

L. W. DRAPER.
FOLDING BOX.
APPLICATION FILED AUG. 6, 1910.

991,052.

Patented May 2, 1911.

2 SHEETS—SHEET 1.

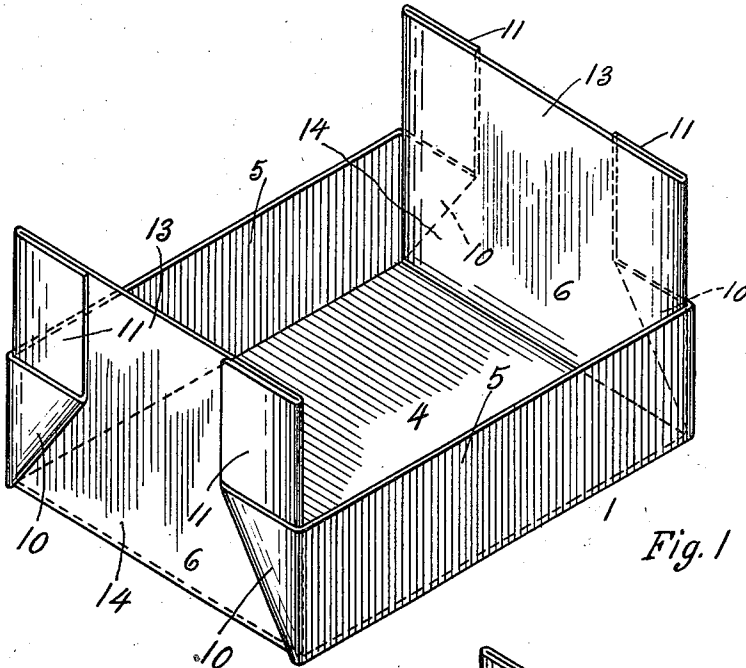


Fig. 1

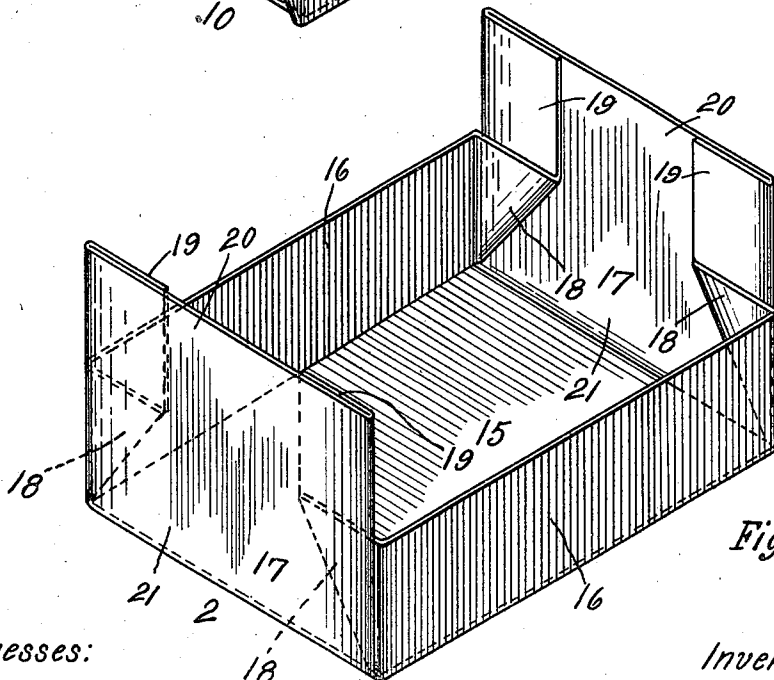


Fig. 2

Witnesses:

H. J. Hansen

A. A. Olson

Inventor:

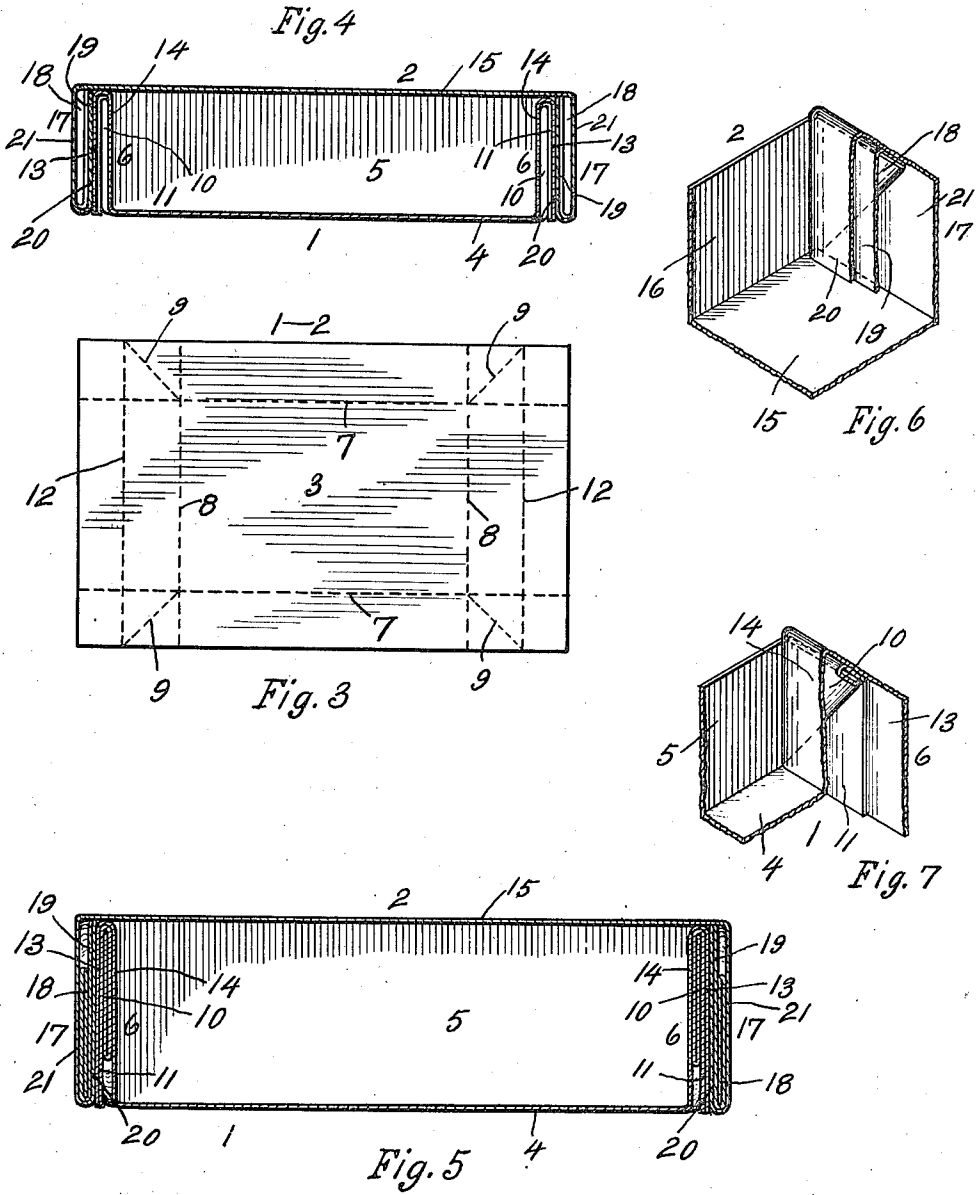
Louis W. Draper,
By *Joshua R. Stone*
his Attorney.

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H. J. Hansen

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UNITED STATES PATENT OFFICE.

LOUIS W. DRAPER, OF CHICAGO, ILLINOIS.

FOLDING BOX.

991,052.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed August 6, 1910. Serial No. 575,969.

To all whom it may concern:

Be it known that I, LOUIS W. DRAPER, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention relates to folding boxes such as are most commonly made of paper or paste-board.

The object of my invention is the provision of a box of the character mentioned which will be so constructed that comparatively thin material may be used in its formation and still result in the production of a box possessing great rigidity and firmness.

A further object is the provision of a box as mentioned which will be of extremely simple construction, no securing devices of any kind being employed therein, and efficient in operation.

Other objects will appear hereinafter.

With these objects in view my invention consists in a folding box characterized as above mentioned and in certain details of construction as will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figures 1 and 2 are similar perspective views respectively of the body and cover, in partly folded condition, of a box embodying the preferred form of my invention, Fig. 3 illustrates a blank from which either the cover or the body of the box may be formed, Fig. 4 is a central longitudinal section of the box assembled, Fig. 5 is a longitudinal section thereof slightly enlarged taken close to one of the longitudinal edges thereof, and Figs. 6 and 7 are similar fragmentary perspective details of corner portions of the cover and body respectively.

Referring now to the drawings 1 indicates the body of the box and 2 the cover thereof, each being formed of a blank 3 similar to that shown in Fig. 3. The body 1 comprises a central rectangular bottom 4 and integral hingedly connected side and end walls 5 and 6 respectively, the blank 3 being creased at 7 and 8 to form said bottom and walls. The creases 8 are so arranged that the end portions of the blank beyond the same will be substantially twice as wide as

the longitudinally extending edge portions defined by the creases 7. At each of the junctures of said creases 7 and 8 is formed an outwardly obliquely extending crease 9 midway between said creases or at 45 degrees thereto; this provision, when the blank is folded to form the side and end walls, permitting of the formation at each of the corners of the body of a corner fold 10 and an integral panel 11 above the fold 10 at the outer side of the adjacent end walls of the body, as clearly shown in Fig. 1. The body after this folding is complete by simply creasing the ends thereof at 12 and folding the outer end portions 13 outwardly and downwardly upon the inner end portions 14.

The cover 2 comprises the central rectangular top portion 15 similar to the portion 4 and the integral side and end flanges 16 and 17 respectively corresponding to the side and end walls 5 and 6 respectively of the body 1. The blank 3 in the formation of the cover is creased the same as when forming the body, above described, the corner folds 18 and panels 19 (corresponding to the ears 10 and panels 11 in said body) being in this formation folded against the inner sides of the end wall portions 20 and 21 (corresponding to the end wall portions 13 and 14 respectively of the body) instead of against the outer sides as in the body, and the end wall portion 21 is folded inwardly instead of outwardly, as clearly indicated.

The central or top portion 15 of the cover is of dimensions slightly greater than those of the corresponding portion 4 of the body so that said cover may be slid down over the box body to envelop the same, as clearly shown in Figs. 4 and 5. When said cover and body are assembled as indicated, the end flanges of the former and the end walls of the latter will evidently cooperate with each other to prevent unfolding of the portions 14 and 21. The latter portions, when in operative positions, evidently serve to lock the folds 10 and 11 and panels 18 and 19 in position, the latter, when so held, evidently serving to hold the side walls and flanges respectively of the body and cover in operative positions. Hence, when the cover and body, after proper folding, are assembled, each will cooperate with the other to hold it in folded or operative position. The flanges of the cover and the vertical walls of the body will be of substantially the same width so that, when assembled, said flanges and

walls will together constitute the sides of the box. By the provision of the corner fold and the panel at each of the corners of the box, the latter will be additionally reinforced at these points capacitating the box to withstand great downward pressure. By virtue of this construction, the material used in the construction of the box may be very light or thin and still result in the production of a strong, durable and rigid construction. The box is of simple construction, no rivets, stitching, or conventional slot and tongue connections being employed, hence the same may be manufactured at an extremely low cost.

While I have shown what I deem to be the preferable form of my box I do not wish to be limited thereto as there might be various changes made in the details of construction without departing from the spirit of the invention comprehended within the scope of the appended claims.

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

1. A folding box comprising a body made from a rectangular blank consisting of a central bottom and integral side and end walls, the said end and side walls being connected at each end by corner folds and the end walls being higher than the side walls, the extra length of end walls being folded downwardly and outwardly over the lower portions thereof and said corner folds; and a cover made from a rectangular blank consisting of a central top and integral side and end walls, the said end and side walls being connected by corner folds and the end walls

being higher than the side walls, the extra length of end walls being folded downwardly and inwardly over the lower portions thereof and said corner folds, whereby the folded extra lengths of the ends of said cover rest against the folded extra lengths of the ends of said body, each locking the other in position, substantially as described.

2. A folding box comprising a body made from a rectangular blank consisting of a central bottom and integral side and end walls, the said end and side walls being connected at each end by corner folds and the end walls being twice as high as the side walls, the extra length of end walls being folded downwardly and outwardly over the lower portions thereof and said corner folds; and a cover made from a rectangular blank consisting of a central top and integral side and end walls, the said end and side walls being connected by corner folds and the end walls being twice as high as the side walls, the extra length of end walls being folded downwardly and inwardly over the lower portions thereof and said corner folds, whereby the folded extra lengths of the ends of said cover rest against the folded extra lengths of the ends of said body, each locking the other in position, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS W. DRAPER.

Witnesses:

HELEN F. LILLIS,
JOSHUA R. H. POTTS.