March 30, 1937. E. C. POTTER 2,075,624

CONTAINER

Filed Feb. 13, 1936 2 Sheets-Sheet 1

Fig. 1

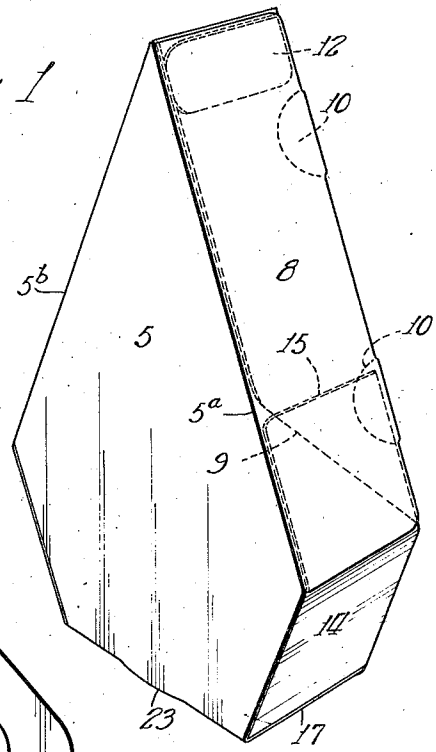
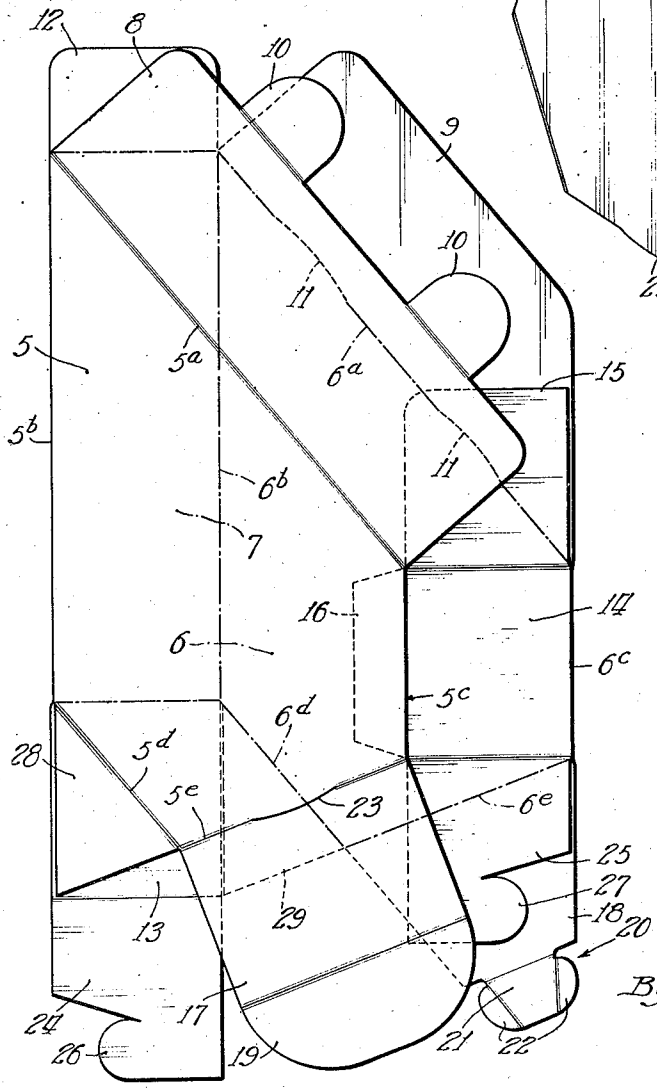


Fig. 2



Inventor:
Earl C. Potter
By: E. A. Wagoneller
Atty.

March 30, 1937. E. C. POTTER 2,075,624

CONTAINER

Filed Feb. 13, 1936 2 Sheets-Sheet 2

Fig. 3

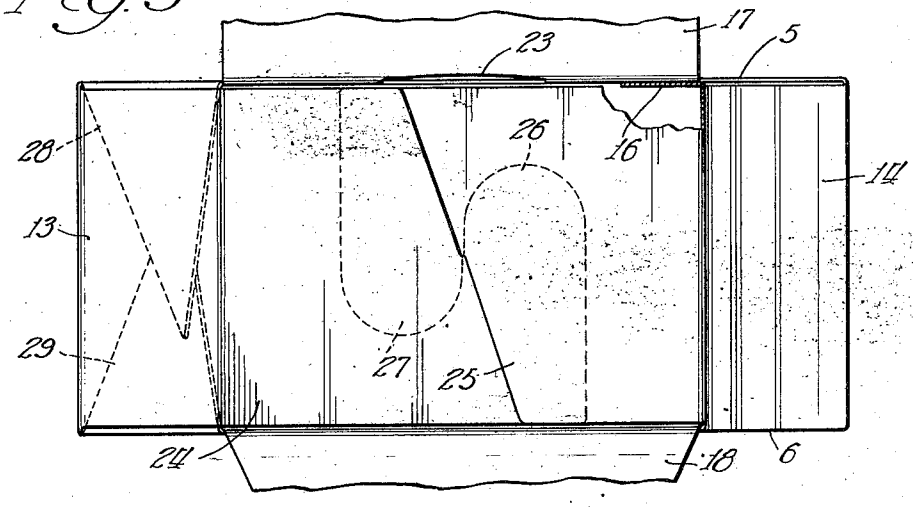
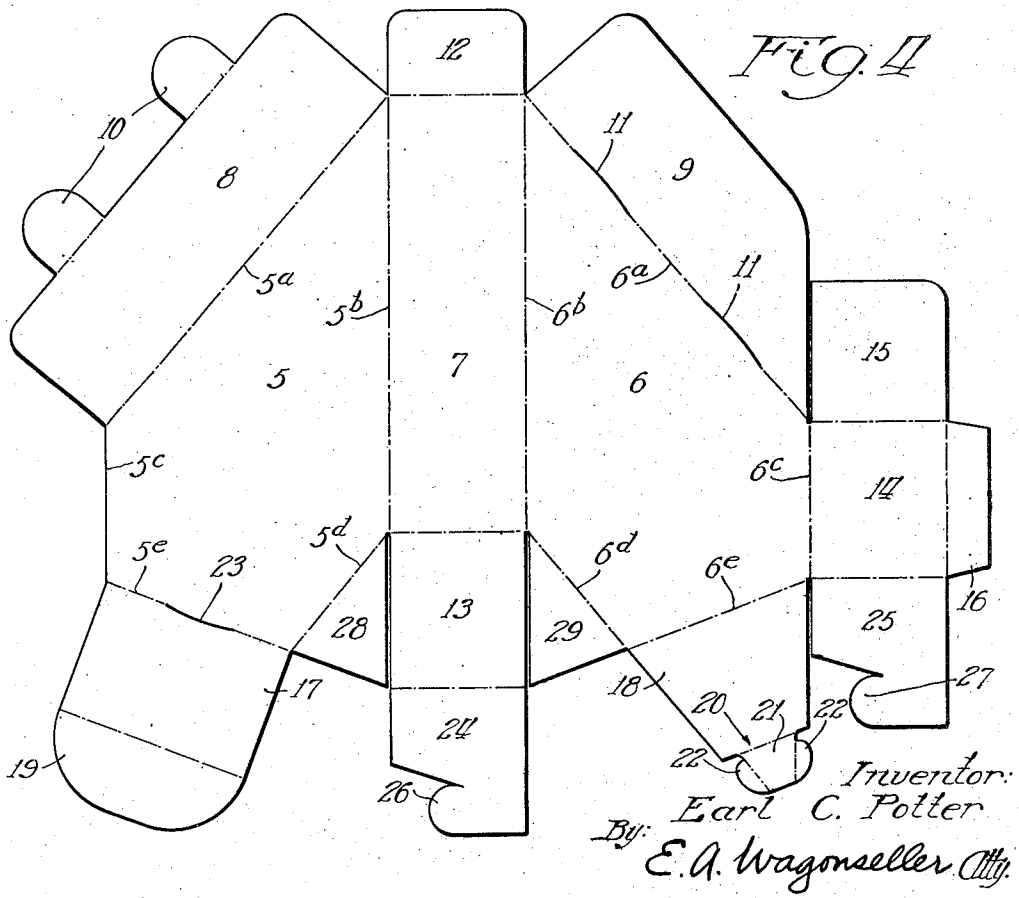


Fig. 4



Inventor:
Earl C. Potter
By: E. A. Wagonseller Atty.

Patented Mar. 30, 1937 2,075,624

UNITED STATES PATENT OFFICE

2,075,624

CONTAINER

Earl C. Potter, Chicago, Ill., assignor to Container Corporation of America, Chicago, Ill., a corporation of Delaware

Application February 13, 1936, Serial No. 63,680

3 Claims. (Cl. 229—22)

The present invention relates to containers, and more particularly to collapsible, folding cartons adapted to be set up to retain individual articles, such as bottles.

One object of the present invention is to provide a folding carton of relatively simple form which is easy to set up and which, while affording adequate protection for a bottle or other article, at the same time is of such a shape as to conform to the shape of the article contained therein as well as to receive and cooperate with various forms of decorative printed matter that it may be desired to apply to the surface of the carton.

A further object of the invention is to provide a carton adapted to hold a single article, such as a bottle, the carton being shaped to simulate the general outline of a conventional Christmas tree and base therefor.

A further object of the invention is to provide securing flaps for the base of the carton which will adequately support an article therein and will not become readily disengaged.

To these and other ends the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Fig. 1 is a perspective view of a preferred embodiment of a container made in accordance with the present invention;

Fig. 2 is a view of the container blank in tubular, collapsed condition;

Fig. 3 is a bottom view with bottom flaps partially assembled; and

Fig. 4 is a view of the blank spread out.

Similar reference characters throughout the several views indicate the same parts.

The present invention as disclosed provides a multi-sided collapsible carton having two main panels thereof tapered to a peak with two cooperating side panels of rectangular form joining the upwardly tapered edges of the main panels. Additional side wall portions near the bottom of the container are inclined downwardly to a flat base or bottom wall whereby the carton is adapted to generally simulate a tree, house, or similarly shaped object.

Referring more particularly to the drawings, the blank of the carton comprises wall sections 5 and 6 of pentagonal shape (hereinafter for convenience sometimes termed front wall 5 and rear wall 6), a side wall section 7 disposed between the front and rear wall sections, and a side wall section 8 integrally joined to the side of the front wall section opposite to the side wall 7. The walls are defined from each other by suitable score lines, as indicated, along which the walls may be hingedly moved relatively to each other.

The front and rear walls are preferably tapered toward their upper ends along lines 5*a*, 5*b* and 6*a*, 6*b*, these lines meeting at the top of the carton. The front and rear walls are also preferably tapered toward their lower ends along lines 5*c*, 5*d* and 6*c*, 6*d* which converge downwardly but terminate short of meeting so as to provide a relatively broad base line, indicated at 5*e* and 6*e*. It will thus be noted that the upper portions of the front and rear walls are triangular and the lower portions are trapeziform in shape.

The rear wall 6 is provided with a flap 9 which extends along the edge of the triangular portion of the rear wall which is opposite to side wall 7.

For the purpose of retaining the carton in closed condition along the side wall portions 8 and 9, retaining means are provided which, according to the present invention, are constituted by tabs 10, 10, on the side wall portion 8, and slits 11, 11 formed along the score line 6*a* separating the rear wall 6 from the flap 9.

In order to completely close the upper edge of the carton a flap extension 12 is provided at the upper end of the side wall 7.

The side wall 7 has at its lower end an extension 13 serving as a continuation of the side wall between the bottom and the point at which the front and rear walls start to converge downwardly. A similar wall portion 14 is formed at the other side of the carton. This wall portion is in the form of a flap extension on the inclined lower edge of the rear wall 6. The wall portion 14 preferably carries on its upper edge a flap 15 to underlie the wall 8 and form a closed joint between the wall 8 and the wall 14.

For the purpose of enabling the container to be made up in tubular form, a glue flap 16 is provided on the wall 14 whereby the latter may be hingedly secured to the front wall 5 along the line 5*c*. It is to be noted that lines 5*c*, 6*c*, 5*b* and 6*b* are in parallelism and that opposite sides are equal in width, whereby the carton, in tubular form, is adapted to be collapsible to a flattened position.

The bottom of the carton is preferably formed by flaps 17 and 18 located respectively on the front wall 5 and the rear wall 6. The flap 17 has a tuck-in flap extension 19 thereon adapted to lie against the inner face of the rear wall 6 when the box is set up. The flap 18 carries a locking tab 20 comprising a central portion 21 with wing portions 22, 22 defined from the central

portion by means of the score lines indicated. The locking tab is adapted to be inserted into the slit 23 formed along the score line 5e at the base of the front wall 5. In order to insert the locking tab 20 the wing portions 22 will be folded against the central portion 21 until the tab is completely inserted after which the wing portions 22 will tend to regain their original position which causes the effective width of the tab to be greater than the length of the slit 23 thus preventing removal of the locking tab except by either tearing the slit or the locking tab.

In order to retain the side wall portion 13 in proper relation with respect to the adjacent lower edges of the front and rear walls the portions 13 and 14 are each provided with a flap extension thereon indicated respectively at 24 and 25. These extensions are provided with cooperating engaging portions 26 and 27.

For the purpose of closing the joint between the side edges of side wall portion 13 and the edges of front and rear walls 5 and 6 suitable flaps 28 and 29 are provided, located respectively on front wall 5 and rear wall 6 and joined thereto along lines 5d and 6d respectively.

The blank of the container, shown in Fig. 4, after being cut and scored as illustrated, is secured in tubular form, see Fig. 2. The cartons in this condition are shipped to the user to be set up by a few simple operations which in general will comprise folding inwardly the flaps 28 and 29 and folding the side wall portions thereover after which the cooperating flaps 24 and 25 are secured together. The flap extension 17 is then brought in position at the bottom and the tuck-in flap 19 is inserted between the inner face of the rear wall 6 and the interlocked flaps 24 and 25. The flap 18 is then folded over against the flap 17 and the locking tab 20 is inserted through the slit 23 as above described.

The next operation is to close the upper part of the side wall formed by portions 8 and 9. First, the flaps 12 and 15 are bent over into the positions shown in Fig. 1; the flap 9 is then folded over against the flaps 12 and 15 after which the side wall portion 8 is folded against the flap 9 and the tongues 10, 10 are inserted into the slits 11, 11.

The use of the terms "front wall" and "rear wall" herein is not to be understood as limiting the description thereto but is for simplicity of designation. It is within the scope of the present invention to interchange these walls so that the rear wall becomes the front wall and, vice versa.

The article to be packed in the carton can be inserted through the opening that is closed by the flaps 8, 9, 12 and 15.

From the foregoing it is apparent that the carton of the present invention can be utilized in substantially the same manner as a tubular carton of regular form and can be readily sealed without the use of adhesive or other securing means and without requiring the use of any machinery. The carton can be formed in a pleasing and artistic shape whereby it is adapted to receive decorative printing representing various forms, such for example, as a conventional form of Christmas tree.

While the present description sets forth a preferred embodiment of the invention, numerous changes may be made in the construction without departing from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A carton blank cut and scored to provide a centrally disposed side wall portion, tapered front and rear wall portions attached respectively to opposite sides of the side wall portion, a flap on the outer edge of one of the tapered wall portions, said flap constituting a second side wall portion, the lower ends of the front and rear wall portions being tapered along lines converging downwardly, a flap on the lower edge of one of said wall portions adapted to form a bottom for the carton, said first-mentioned side wall portion having at its lower end an extension free to move relatively to the front and rear wall portions whereby, when the carton is set up, said extension may be disposed along the edges of the adjacent downwardly converging sides of the front and rear wall portions, and an extension on the inclined edge of the rear wall portion at its lower end adapted to form a continuation of the second-mentioned side wall when the blank is set up.

2. A carton of the class described having two oppositely disposed pentagonal sides of symmetrical form having two edges converging upwardly to a peak, a base edge, and two edges converging downwardly from the first-mentioned edges to meet the edges of the base, said downwardly inclined edges being substantially parallel respectively to the alternately disposed upper inclined edges, a side wall joining two of the upper inclined edges of the pentagonal walls, a second side wall joining two adjacent lower inclined edges of the pentagonal walls opposite and parallel to the first-mentioned side wall, a closure flap on one of the pentagonal walls at the base, and a closure flap on the first-mentioned side wall adapted to close the space between the pentagonal walls along the remaining lower inclined edges thereof opposite the second-mentioned side wall.

3. A carton of the class described having two oppositely disposed pentagonal sides of symmetrical form having two edges converging upwardly to a peak, a base edge, and two edges converging downwardly from the first-mentioned edges to meet the base edge, said downwardly inclined edges being substantially parallel respectively to the alternately disposed upper inclined edges, a side wall joining two of the upper inclined edges of the pentagonal walls, a second side wall joining two adjacent lower inclined edges of the pentagonal walls opposite and parallel to the first-mentioned side wall, a closure flap on the upper portion of one of the pentagonal walls disposed along the remaining inclined edge thereof opposite the first-mentioned side wall, a closure flap on one of the pentagonal walls at the base, and a flap on the first-mentioned side wall adapted to close the space between the pentagonal walls along the remaining lower inclined edges thereof opposite the second-mentioned side wall.

EARL C. POTTER.