

BCB

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C. BUREL

2,160,643

FOLDING BOX

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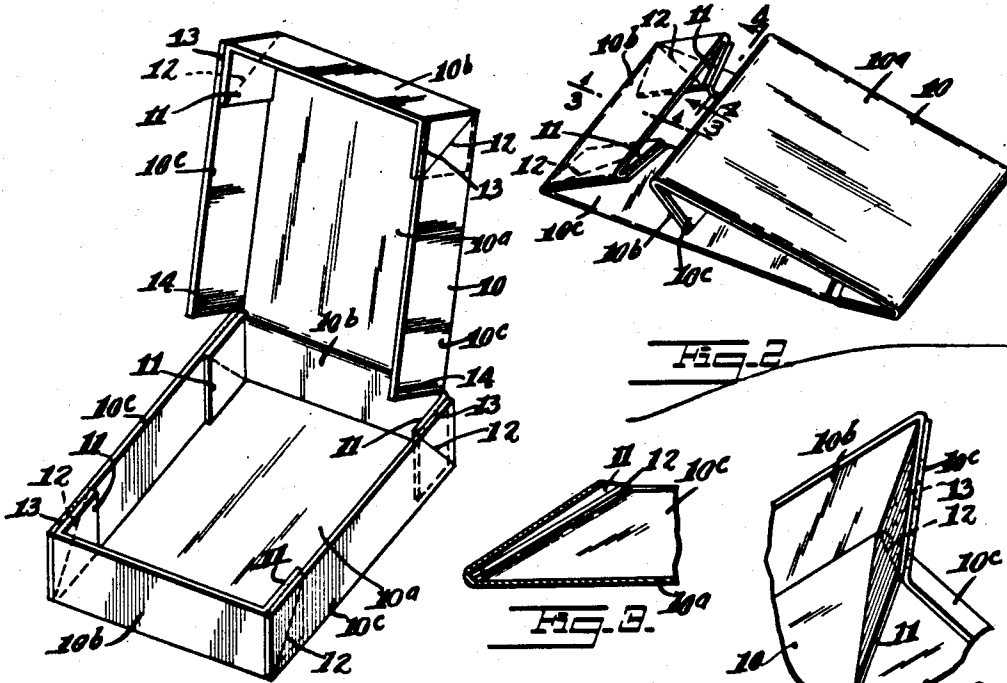


Fig. 1.

Fig. 2.

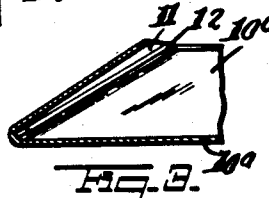


Fig. 3.

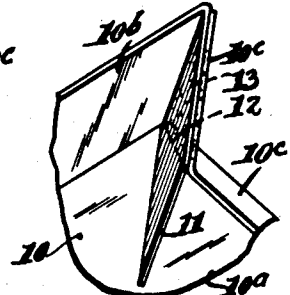


Fig. 4.

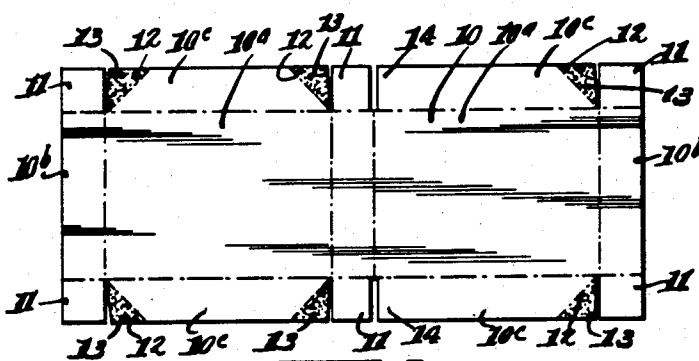


Fig. 5.

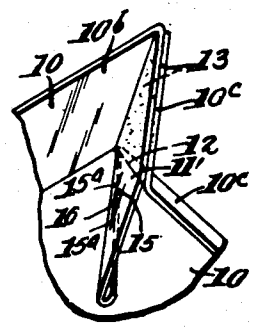


Fig. 6.

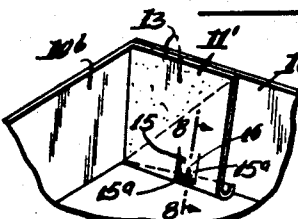


Fig. 7.

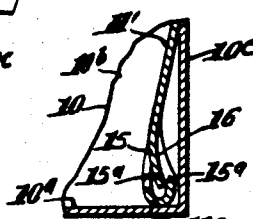


Fig. 8.

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UNITED STATES PATENT OFFICE

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FOLDING BOX

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Application November 10, 1937, Serial No. 173,836

3 Claims. (Cl. 229—32)

This invention relates to new and useful improvements in a folding box.

More specifically, the invention proposes the construction of a folding box having a bottom and a top integrally formed and having side walls and end walls which are adapted to be collapsed so that their inner faces lay adjacent the inner face of the base wall and top walls.

Another object of the invention is to form the corners of the box so that the portions forming the said corners will be fixedly attached together and still permit the sides thereof to be collapsed.

Another object of the invention is to form the corners of the box so that under normal use they will be restrained from collapsing unless pressure is applied in the proper direction to cause said corners to collapse.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a perspective view of a folding box constructed according to this invention and in its open position.

Fig. 2 is a perspective view of the box in its collapsed position.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2 and illustrating the corner in its half collapsed position.

Fig. 5 is a developed view of the blank from which the box is formed.

Fig. 6 is a view similar to Fig. 4 but illustrating a modification of the invention.

Fig. 7 is a view similar to Fig. 6 but illustrating a corner in its open position.

Fig. 8 is an enlarged sectional view taken on the line 8—8 of Fig. 7.

The corner construction for a folding box, according to this invention, is adapted to be used in conjunction with a box 10 having a base wall 10^a, an end wall 10^b, and a side wall 10^c, normally at right angles to each other. The end wall 10^b has a flap 11 continuing from one end thereof and is adapted to extend behind the adjacent portion of the side wall 10^c. The side wall 10^c is formed with a crease 12 extending from the intersection of the walls 10^a, 10^b and 10^c upward to the outer corner of the flap 11. The flap 11 is secured to the side wall portion 10^b above

the crease 12 so that the side wall 10^c and the end wall 10^b may be collapsed with relation to the base wall 10^a by folding said walls inward as permitted by the crease 12.

The flap 11 has a square contour and the crease 12 extends upwards from the junction of the walls at an angle of 45° so that the upper end of the crease 12 will be adjacent the upper corner of the flap 11. The adjacent faces of the side portion 10^c and the flap 11 above the crease 12 has mucilage 13 or other similar material applied thereto so that the corners of the box will be fixedly attached together and still permit the box to be collapsed by folding the side walls 10^c downward and folding the end wall 10^b downward on the crease 12 to a position in which the side walls 10^c and the end wall 10^b will lay adjacent the base wall 10^a.

The top of the box is formed integral with the bottom and one end of the top is not provided with the corner construction as described in connection with the other corners and is adapted to be placed within the walls of the bottom of the box when the box is in its assembled position. The corners 14 as shown in Fig. 1, are free of any supporting means, and the purpose for keeping the free portions of the flaps 11 which are secured to the side walls 10^c is to stiffen the sides and ends of the box to prevent them from collapsing under normal conditions.

The collapsed position of the box is shown in Fig. 2 and in order to assemble the box it is merely necessary to engage one's fingers beneath the free edges of the side walls 10^c and the end wall 10^b and lift them with relation to the base wall 10^a to a position in which the side walls 10^c will be at right angles to the base wall 10^a and in which the free edge of the flap 11 will engage the top face of the base wall 10^a to support the side walls 10^c and the end wall 10^b in their raised positions.

According to the modification shown in Figs. 6-8 the flap 11' is formed with a curled extension portion 11^a extending from the bottom flap and which is adapted to frictionally engage the top face of the base wall 10^a to fixedly maintain the flap 11' in its assembled position with relation to the base wall 10^a. A tab portion 15 is stamped from the flap 11' and is provided with a slit 16 intermediate of its edges forming separate tab portions 15^a. These tab portions 15^a are adapted to be engaged over the edge portions of the curled extensions 11^a and engage the faces thereof for holding these tab portions in their extended position, to cause them to fric-

tionally engage the base wall 10^a. The manner in which the tabs 15^a engage the face of the curled extension 11^a is clearly shown in Fig. 8 and it will be noted that the upper edge of the curled extension 11^a engages the inner end of the slit 10 to prevent this curled extension 11^a from moving to a position in which it will not engage the base wall 10^a so as to not support the flap 11'. In other respects this form of the invention is similar to the previous form and similar parts may be identified by corresponding reference numerals.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In a folding box, a corner construction, comprising a base wall, an end wall and a side wall normally at right angles to each other, and a flap continuing from said end wall and extending behind the adjacent portion of said side wall, said side wall having an inwardly bent crease extending from the intersection of said walls upwards to the outer corner of said flap, and said flap being secured to the side wall portion above said crease, said flap being formed with a curled portion extending from the bottom edge thereof, and a lug portion on said flap engaging the edge of said curled extension portion for holding the same so as to frictionally engage said base wall.
2. In a folding box, a corner construction, com-

prising a base wall, an end wall and a side wall normally at right angles to each other, and a flap continuing from said end wall and extending behind the adjacent portion of said side wall, said side wall having an inwardly bent crease extending from the intersection of said walls upwards to the outer corner of said flap, and said flap being secured to the side wall portion above said crease, said flap being formed with a curled portion extending from the bottom edge thereof, and a lug portion on said flap engaging the edge of said curled extension portion for holding the same so as to frictionally engage said base wall, said lug portion being formed with a slit intermediate of its sides which are adapted to engage the adjacent faces of said curled extension portion for holding said curled extension portion in a fixed position with relation to said flap so that the bottom thereof will frictionally engage said base wall.

3. In a folding box, a corner construction, comprising a base wall, an end wall and a side wall all normally at right angles to each other, a flap continuing from said end wall and extending behind the adjacent portion of said side wall and having an upper portion attached to said side wall, a curled portion formed on the bottom of said flap and frictionally engageable against said base wall for maintaining said flap in an upright position, and a lug stamped from a portion of said flap, said lug being divided into separate sections and each of said sections being engageable upon opposite sides of said curled portion for maintaining said curled portion in a position in which it will constantly bear against said base wall.

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