June 26, 1923. 1,460,132

J. V. HORR

DISPLAY CARTON

Filed Oct. 1, 1920 3 Sheets-Sheet 1

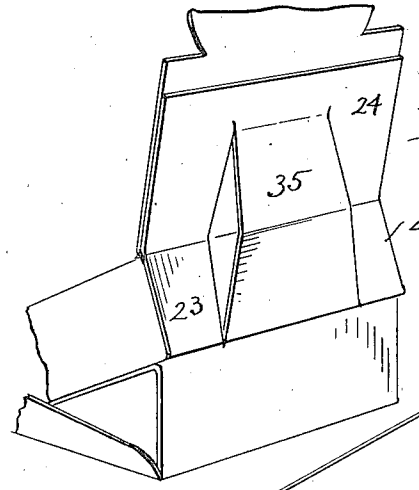


Fig. 2.

Fig. 1.

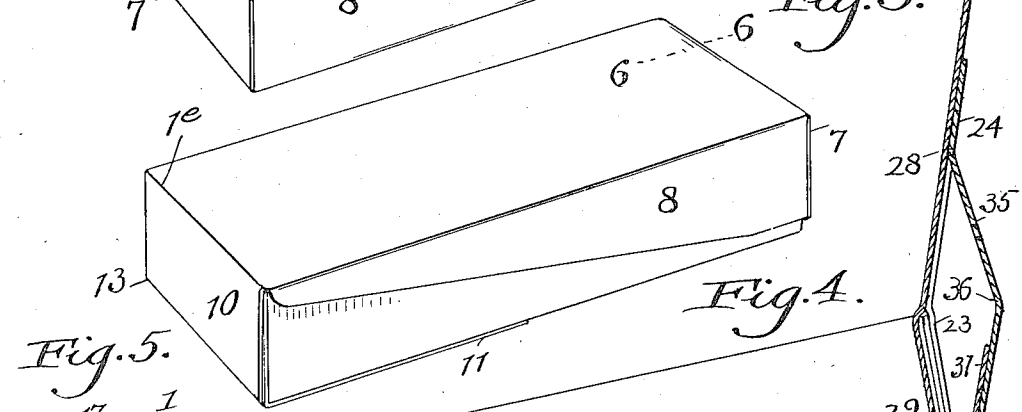


Fig. 3.

Fig. 4.

Fig. 5.

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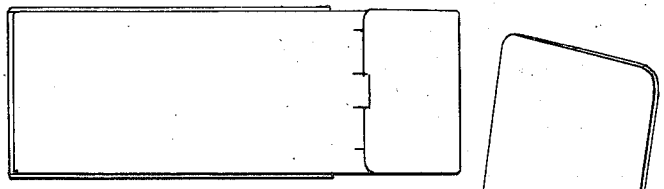


Fig. 6.

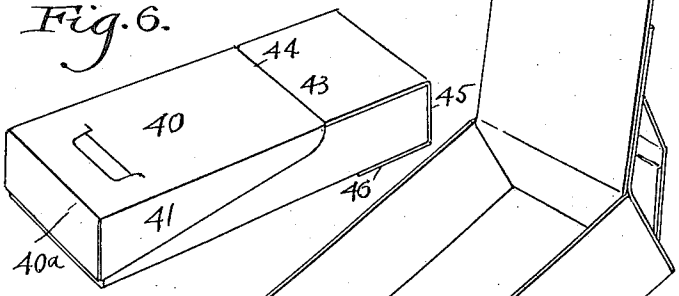


Fig. 7.

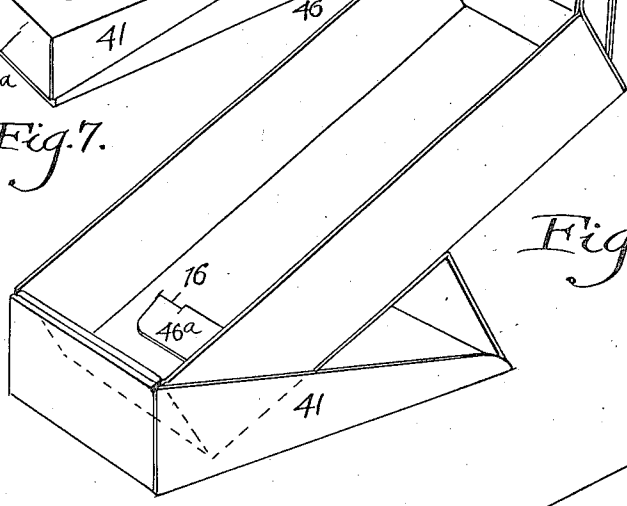


Fig. 8.

Fig. 9.

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Fig. 10.

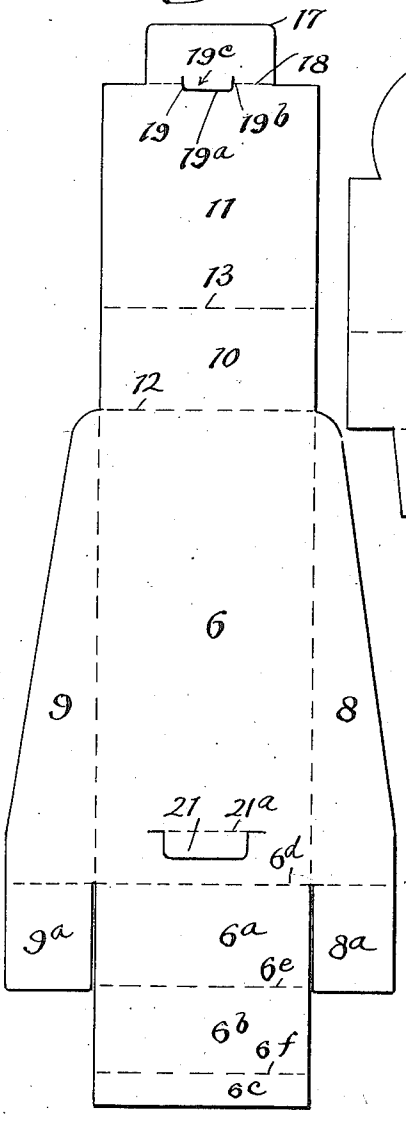


Fig. 11.

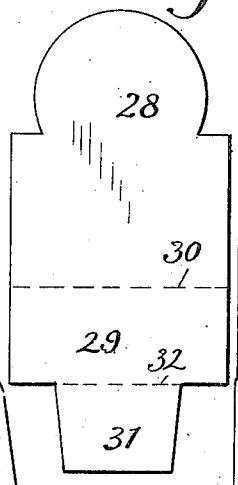
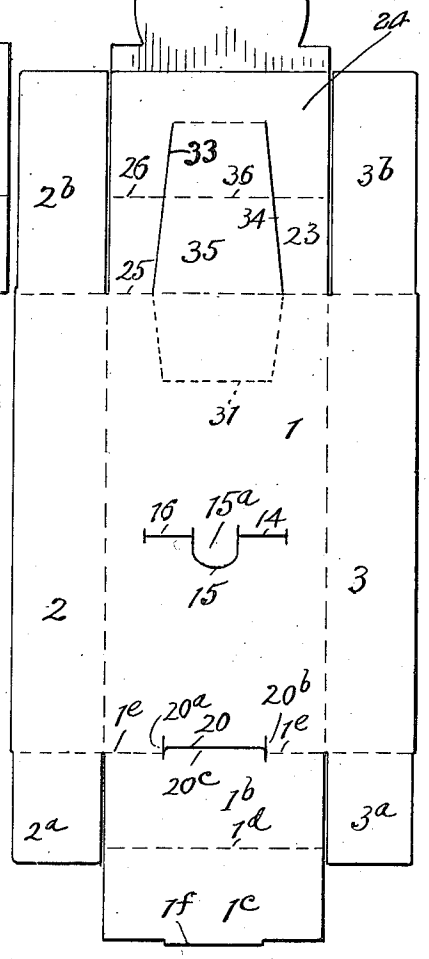


Fig. 12.



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Patented June 26, 1923. 1,460,132

UNITED STATES PATENT OFFICE.

JOHN V. HORR, OF CLEVELAND, OHIO, ASSIGNOR TO ALBERT T. FISCHER, OF CLEVELAND, OHIO.

DISPLAY CARTON.

Application filed October 1, 1920. Serial No. 413,976.

To all whom it may concern:

Be it known that I, JOHN V. HORR, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Display Cartons, of which the following is a full, clear, and exact description.

The present invention relates to a carton adapted to contain articles, which carton is constructed so that the same may be utilized as a display carton adapted to be supported in inclined position upon a shelf or counter so that the articles contained therein may be seen by respective purchasers and each article removed from the carton as sales are made.

The invention further contemplates a carton constructed so that a display device or card may be associated with the carton with means for maintaining it in upright position when the carton is in its open or display position.

The invention further contemplates a construction in which the cover remains a part of the supporting easel by which the body of the carton may be held and supported in inclined position.

The invention further contemplates certain details of construction by which the various elements making up the carton are assembled which obviates certain gluing operations and otherwise tends to produce a carton at low manufacturing cost.

Referring to the drawing, Fig. 1 is a perspective view showing a carton embodying the present invention; Fig. 2 is a perspective view showing a portion of the rear of the carton; Fig. 3 is a perspective view showing the carton in closed position; Fig. 4 is a longitudinal sectional elevation; Fig. 5 is a section on the line 4—4 of Fig. 1; Fig. 6 is a bottom view of a modified form of construction; Fig. 7 is a perspective view showing in closed condition a carton of modified construction; Fig. 8 is a perspective view showing in open position a carton of modified construction; Fig. 9 is a longitudinal sectional elevation showing a carton of modified construction; Fig. 10 is a plan view of a portion of a blank; Fig. 11 is a plan view of a portion of a blank; Fig. 12 is a plan view of a portion of a blank.

Referring to the drawings, the bottom of the carton is represented at 1 and the side members at 2 and 3 respectively, the end portion of the carton which is elevated when the carton is in open position is indicated at 4 and the other end portion of the carton is represented at 5.

As shown in Figs. 1 to 5 inclusive, a cover member 6 is provided which has a depending end portion 7 and side members 8 and 9 which side members extend throughout substantially the entire length of the cover portion.

Extending from the end of the cover member 6 is an extension which is made up of two parts indicated at 10 and 11. These parts are preferably made as a continuation of the top member 6 and are separated or identified by the score lines which are indicated at 12 and 13.

The portion 11 at the free end thereof is attached to the bottom 1 of the body of the carton the connection being such that the member 11 has a hinged connection so that when the cover is in position to form a closure for the body of the carton, the portion 11 lies along the bottom of the box, the portion 10 in contact with the end of the body of the box, the cover 6 extending over the otherwise open carton and the end 7 of the cover together with the depending side members 8 and 9 of the cover cooperating respectively with the end and side portions of the body of the carton thereby making a self-contained article.

When the carton is opened for display purposes, the cover is removed, the member 11 moved about its hinge until it lies in contact with the bottom of the box adjacent the end which is to be elevated. The end portion of the body of the carton which is indicated at 5 in the drawing is positioned within the end member 7 of the cover and between the side members 8 and 9 thereof and when in this position the part 10 which forms a part of the extension from the cover stands in a substantially upright position, thereby maintaining the end of the carton to which it is adjacent, in elevated position.

The manner in which the portion 11 of the extension from the cover is secured to the bottom 1 of the body of the carton will now be described.

The bottom 1 of the carton is cut along the lines indicated at 14, 15 and 16 in Fig.

12 thus providing what may be termed an extending tab 15^a.

The end of the member 11 is provided with an extension 17 which is folded along the score line 18 and is severed along the lines 19, 19^a, and 19^b thus providing what may be termed a tab extension 19^c.

In assembling the member 11 with respect to the bottom of the carton the extending tab 17 is introduced to the cut portion 14, 15 and 16, see Figure 12, in the bottom of the box and the tab 17 inserted through this cut portion. The tab 15^a is caused to extend through the opening, caused by the severing along the lines 19, 19^a and 19^b, and when the tab 17 is completely inserted, the tab 17 is bent toward the end 5 of the carton while the smaller tab 19^c extends toward the end 4 of the carton and the engagement of the extension 19^c with the bottom of the carton prevents the tab 17 from assuming a vertical condition. This condition is further maintained when the articles which the carton is to contain, are inserted in the carton as will be apparent. With the tab 17 maintained in substantially flat condition, the connection of the portion 11 of the cover with the bottom of the box is substantially that of a hinge and it will be noted that the connection is secured without pasting but by cutting the cardboard in a simple manner thus eliminating an expensive item of labor.

In order to prevent the body of the carton from moving rearwardly when the carton is in its open position, cooperating means between the underside of the body of the carton and the inside of the cover are provided which will now be explained.

In forming the blank for the body of the carton, the portion of the blank which forms the bottom 1 of the carton has a two part extension indicated at 1^b and 1^c in Fig. 12 which division is effected by a score line 1^d, this extension also is separated from the bottom 1 by a score line 1^e. Adjacent the score line 1^c the material of which the blank is made is severed along the lines 20, 20^a, and 20^b thereby forming a tab extension 20^c which as will be noted extends beyond the score line 1^e. The portion 1^c to which reference has before been made is formed with an extending tab 1^f.

When the sides 2 and 3 which have the extension 2^a and 3^a are folded into vertical position, the extensions 2^a and 3^a are folded at right angles to the sides 2 and 3 and then the portion 1^c is folded over the extensions 2^a and 3, and the tab 1^f is pushed through the bottom of the blank when at the severed portion 20. This causes the tab 20^c to be bent downwardly and therefore it will be seen that this bent tab 20^c and the tab 1^f extends below the bottom 1 of the carton.

The end of the top portion 6 of the cover is formed with an extension which is divided into three portions 6^a, 6^b and 6^c, these portions being formed by the score lines 6^d, 6^e and 6^f respectively. The side members of the cover, 8 and 9, are provided with extensions 8^a and 9^a. When the side members 8 and 9 are folded in the right angle position in the top of the cover 6, the portion 6^b is folded over these extensions 8^a and 9^a so that the extensions lie between the portions 6^a and 6^b of the extension which has just been described. The portion 6^b extends along the inside of the cover and it is held in position by means of a tab 21 which is formed by severing the tab along three sides and leaving the other or base portion of the tab as indicated at 21^a intact. When the portion 6^b is brought into position and contacts with the portions 8^a and 9^a, the tab 21 overlies the extension 6^c, thus holding the parts which have been described in assembled relationship.

When the end portion 5 of the body of the carton which is formed by the members 6^a and 6^b is introduced inside of the cover as shown in Fig. 4, the short extending tabs 1^f and 20^c will lie just in front of the end of the tab 21, therefore if any force be applied to the body of the carton which tends to slide the body of the carton backward, the tab 21 will engage with the tab 1^f and the tab 20^c and prevent such movement, thus when the carton is in open position, the articles contained therein will provide sufficient weight to insure contact between the tabs 21 and 1^f and thus hold the carton in rigid open position.

At the opposite end of the carton to that which has been described, the bottom member 1 has an extension which is formed in two parts as indicated at 23 and 24, these parts being formed by the score lines 25 and 26 respectively. The side portions 2 and 3 have the extensions 2^b and 3^b which when the sides are folded in vertical position extend at right angles and transversely with respect to the bottom 1, these extensions 2^b and 3^b overlapping each other and forming a part of the end wall of the box. The portion 23 is folded into vertical position and the width is substantially the same as the width of the portions 2^b and 3^b. The portion 24 is adapted to have secured thereto by an adhesive or otherwise, a display member which is indicated at 28. This display member has an extension 29 formed by the score 30 and the portion 29 has an extending tab 31 which is scored as indicated at 32. The display member 28 as indicated is secured to the portion 24 and the score 30 coincides substantially with the score 26. When the carton is in folded condition the portion 23 lies on one side of the extensions 2^b and 3^b, while the member 29 lies on the inside of the members 2^b and

3b. The extension or tab 31 is tucked beneath the members 2b and 3b so that the members 2b and 3b as well as the associated members 23 and 29 are securely held together.

The portions 23 and 24 which have before been described are severed along the lines indicated at 33 and 34 and this severed portion maintains its integral formation at the ends of the severing lines. The tab 31 when tucked beneath the members 2b and 3b extends through the opening formed by the severed portion before described and inasmuch as the tendency of the tab 31 is to straighten itself, it pushes the severed portion 35 outwardly and causes it to bend along a score line indicated at 36.

Due to the fact that the severed portion 35 is moved to the position such as indicated in Fig. 4, the display member 28 is held in vertical position, and if the display member 28 be moved to horizontal position, upon release of the force which thus moves it, the resiliency of the tab member 31 and the cut-out portion 35 will return the display member to its upright position. This insures that the display member will be held in its proper upright position under all circumstances.

The construction which has just been described provides what may be termed a full cover, that is to say, a cover having depending side flanges or pieces throughout its entire length and as will be appreciated, the angle of inclination at which the box may be held has its limitations as to height because the member 10 cannot be any higher than the front end member 5 of the body of the carton.

It frequently is desirable to support the carton in an inclined position of greater angle than that as shown and described, and for this purpose the construction may be somewhat modified as indicated in Figs. 6 to 7. In this construction the body of the carton, the mounting of the display card, and the other features of construction, are precisely the same as that which has been described. The cover, however, is somewhat modified. The cover comprises a top portion 40 with side depending members 41 and 44, the top 40 has an extension 43 and there is a score line 44 between the portions 40 and 43 of the cover. From the cover portion 43 there is an extension formed in two parts 45 and 46, these portions being separated from each other by a score 47 and the parts 45 and 43 being separated from each other by a score 48. The portion 46 is provided with a tab extension 46a which extends through a severed portion in the bottom of the carton, this being the same severed portion as indicated at 14, 15 and 16 in Fig. 12, and the extending tab 46a is formed in precisely the same manner as the extending tab shown in Fig. 10. When the carton is in folded condition and the cover is in place, the portions 40 and 43 form the cover of the carton. The portion 45 coincides with the end of the carton and the portion 46 lies in engagement with the bottom of the carton.

When the carton is moved to open position the portion 46 moves through an angle of 180° and again lies flat against the bottom of the carton. Likewise the portion 45 lies against the bottom of the carton and the end portion 5 of the body of the carton is inserted between the side members 41 and 42 and into engagement with the end 40a of the cover and in this position the portion 43 is caused to assume an upright position, as indicated in Fig. 9. With the construction which has just been described, the relative proportions as to area of the parts 40 and 43 may be varied and as the length of the portion 40 is shortened and that of the portion 43 is increased, the body of the carton will be supported at a greater angle of inclination.

The same construction is employed in the modification which has just been described for the purpose of preventing a backward sliding movement of the body of the carton as that described with respect to the form shown in Figs. 1 to 5 inclusive.

Having described my invention, I claim—

1. A display carton comprising a body portion which serves as a container, a cover for said body portion, a member hingedly connected to and extending from one end of the cover and hingedly connected to the bottom of the container upon the outside thereof, said member having a score at a distance from both hinges and being adapted to fold along the bottom and around the end of the container when the cover is in closed position, the container when in open position having an end of the box inserted within the cover at one end thereof, a portion of said member being in substantially upright position to support the opposite end of the container and hold the container in inclined position.

2. A display carton comprising a body portion which serves as a container, a cover for said carton, a member hingedly connected to and extending from one end of the cover and hingedly connected to the bottom of the container and extending upon the outside thereof, said member having a score and being adapted to fold along the bottom and around the end of the container when the cover is in closed position, the container when in open position having an end of the box inserted within the cover adjacent one end thereof, said member having a portion which lies along the bottom of the box and a portion which extends in substantially upright position to support the

opposite end of the container and hold the same in inclined position.

3. A display carton comprising a body portion which serves as a container, a cover for said carton, a member hingedly connected to and extending from one end of the cover and hingedly connected to the bottom of the container and extending upon the outside thereof, said member having a score at a distance from both hinges and being adapted to fold along the bottom and around the end of the container when the cover is in closed position, the container when in open position having an end of the box inserted within the cover at one end thereof, a portion of said member being in substantially upright position to support the opposite end of the container and hold the same in inclined position and cooperating means upon the container and the cover for preventing the relative sliding movement of the container and cover.

4. A display carton comprising a body portion which serves as a container, a cover for said carton, a member hingedly connected to and extending from one end of the cover and hingedly connected to the bottom of the container and extending upon the outside thereof, said member having a score and being adapted to fold along the bottom and around the end of the container when the cover is in closed position, the container when in open position having an end of the box inserted with the cover at one end thereof, a portion of said member being in substantially upright position to support the opposite end of the container and hold the same in inclined position and cooperating means upon the container and the cover for preventing the relative sliding movement of the container and cover, said means comprising a member extending below the bottom of the container at the forward portion thereof on the container and a projecting member on the cover which engage when the box is in open position.

5. A display carton comprising a body portion which serves as a container, a cover for said carton, said container when in open position having the one end of the container inserted within the cover, means for supporting the other end of the carton in elevated position and cooperating means upon the bottom of the container and the inside of the cover for preventing backward slipping of the container with respect to the cover when in open position.

6. A display carton comprising a body portion which serves as a container, a cover for said carton, said container when in open position having the one end of the container inserted within the cover, means for supporting the other end of the carton in elevated position and cooperating means upon the container and the cover for preventing backward slipping of the container with respect to the cover when in open position, said means comprising a member carried by the body portion and extending below the bottom thereof at the forward end and a member carried by the cover and extending below the bottom thereof which are adapted to engage.

7. A display carton comprising a body portion which serves as a container, a cover for said carton, the said body portion being adapted to have an end thereof inserted within the cover at one end thereof when the carton is in open position, means for holding the other end of the body portion in elevated position, the said end of the carton which engages with the cover being formed by extensions from the side members of the body and an enfolding member which extends within the body portion and encloses the said extensions, the end of the said box being provided with an opening through which the said tab extends, the cover at the end at which the body portion engages when in open position, being provided with a cutout tab and adapted to engage with the tab on the body portion.

8. A display carton comprising a body portion which serves as a container, a cover for said carton, the said body portion being adapted to have an end thereof within the cover at one end thereof when the carton is in open position, means for holding the other end of the carton in elevated position, the said end of the carton which engages with the cover being formed by extension from the side members of the body and an enfolding member which extends within the body portion and encloses the said extensions, the end of said enfolding member being provided with an extending tab and the bottom portion of the body being provided with an opening through which the said tab extends, the said cover at the end at which the body portion engages being formed by inwardly extending members from the sides of the cover and an enfolding member which encloses the said extensions, a portion of said enfolding member projecting along the top of the cover on the inside thereof, a tab member for holding the said extension, the tab member last mentioned being adapted to engage with the tab member formed on the body portion when the carton is in open position.

9. A display carton comprising a body portion which serves as a container, a cover for said body portion, a member extending from one end of the cover and provided with an extending tab, a secondary tab formed by severing a portion of said extension, the bottom of the body of the carton being provided with a cut and a tab member formed by severing a portion of the bottom of the carton, the said tab car-

ried by the member which extends from the cover extending through the cut in the bottom of the carton, the portion of the tab extending within the carton being folded against the bottom of the carton and lying into contact with the bottom of the carton whereby there is formed a hinged connection between the bottom of the carton and the member which extends from the cover.

10. A display carton comprising a body portion which serves as a container, the bottom member of said body member having an extension, a portion of which extension serves as one end of the container, said extension being severed along two opposite lines and said severed portion being provided with a score intermediate its ends, a display member secured to a portion of said extension, said display member having an extending tab, side members for the body portion, each of said side members having an extension which is folded inwardly to lie inside of that portion of the extension which forms the end of the carton, the said tab member on the display member being tucked beneath the said inwardly extending members and into engagement with the cut-out portion of the said extension.

11. A display carton comprising a body portion having side members, the said side members at one end having extensions which extend inwardly to form part of the end of the carton when the side members are in folded position, the bottom of the body portion of the carton having an extension, a portion of said extension forming a part of the end of the carton and extending outside of the portions which extend inwardly from the side member, the said member which extends from the bottom of the carton being severed along two lines, and said severed portion being provided with a score intermediate its ends, a display member secured to a portion of the member which extends from the bottom of the carton, said display member being provided with an extension which engages upon the inside of the extensions from the side members and said display member being provided with a tab adapted to tuck beneath the said extensions from the side members and into contact with the aforesaid severed portion for the purpose described.

In testimony whereof, I hereunto affix my signature.

JOHN V. HORR.