Sept. 13, 1932. W. R. WILLAUER 1,877,213

CARTON

Filed Feb. 13, 1930

Fig. 1

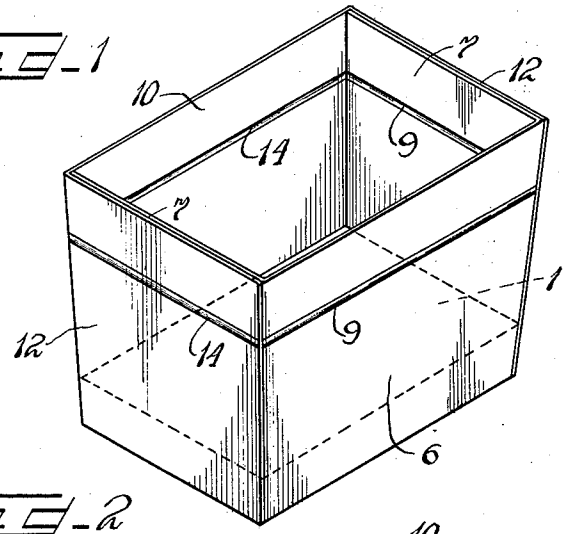


Fig. 2

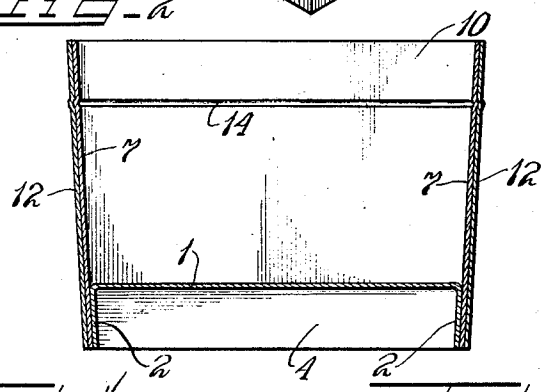


Fig. 4

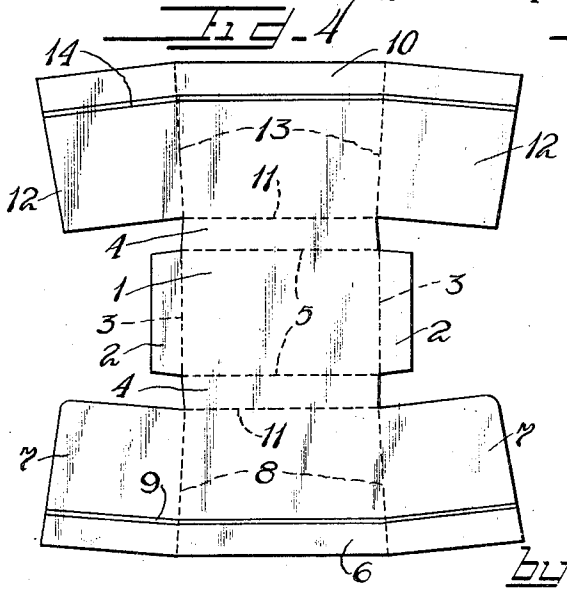
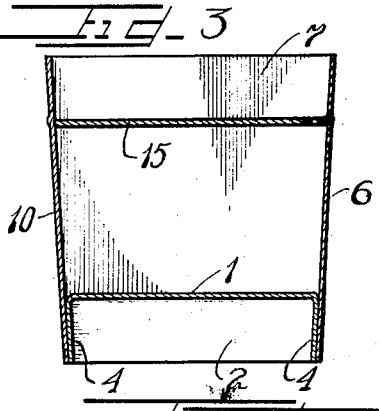


Fig. 3



Inventor

William R. Willauer

By Charles O. Wills Attys

Patented Sept. 13, 1932

1,877,213

UNITED STATES PATENT OFFICE

WILLIAM R. WILLAUER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE MENASHA PRODUCTS COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF WISCONSIN

CARTON

Application filed February 13, 1930. Serial No. 428,001.

This invention relates to an improved type of carton and a blank for making the same, said blank being of unitary form comprising integrally connected side walls, end walls and a bottom, with said bottom having integral side and end flanges or flaps adapted to reinforce the lower end of the carton when assembled to provide a reinforced standard or base for the carton with a raised bottom.

It is an object of this invention to provide an improved type of carton blank which is creased and scored to permit the same to be readily folded to form a container or carton having a raised bottom and an inner peripheral groove for the reception of a cover.

It is also an object of this invention to provide a one-piece container or carton blank adapted to be folded to provide a tapered angular container or carton.

It is a further object of this invention to provide an improved type of carton blank of unitary construction having creases therein to permit the blank to be folded to provide a tapered angular container having a raised bottom, the side and end walls of which are scored to provide a stop groove for the reception of a lowered friction cover.

It is furthermore an object of this invention to provide an improved simplified form of a carton blank wherein a flanged bottom has side wall sections integrally connected with the side flanges thereof, while each of the side wall sections has a pair of end wall sections integral therewith to provide a carton or container having a raised bottom, single thickness side walls and double thickness end walls, with the lower ends of the side walls and end walls reinforced by the flange members of the raised bottom.

It is an important object of this invention to provide an improved type of carton or container blank of unitary construction adapted to be folded to provide a tapered angular body section provided with a flanged raised bottom, the flanges of which serve to reinforce the lower margins of the body section walls below the level of said raised bottom.

Other and further important objects of this invention will be apparent from the disclosures in the specification and accompanying drawing.

The invention (in a preferred form) is illustrated in the drawing and hereinafter more fully described.

On the drawing:

Figure 1 is a perspective view of a container or carton constructed of a unitary blank embodying the principles of this invention.

Figure 2 is a longitudinal central vertical section of the carton illustrated in Figure 1.

Figure 3 is a transverse vertical section of the carton.

Figure 4 is a developed plan view of the carton blank indicating the creases in dotted lines and the scorings in full lines.

As shown on the drawing:

The improved carton or container blank embodying the principles of this invention is adapted to be constructed of paper or other suitable material and is of unitary form comprising a rectangular bottom or base plate 1 oblong in form and having integrally formed on the end margins thereof a pair of end flaps or flanges 2. Creases 3 are provided in the blank between the end flanges 2 and the bottom 1. Integrally formed on the longitudinal edges or margins of the bottom 1 is a pair of side flaps or flanges 4 which are divided from the bottom 1 by means of creases 5.

Integrally formed on the outer edge or margin of one of the side flaps or flanges 4 is a side wall 6 of trapezoidal shape having inner end wall sections 7, also of trapezoidal shape, integrally formed on the ends thereof and separated from the side wall 6 by creases 8. The inner end wall sections 7 and the side wall 6 are provided with a continuous scoring 9 a short distance from the outer or

upper end of the end wall sections 7 and the side wall 6. The scoring 9 extends across the inner end wall sections 7 and the side wall 6 and affords a groove on one side and a bead on the opposite side of the respective wall sections.

Integrally formed on the outer longitudinal edge or margin of the second bottom side flange 4 is a second side wall 10 of trapezoidal shape. The side walls 6 and 10 are separated from the respective side flanges or flaps 4 by means of creases 11. Integrally formed on the ends of the side wall 10 are a pair of outer end wall sections 12 of trapezoidal shape and separated from the side wall 10 by means of creases 13, the outer side wall sections 12 and the side wall 10 also being provided with a continuous scoring at 14 near the outer or upper end of said wall sections to provide an inner groove and an outer beading for said wall sections.

The improved unitary blank may be constructed of either plain or waterproof paper or other suitable material and may be punched or cut from a sheet of material with a single operation.

The unitary container or carton blank is provided with the creases 3, 5, 8, 11 and 13 which are represented in dotted lines in Figure 4 and separate the various sections or members forming part of the blank. The side and end wall sections are also provided with the scorings 9 and 14 which complete the forming of the blank.

To assemble the container or carton, the blank is bent along the creased lines with the bottom plate flanges 2 and 4 deflected downwardly away from the top or inner surface of the bottom 1 to provide a base for said bottom 1 to support the same above the level of the bottom of the carton. The side walls 6 and 10 are now adapted to be bent upwardly along the crease lines 11 and against the outer surfaces of the side flanges 4 of the base. The two inner end wall sections 7 are now bent inwardly along the creases 8 to position the inner end wall sections adjacent the outer faces of the base flanges 2. The two outer end wall sections 12 are next bent inwardly along the creases 13 to position the outer end wall sections 12 adjacent the outer surfaces of the inner end wall sections 7 to complete the assembly of the container or carton. In the assembled form of the container or carton, the scorings 9 and 14 provide a continuous inner peripheral groove a short distance from the upper end of the container or carton for the reception of an oblong cover or top plate 15 which may be engaged in the upper end of the carton and frictionally pushed downwardly until the edges of the cover seat in the grooves 9 and 14 to hold the cover properly seated in position.

The overlapping walls of the improved container or carton may be secured to one another by means of adhesive or by suitable fasteners to hold the blank in its assembled form. When assembled, the blank provides a carton having double end walls and a raised bottom which is supported by means of the base flanges 2 and 4, which not only support the bottom in an elevated position but also serve to reinforce the lower margins or portions of the side and end walls of the container or carton.

The cartons, when formed, may be stacked one within the other in nested relation when empty, and, if desired, may, when filled and provided with covers, also be stacked with the lower base section of one carton seated in the upper recessed end of another filled carton above the cover plate 15.

The improved blank, when folded, forms a container or carton having a tapered body constructed of converging side and end walls and furthermore having a raised bottom supported by a base which reinforces the lower portions of the side and end walls of the carton. The improved carton may be used with or without a cover.

It will, of course, be understood that many details of construction may be varied through a wide range without departing from the principles of this invention, and it is, therefore, not purposed to limit the patent granted hereon otherwise than necessitated by the scope of the appended claims.

I claim as my invention:

1. A carton integrally formed from a single blank comprising a bottom wall having, at opposite ends, short flanges folded downwardly to provide free bottom edges and having intermediate extensions folded downwardly with adjacent extending edges of said flanges and extensions in abutting relationship, side walls folded upwardly from said extensions to provide folded bottom edges in the same plane as said free bottom edges and a flap on each of said side walls folded into substantially coextensive overlapping relation to form end walls having bottom edges coincident with said free bottom edges.

2. A rectangular carton formed integrally from a single blank comprising a raised bottom wall having, at opposite ends, short flanges folded downwardly to provide free bottom edges and having intermediate side flanges folded downwardly, adjacent downwardly extending edges of said flanges being in abutting relationship, side and end walls integrally connected to said bottom and folded about said bottom so that the bottom edges thereof are coincident with the bottom edges of said flanges.

3. A rectangular carton comprising a raised bottom wall having, at opposite ends, short flanges folded downwardly to provide free bottom edges and having intermediate

side flanges folded downwardly, adjacent downwardly extending edges of said flanges being in abutting relationship, side and end walls secured to said bottom and folded about said bottom so that the bottom edges thereof are coincident with the bottom edges of said flanges.

In testimony whereof I have hereunto subscribed my name at Chicago, Cook County, Illinois.

WILLIAM R. WILLAUER.