J. REGENSTEIN.

FOLDING BOX.

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1,041,872.

Patented Oct. 22, 1912.

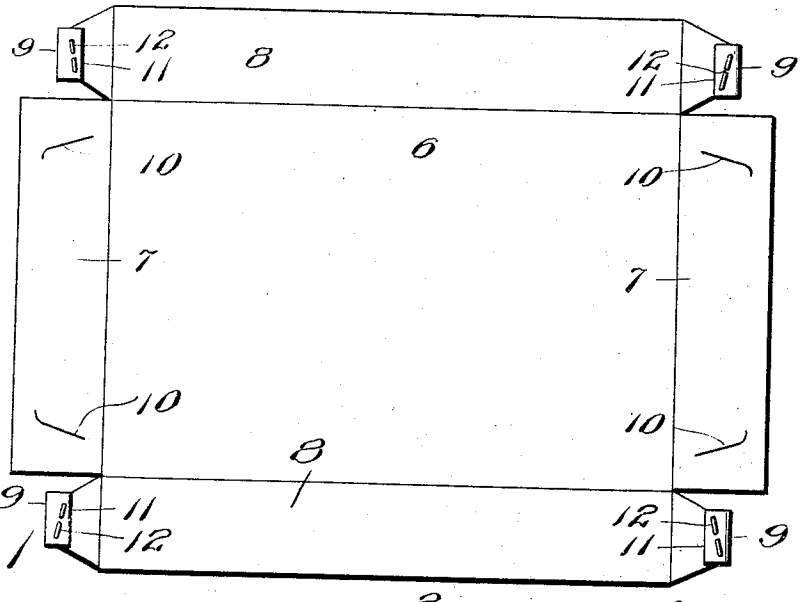


Fig. 1

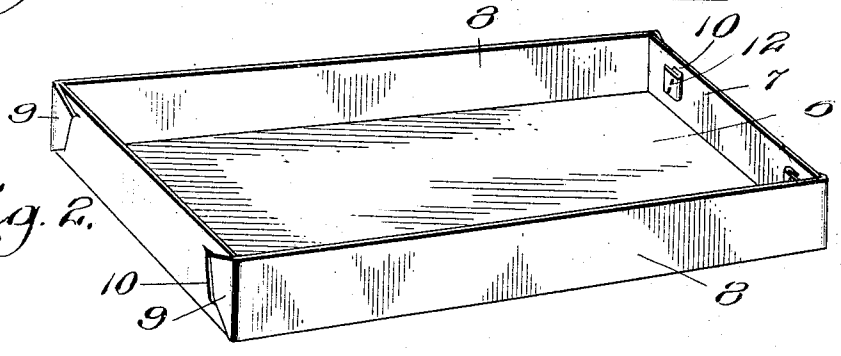


Fig. 2.

Fig. 3

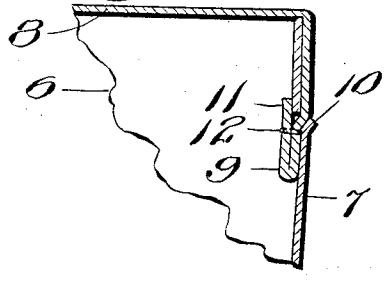
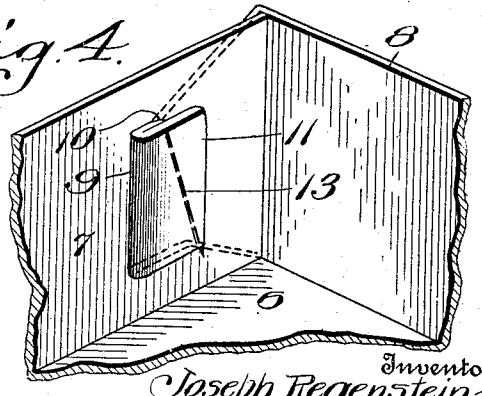


Fig. 4.



Witnesses

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JOSEPH REGENSTEIN, OF ATLANTA, GEORGIA.

FOLDING BOX.

1,041,872. Specification of Letters Patent. Patented Oct. 22, 1912.

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To all whom it may concern:

Be it known that I, JOSEPH REGENSTEIN, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Folding Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to knockdown boxes of that class usually made from paper or pasteboard or other similar flexible material which is cut to form a blank the sides and ends of which may be folded up and interlocked when the box is to be used. Such boxes are commonly used for the package and transportation of suits, dry goods and the like, being supplied to the user in flattened condition.

The object of the present invention is to provide an improved corner or lock for connecting the side and end walls when the box is set up.

In the accompanying drawings—Figure 1 is a plan view of the blank for one kind of a knockdown box provided with the improved corner fastening; Fig. 2 is a perspective view of the box body set up; Fig. 3 is a horizontal sectional view of a corner of the box; Fig. 4 is a perspective view of a modified form of corner.

Referring specifically to the drawings, it will be seen that only one part of the box is illustrated, which for purpose of convenience I term the body. The cover may be of similar construction, as is usual in this class of boxes, wherein the body is made of one blank and the top part or cover is made of another blank slightly larger in size so that when the blanks are set up the cover will fit over the body. No limitation is implied in this respect, since the same form of corner fastening may be used on any box of the kind, such for example as a box having a cover or top flap integral with one of the side walls, in which event the box body and the cover will be made in one blank, as will be understood.

In the box part shown 6 indicates the bottom, conveniently rectangular in shape, with end pieces or walls 7 and side walls 8, the blank being scored at the edges of the bottom to permit the side and end walls to be readily turned up and united at the corners when the box is to be used.

As shown the side pieces 8 are provided at each end with a tapering flap 9 arranged to be inserted through a slit 10 near the end of each end piece 7. Obviously the end pieces may be provided with the flaps and the side pieces with the slits, if desired, but the construction shown is preferred. The extremity of each flap 9 is folded inwardly upon itself as indicated at 11, forming an interlocking part arranged to catch or engage the adjacent wall at the edge of the slit. To hold the tongue or folded part 11 in proper position a staple 12 is driven through the same and through the adjoining part of the tongue and clenched. This staple is located at a distance from the end of the tongue so that the end of the tongue is unattached and forms a hook or fork into which the edge of the slit portion is engaged or entered when the box is set up, said edge or part of the end wall adjacent the slit being thus held between the end of the tongue and the flap. This is important, since it forms an effective lock and prevents accidental disengagement of the tongue while at the same time the tongue and the flap brace or reinforce each other.

The corner can only be unlocked by bending in the end of the wall having the slit and forcing the flap inwardly through the slit to an additional extent, to enable the flap to be retracted and the corner to be opened. This prevents accidental disengagement of the corners which is an objectionable feature of many boxes of the kind referred to. Preferably the flap is inserted through the slit from the outside, so that the interlocking engagement is formed on the inside of the box, but this construction may be reversed if desired. This construction possesses a distinctive advantage over a construction in which a tongue is cemented to the flap to form a shoulder at the end of the tongue to abut against the connecting wall at the edge of the slit, inasmuch as under the latter construction it is possible for the fastening to become unlocked by the contents of the box pressing the tongue out-

wardly a sufficient distance to slip the shoulder through the slit. With the corner herein shown and described internal pressure will not disengage the lock, but manipulation is required as above described.

In Figs. 1, 2 and 3, I show a staple for fastening the tongue to the flap. Other means may be substituted, as for example a line of stitches as shown at 13 in Fig. 4. Or any form of fastening devices or means may be used, provided that the end of the tongue is free to hook around the edge of the slit. Preferably the slit 10 is inclined or made on a slant, which facilitates entering the end of the flap through said slit. It will be noted that internal pressure on the walls of the box, instead of tending to unlock the corners, causes a tighter engagement of the tongue with the adjacent wall, so that separation is resisted to the point of fracture of the tongue, the main strain however coming on the staple or other fastening device which is not easily broken.

Having described my invention and set forth its merits, what I claim is:—

1. A box having a wall with an end flap, and an adjoining wall with a slit to receive said flap, the end of said flap having a tongue folded against the flap and fastened thereto, the end of the tongue being unattached, to form a fork to engage the edge of the wall adjacent the slit between the said end and the flap.

2. A box having a wall with an end flap and provided with a tongue at the extremity of the flap, said tongue being folded against the flap and fastened thereto at a distance from the end of the tongue, forming a fork, and also having an adjoining wall with an opening through which the end of the flap is inserted, the edge of the wall adjacent the opening being engaged in said fork, between the end of the tongue and the flap.

3. A box having a wall with a flap at the end thereof, a tongue at the end of the flap and folded against the flap, a fastening connecting the tongue and flap, said fastening being located at a distance from the end of the tongue, whereby said end is free, to form a fork, and also having an adjoining wall with an opening therein through which the flap is inserted to engage the edge of said opening between the end of the tongue and the flap.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH REGENSTEIN.

Witnesses:
JAMES T. BUSBEE,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."