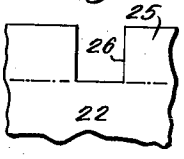


Fig. 7.

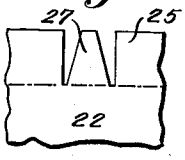


Fig. 8.

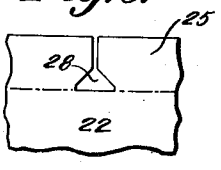
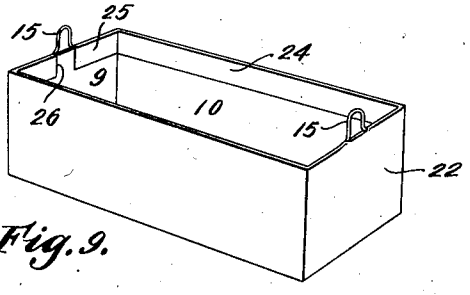


Fig. 9.



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Attys

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2,131,389

UNITED STATES PATENT OFFICE

2,131,389

CONTAINER AND METHOD OF MAKING

Russell I. Rhodes, North Attleboro, Mass., assignor to The Mason Box Company, Attleboro Falls, Mass., a corporation of Massachusetts

Application October 8, 1937, Serial No. 167,917

5 Claims. (Cl. 229—47)

This invention relates to containers of the type shown in Patent No. 1,669,279 and to an improved method of making the same.

In the manufacture of containers of the type disclosed in the aforementioned patent, it has been the practice to apply the fasteners to the completed box so that the ends of the loop or attaching prongs, as the case may be, extend through the wrapper and body of the box and are usually clenched against its inner surface, after which the boxes, with their covers applied, are shipped to the users. This practice is subject to several objections which include the bulk and consequent high cost of shipment of such boxes, the fact that the exposed lower ends of the fasteners detract from the appearance of the box, and the possibility that the attaching prongs or ends of the fastener may not be sufficiently embedded in the walls of the box to prevent either scratching or injury to the hands of the user or catching on and consequent damage to articles with which they may come in contact.

The principal objects of the invention are to provide a container or box of the above type which overcomes the aforementioned objections and to provide an improved method of making such boxes and blanks from which such boxes may be formed.

Further objects will be apparent from a consideration of the following description and accompanying drawings, wherein

Fig. 1 is a fragmentary plan view of a piece of sheet material from which the body of the blank is cut;

Fig. 2 is a plan view of a cut-out blank;

Fig. 3 is a plan view of the cut-out blank with the fasteners applied;

Fig. 4 is a perspective showing the blank folded to form a box and having its corners stayed;

Fig. 5 is a perspective illustrating the manner in which a wrapper is applied to the stayed box;

Figs. 6, 7 and 8 are fragmentary plan views illustrating various ways in which the wrappers may be cut so as to fit about and substantially conceal the lower ends of the fasteners;

Fig. 9 is an enlarged perspective showing a completed box;

Fig. 10 is an enlarged fragmentary plan view of the inside of a completed box, having a wrapper cut in the manner illustrated in Fig. 6;

Fig. 11 is a section on the line 11—11 of Fig. 10;

Fig. 12 is a view similar to Fig. 10 but showing the exterior of the box;

Figs. 13, 14 and 15 are views corresponding to Figs. 10 to 12, respectively, but showing a box having a wrapper cut in the manner illustrated in Fig. 7; and

Figs. 16, 17 and 18 are views corresponding to Figs. 10 to 12 respectively, but showing a box having this type of fastener and a wrapper cut in the manner illustrated in Fig. 8.

In accordance with the present invention a container blank B (Fig. 2) is cut or stamped from a length of sheet material S (Fig. 1) such as fiber board having unfinished surfaces. Where, as here shown, the container is to form a rectangular box, the blank B is scored along lines 5, 6, 7 and 8 which define side walls 9, 10, 11 and 12 and a bottom wall 14, and after the scoring operation fastening elements are applied to the free edges of opposite sides 9 and 11. The fastening elements may consist of U-shaped pieces of ductile wire 15 (Figs. 10 to 15) whose free ends or legs extend through the side wall adjacent to its free edge, thence upwardly and over the free edge with the outer ends embedded in the body of the wall, or such elements may comprise a bendable tab 15a (Figs. 16 to 18) whose lower end or base portion 16 is formed with attaching prongs 17 which extend through the side wall and are bent inwardly toward each other and clenched against the inner face of the wall. In either case the fastening elements are positioned so that their outer ends extend beyond the free edge of the wall for insertion through the usual opening formed in the cover or closure for the container. After having applied the fastening elements, the blanks, with or without wrappers and stays, are ready for shipment to such users or customers who are equipped to complete the manufacture in the manner presently to be described.

The finished blank (Fig. 3) is formed into a box by folding its side walls 9 to 12 along the score lines 5 to 8 and stays 20 or the like means may then be applied so as permanently to secure the walls in upstanding position, as shown in Fig. 4. A wrapper 22 (Fig. 5) having a shape similar to but larger than the blank B, is prepared and may, if desired, be similarly scored to define side and bottom walls corresponding to those of the blank, it being understood that the length and width of the areas corresponding to the sides 10 and 12 and the width of the areas corresponding to sides 9 and 11 are such as to provide foldable margins 24 and 25.

Where, as here shown, the fasteners are applied only to opposite side walls, the margins 25 of the wrapper are cut to fit about the fasteners so as to cover or form a shield about their

lower ends. To this end the margins **25** may be cut to form a square notch, as indicated at **26** in Fig. 7, or a pair of spaced slots with an intervening taper tongue **27**, as shown in Fig. 7, or a single slot terminating in an enlarged triangular shaped opening **28**, as shown in Fig. 8. In any event the size and shape of the openings or slots are such that when the marginal portions **25** are folded over the top edge and against the inner surface of the walls **9** and **11** they completely cover the lower ends of the fasteners **15** or **15a**, as the case may be, thus providing, in effect, a shield which extends completely about the fasteners, as shown in Figs. 9 to 18.

The wrappers **22** may be of any suitable sheet material whose outer surface carries either a design or finish producing an attractive appearance, or indicia, characters or other printed matter fulfilling the requirements of the user, and the inner surface may be provided with a gum coating by means of which the wrapper may be permanently secured to the box, it being understood that the gum coating may be applied either to the sheet material from which the blank is cut or to the cut-out wrapper, as desired. Where the unstayed blanks (Fig. 3) are shipped to customers equipped to complete the manufacture, they may select and apply the particular type wrapper most suitable for the use to which the completed box is to be put. Thus, there is not only an appreciable saving in the cost of transportation, but furthermore the customer is in a position to complete the box in a manner most suitable for his particular needs in one operation, it being noted that the application of special wrappers, labels or the like to the completed box is entirely dispensed with.

A completed box, manufactured in accordance with the present invention, possesses a more attractive appearance than those manufactured in accordance with customary practices, and as any rough edges of the fasteners are shielded and effectively concealed by the inturned edges of the wrapper, there is no danger of injury to the hand or fingers of the user; nor is there any danger of the attaching prongs or bent ends of the fasteners catching on and damaging the contents of the box. Moreover, since the wrapper extends over the upper edges of the side walls of the completed box, the cover may be slipped on more easily and the continued use of the box does not result in the fraying of the upper edges of the side walls as in the case of boxes manufactured from blanks cut from sheet material provided with a finished surface such as a veneer or other facing material.

While I have shown and described different desirable embodiments of the invention, it is to be understood that this disclosure is for the purpose of illustration and that various changes in shape, proportion and arrangement of parts, as well as the substitution of equivalent elements for those herein shown and described, may be made without departing from the spirit and scope of the invention, as set forth in the appended claims.

I claim:

1. A container of the class described, having a wall formed with a free edge portion, a deformable fastener having one end projecting outwardly from said wall and its other end having parts secured to the free edge portion of said wall, and a wrapper secured to the outer face of said wall and having one end folded about said free edge portion and against the inner face of said wall so as to cover substantially completely said other end of the fastener.

2. A container of the class described, having a wall formed with a free edge portion, a fastening element having at one end a deformable part projecting outwardly from the upper edge of said wall for insertion in an opening in a closure member for said container and attaching means adjacent to its opposite end embedded in said wall, and a wrapper adhesively secured to the front face of said wall with its marginal portions folded about said free edge portion and against the inner face of said wall so as to cover substantially completely said attaching means.

3. A container of the class described, having a wall formed with a free edge portion, a loop member formed of ductile wire and having its free ends embedded in said wall adjacent to said free edge portion, the closed end of said loop member extending outwardly beyond said free edge portion for insertion in an opening in a closure member for said container, and a wrapper adhesively secured to the front face of said wall with its marginal portions folded about said free edge portion and against the inner face of said wall so as to cover substantially completely the free ends of said loop member.

4. A container of the class described, having a wall formed with a free edge portion, a fastening element comprising a base portion formed with attaching prongs extending through said wall and clenched against its inner surface and a deformable part integral with said base portion and extending outwardly beyond said free edge for insertion in an opening in a closure member for said container, and a wrapper adhesively secured to the front face of said wall with its marginal portions folded about said free edge portion and against the inner face of said wall so as to cover substantially completely said attaching prongs.

5. A container of the class described having side and bottom walls, stays permanently securing the side walls in upstanding position, a fastening element secured to opposite side walls, each fastening element having a deformable part projecting outwardly from the upper edge of the side wall for insertion in an opening in a closure member for said container and attaching means embedded in said wall, and a wrapper extending about the outer face of said side and bottom walls with its marginal portions folded about the upper edges and against the inner faces of the side walls and arranged so as to cover substantially completely said attaching means.

RUSSELL I. RHODES.